

Главный пост основной темы(В этом посте собраны ссылки на все проекты и важные посты. Есть ссылка на вторую часть основной темы. Часть информации обновилась, но лимит символов в посте исчерпан, дополнения будут выложены во второй части основной темы.) :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/)

боролись с зеркальной картинкой на TFT правкой библиотеки UTFT:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-8#post-125749](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-8#post-125749)

основные особенности нагревателей:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-9#post-129286](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-9#post-129286)

про размер и мощность нижнего нагревателя:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-12#post-135163](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-12#post-135163)

о возможных конструкциях держателей термодатчиков:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-16#post-140423](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-16#post-140423)

как компактно соединить модули с платой и дисплеем (пример для Mega2560+tft 3.2inch):

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-19#post-145397](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-19#post-145397)

о размещении датчиков на плате при пайке:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-22#post-148455](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-22#post-148455)

про вариант крепления сетки, чтобы её не пучило при работе:

<https://www.youtube.com/watch?v=G89TCCRAS6U>

первая попытка вывода графиков на ПК:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-26#post-150417](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-26#post-150417)

развитие темы софта для ПК:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-27#post-154046](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-27#post-154046)

продолжение об особенностях нагревателей:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-28#post-155312](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-28#post-155312)

тут разобрались с резистивной клавиатурой:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-29#post-155399](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-29#post-155399)

о возможных проблемах с модулями реле для arduino:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-29#post-156381](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-29#post-156381)

моё видение окна софта heater для ПК и примерная (с использованием модуля реле) блок-схема силовой части для Mega2560+tft 3.2. На этой же странице обмен мнениями о компонентах:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-31#post-158531](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-31#post-158531)

... и новая редакция heater:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-31#post-158531](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-31#post-158531)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-32#post-159298](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-32#post-159298)

о доработке модулей MAX6675:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-32#post-159441](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-32#post-159441)

и снова обновление heater:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-32#post-159835](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-32#post-159835)

@Dmitrysh нашел баг в функции чтения профилей из EEPROM:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-32#post-160377](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-32#post-160377)

... и исправил его:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-32#post-160468](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-32#post-160468)

вариант обработчика нажатий кнопок от Aleksander1997:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-35#post-161475](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-35#post-161475)

и ещё он об обработчике:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-46#post-163217](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-46#post-163217)

крайняя прикольная «чистокровная» версия @Yurik-о для TFT 2.4" SPI и arduino UNO:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-46#post-163217](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-46#post-163217)

[2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-39#post-162141](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-39#post-162141)

... и библиотека, которую он забыл выложить:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-39#post-162308](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-39#post-162308)

переменные, используемые в текущих версиях:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-39#post-162242](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-39#post-162242)

некоторые особенности бесконтактного нагрева:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-39#post-162273](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-39#post-162273)

почитать документ «Lead-free Reflow Oven and Rework Machine Status»:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-40#post-162558](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-40#post-162558)

О кварцевом стекле официально:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-41#post-162577](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-41#post-162577)

ПИД по предложению **Aleksander1997** вместо библиотеки:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-49#post-163815](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-49#post-163815)

избавляемся от библиотеки max6675:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-49#post-163918](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-49#post-163918)

у max6675 нет регулировок, поэтому:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-52#post-164728](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-52#post-164728)

версия @Dmitrysh не диммер, а фазовое управление как у **snmar4enko**, только без чередования периодов:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-53#post-165260](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-53#post-165260)

про некоторые особенности замера температуры:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-53#post-165412](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-53#post-165412)

@bamik предложил концепцию скетчей:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-53#post-165456](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-53#post-165456)

хороший детектор нуля:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-60#post-168494](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-60#post-168494)

... и несколько фото о нём:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-60#post-168569](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-60#post-168569)

как контроллер обрабатывает прерывания:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-61#post-168573](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-61#post-168573)

@revolover показал работу своего ZCC:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-64#post-169119](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-64#post-169119)

пояснение про алгоритм включения ВИ реализацию «горячий старт»:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-64#post-169137](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-64#post-169137)

немного о симуляции скетчей в Proteus:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-67#post-170397](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-67#post-170397)

замечание по старым версиям скетча:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-68#post-170572](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-68#post-170572)

первая версия от @revolover:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-69#post-170691](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-69#post-170691)

рабочий экран по первой версии @revolover:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-69#post-170753](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-69#post-170753)

обнова первой версии от @revolover:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-71#post-170999](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-71#post-170999)

суть скетча, если убрать меню:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-71#post-170999](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-71#post-170999)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-71#post-171000](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-71#post-171000)

цитаты топ о ПИД:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-73#post-171247](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-73#post-171247)

и ссылка по последней его цитате:

<http://d.17-71.com/2009/04/06/ppipidpd-zakon-regulirovaniyaobshhee-opisanie/>

@хаке вынес обработчик кнопок и добавил энкодер в первой версии от @revolover:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-74#post-171725](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-74#post-171725)

вторая версия от @revolover:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-76#post-171927](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-76#post-171927)

работа второй версии от @revolover:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-76#post-171917](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-76#post-171917)

и пояснения к ней:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-76#post-172090](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-76#post-172090)

что мы намерили с разных сторон возле чипа:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-78#post-172783](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-78#post-172783)

и ещё об этом и MAX6675:



[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-78#post-172792](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-78#post-172792)

вариант согласователя уровней для tft 2.4" SPI (для версии от @Yurik-o):

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-79#post-172890](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-79#post-172890)

беседуем о ВИ и температурах отсюда:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-79#post-173570](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-79#post-173570)

... и до сюда:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-79#post-173664](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-79#post-173664)

запуск режима «только термостол»:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-80#post-173880](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-80#post-173880)

как считать расстояние от трубочных излучателей до платы, чтобы распределение энергии излучения было по-возможности равномерным:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-80#post-174033](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-80#post-174033)

версии плат ZCC, по выбранной @revolover схеме:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-80#post-174545](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-80#post-174545)

... и до сюда:



[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-80#post-174567](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-80#post-174567)

про фиксацию мощности НИ при выходе его на уставку:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-80#post-174940](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-80#post-174940)

ещё вариант держателя датчика:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-81#post-175862](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-81#post-175862)

@revolover предупредил, что его версия – только наброски:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-81#post-176492](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-81#post-176492)

не задавалась мощность для конкретного шага, вылечил @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-81#post-176511](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-81#post-176511)

первый свод версий 1.3.x:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-81#post-176596](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-81#post-176596)

не работал выбор размера НИ, заметили @Dmitrysh и @mrzevs:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-82#post-177269](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-82#post-177269)

починил @Dmitrysh выбор размера НИ в версии от @revolover:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-82#post-177269](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-82#post-177269)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-83#post-177321](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-83#post-177321)

тут @Dmitrysh впервые говорит, что его скетч не как в теме:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-83#post-177333](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-83#post-177333)

... и общаются на эту тему они с @revolover (у которого тоже код стал иным) до сюда:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-83#post-177368](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-83#post-177368)

взгляд на повышение повторяемости результатов:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-86#post-177945](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-86#post-177945)

первый пост разработчика @Leonid0071 о его проекте:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-88#post-180617](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-88#post-180617)

сумбурная попытка просить ввести преднагрев для инерционных грелок:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-89#post-181558](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-89#post-181558)

... и плотное обсуждение вопросов точности замеров и принципов регулирования, до сюда:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-89#post-181716](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-89#post-181716)

... и продолжили обсуждать (и еще @Leonid0071 представил обновление), до сюда:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-89#post-181716](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-89#post-181716)

[2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-90#post-182725](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-90#post-182725)

новое видео проекта @Leonid0071:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-92](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-92)

вариант @Watashi с загрузкой профилей с SD-карты, для второй версии от @revolover:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-92#post-184201](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-92#post-184201)

новое видео проекта @Leonid0071:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-94#post-189407](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-94#post-189407)

обновление проекта @Leonid0071:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-95#post-192711](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-95#post-192711)

... и его видео теперь плей-листом:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-95#post-192714](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-95#post-192714)

посты VladSko о теории конструирования станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-95#post-193418](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-95#post-193418)

предложение по работе с и без ZCC:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-96#post-193889](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-96#post-193889)

обновление проекта @Leonid0071:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-97#post-197673](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-97#post-197673)

даташиты содержащие ограничения на время нагрева и температуры (нагрева) конкретных BGA элементов по группам основанным на размерности техпроцесса:

[http://radioservice.at.ua/fr/0/Altera\\_an353.pdf](http://radioservice.at.ua/fr/0/Altera_an353.pdf)

<http://radioservice.at.ua/fr/0/packaging-chapt.pdf>

как греем, сколько греем, что нельзя допускать:

<http://www.rom.by/comment/357301>

PID Compensation Animated(gif):

[https://ru.m.wikipedia.org/wiki/%D0%A4%D0%B0%D0%B9%D0%BB:PID\\_Compensation\\_Animated.gif](https://ru.m.wikipedia.org/wiki/%D0%A4%D0%B0%D0%B9%D0%BB:PID_Compensation_Animated.gif)

про подлянку от китайских ProMINI:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-99#post-200127](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-99#post-200127)

про вариант v2.0.9 от @SNMar4enko:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-99#post-200240](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-99#post-200240)

... и первые правки его от @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-99#post-200287](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-99#post-200287)

замена прожорливому фильтру Калмана, для фильтрации выходов MAX6675:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-99#post-200487](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-99#post-200487)

вопросы к @Dmitrysh по 2.0.9 @SNMar4enko:

<http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F->

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-100#post-200958](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-100#post-200958)

... и ответы на них:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-100#post-201007](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-100#post-201007)

о проблемах с MAX6675 в наших скетчах:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-101#post-202892](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-101#post-202892)

подборка постов в архиве про наводки:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-101#post-203033](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-101#post-203033)

первая версия для Мегы168, только с каналом ВИ (под автономный термостол):

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-102#post-204998](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-102#post-204998)

варианты печаток самодельных силовых узлов:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-104#post-209457](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-104#post-209457)

... еще силовая плата на 2 канала, совмещенная с ZCC, используются оплотриаки без встроенного контроля нуля:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-104#post-209457](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-104#post-209457)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-105#post-209506](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-105#post-209506)

в 1.3.4 графики в программе heater теперь стартуют с запуском пайки:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-105#post-209703](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-105#post-209703)

... вот так:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-105#post-209850](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-105#post-209850)

@Dmitrysh представил переработанную версию версии для Mega2560+TFT:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-108#post-210304](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-108#post-210304)

... и тут же кое-что перенесли в версию 1.3.3:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-108#post-210309](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-108#post-210309)

ламерские вопросы про переменные скетчей и их размеры:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-108#post-210411](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-108#post-210411)

... и @Dmitrysh поясняет, что к чему:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-108#post-210467](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-108#post-210467)

... а затем исправляет огрехи в 1.3.3:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-108#post-210504](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-108#post-210504)

Leonid0071 представил своё новое видео:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-108#post-210745](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-108#post-210745)

вопросы по исправлениям @Dmitrysh в 1.3.3 и про замеченные баги:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-109#post-210864](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-109#post-210864)

... @Dmitrysh поясняет и предлагает подправленный 1.3.3:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-109#post-210925](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-109#post-210925)

... снова вопросы по багам в 1.3.3:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-109#post-210928](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-109#post-210928)

... и снова ответы по 1.3.3:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-109#post-211009](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-109#post-211009)

... и подправленный 1.3.3:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-109#post-211009](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-109#post-211009)



[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-109#post-211031](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-109#post-211031)

о важности профилей пайки:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-109#post-211259](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-109#post-211259)

про излучатели верха:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-109#post-211362](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-109#post-211362)

обновление одноканальной версии ProMini AtMega168p / 16MHz / 5v и LCD1602A:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-110#post-211499](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-110#post-211499)

обновление от @Watashi версии для Mega2560 + TFT:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-110#post-211526](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-110#post-211526)

@Dmitryshh подправил 2.0.9 @SNMar4enko (NANO + LCD1602 i2c):

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-110#post-211831](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-110#post-211831)

... и ввел автоинит 14 профилей в 1.3.3:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-110#post-211842](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-110#post-211842)

@Watashi предложил использовать структуру для данных профилей в EEPROM:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-110#post-211872](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-110#post-211872)

...мелкое исправление в 1.3.3:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-111#post-211957](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-111#post-211957)

@Watashi представил свой новый проект для Mega2560 + TFT:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-111#post-212670](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-111#post-212670)

про борьбу с зеркальной картинкой на TFT:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-111#post-212881](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-111#post-212881)

@Ptisa выложил фото своей станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-112#post-212907](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-112#post-212907)

@Watashi представил свою версию скетча «sketch\_TFT-320x480\_dimer\_PC\_revolver\_Dmitrysh\_v4» из поста №2142:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-112#post-213030](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-112#post-213030)

@Dmirtysh предложил измененный вариант сохранения данных профилей в структуре:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-112#post-213030](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-112#post-213030)

[2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-112#post-213042](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-112#post-213042)

@Watashi испытал скетч с прерыванием по таймеру, а не от внешней схемы ZCC (например, для тех, у кого покупные твердотельные реле и «страх перед схемами ZCC»):

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-112#post-213839](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-112#post-213839)

@Watashi представил второе видео с демонстрацией работы без ZCC, с прерыванием по таймеру:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-113#post-213997](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-113#post-213997)

Если верх не стартует после выхода низа на уставку:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-114#post-214401](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-114#post-214401)

... и как нельзя делать:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-114#post-214378](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-114#post-214378)

... и об этом же от @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-114#post-214420](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-114#post-214420)

... и более подробно про логику этого в скетчах для Mega2560 + TFT:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-114#post-214481](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-114#post-214481)

просто интересная информация о расстоянии от НИ до платы и об альтернативном ведении профилей на сильно инерционных нагревателях:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-115#post-214553](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-115#post-214553)

рекомендации Amtech по предельным скоростям роста температур:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-115#post-214712](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-115#post-214712)

немного о способах фильтрации сигналов от термопар:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-116#post-214986](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-116#post-214986)

видео и чтиво от известного производителя ИК станций:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-117#post-215491](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-117#post-215491)

от @Dmitrysh первый релиз скетча с рампой для нижнего нагревателя и параметрами в виде структуры как предлагал @Watashi и релиз программы irsp.exe, которая работает с этим скетчем:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-119#post-216258](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-119#post-216258)

@Watashi испытал свой вариант рампы для НИ:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-119#post-216305](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-119#post-216305)

попытка воскрешения версии для UNO & TFT SPI 2.4" от @Yurik-o:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-119#post-216447](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-119#post-216447)

... и комментарии @Dmitrysh к этой попытке:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-119#post-216471](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-119#post-216471)

... и подправленный по замечаниям релиз:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-119#post-216570](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-119#post-216570)

... и пояснения от @Dmitrysh к этому релизу:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-119#post-216583](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-119#post-216583)

плавный запуск для НИ на галогенках в версии для Mega2560 + TFT в редакции @Watashi:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-119#post-216523](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-119#post-216523)

рассуждаем о разнице между софт-стартом и плавным разогревом:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-120#post-216681](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-120#post-216681)

пример софт-старта на промышленных станциях с инерционными НИ:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-120#post-216681](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-120#post-216681)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-120#post-216687](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-120#post-216687)

@Dmitrysh представил версию с софт-стартом для НИ на галогенках:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-121#post-216989](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-121#post-216989)

версия «ручного» управления преднагревом инерционного НИ:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-121#post-217123](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-121#post-217123)

@Ptisa зарисовал внутренний мир своего экземпляра твердотельного реле на 40А:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-124#post-217705](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-124#post-217705)

немного видео познавательных:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-125#post-218069](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-125#post-218069)

... и ещё видео и читиво:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-125#post-218069](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-125#post-218069)

Простенький термостат для низа от mvm\_ksaa:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-125#post-218158](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-125#post-218158)

станция на единственном REX-C100:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-126#post-218361](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-126#post-218361)

ссылка на проект сушилки для чипов на AtMega8:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-126#post-218913](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-126#post-218913)

@RSR3000 собрал станцию по версии @Dmitrysh на базе aoyue int 863:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-127#post-219440](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-127#post-219440)

@Watashi представил видео о развитии своего проекта:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-127#post-219601](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-127#post-219601)

@SergeyVasilyev представил видео о своей станции с контроллером версии @revolover @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-127#post-219661](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-127#post-219661)

... ему задан вопрос по неточности с платой ZCC в видео:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-127#post-219671](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-127#post-219671)

... он ответил на вопрос:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-127#post-219671](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-127#post-219671)



[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-127#post-219929](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-127#post-219929)

... и ещё уточнил:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-127#post-219931](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-127#post-219931)

ссылка на видео с интересной конструкцией ВИ:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-128#post-219973](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-128#post-219973)

немного лирики и частное мнение о возможном конструктиве НИ на кварцевых галогенных линейных лампах по ссылке в посте #2508:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-128#post-220039](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-128#post-220039)

... и небольшое дополнение:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-128#post-220057](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-128#post-220057)

неоконченная серия постов с массой материалов:

0.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-128#post-220121](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-128#post-220121)

1.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-128#post-220121](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-128#post-220121)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-128#post-220126](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-128#post-220126)

2.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-128#post-220131](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-128#post-220131)

3.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-128#post-220157](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-128#post-220157)

4.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-168#post-246054](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-168#post-246054)

@Watashi представил новое видео по своему проекту:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-129#post-220860](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-129#post-220860)

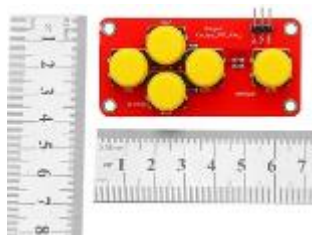
интересное замечание по написанию кода:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-129#post-221352](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-129#post-221352)

... и пояснение к ней:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-129#post-221403](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-129#post-221403)

@tssergej сделал чертеж панели под шилд китайских аналоговых(резистивных) кнопок «Keyes yes\_AD\_key K845037»:



[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-129#post-221364](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-129#post-221364)

@Dmitrysh представил скетч для проверки работоспособности схемы ZCC:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-130#post-222208](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-130#post-222208)

... и привел пример простой схемы ZCC:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-130#post-222342](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-130#post-222342)

... и ещё варианты исполнения простых ZCC:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-130#post-222343](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-130#post-222343)

ссылки на материалы по конструкции излучателей станций и выборе их параметров:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-131#post-222563](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-131#post-222563)

как работает датчик в верхнем излучателе в известной промышленной станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-131#post-222563](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-131#post-222563)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-132#post-223110](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-132#post-223110)

очередное видео от @SergeyVasilyev, версия скетча @revolovr @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-133#post-223461](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-133#post-223461)

чем заменить модули реле для arduino в в наших проектах:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-134#post-223665](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-134#post-223665)

ссылки на схемы самодельных модулей и обсуждение компонентов:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-135#post-223767](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-135#post-223767)

версия силовой схемы от @Dmitrysh с оптронами без встроенной схемы ZCC (нужна внешняя схема ZCC):

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-135#post-223768](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-135#post-223768)

ссылки на чтиво по мощностям и размерам:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-135#post-223923](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-135#post-223923)

... и снова ссылки:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-135#post-223995](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-135#post-223995)

... и примеры прикладывания мощности к площади излучателей:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-135#post-224800](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-135#post-224800)

бюджетный вариант самодельных стоек для фиксации платы на станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-136#post-225185](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-136#post-225185)

вопрос по интерфейсу в версии @revolover @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-137#post-225434](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-137#post-225434)

... и ответ на него:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-137#post-225477](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-137#post-225477)

очередное видео от @SergeyVasilyev, версия скетча @revolovr @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-137#post-225436](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-137#post-225436)

вопрос о возможности отображать названия более 5 профилей в окне программы irsp от @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-138#post-225978](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-138#post-225978)

... и версия программы heater (предшественница irsp) для построения графиков на ПК, позволяющая отображать названия не 5, а больше профилей:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-138#post-226019](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-138#post-226019)

снова ссылки на «посмотреть» и на «почитать»:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-139#post-226183](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-139#post-226183)

ссылка на расчеты снабберных цепочек для симисторов:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-139#post-226594](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-139#post-226594)

замечание по версии @revolover @Dmitrysh для работы режима «только НИ»:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-141#post-227321](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-141#post-227321)

@Dmitrysh представил вариант скетча с фазовым управлением (он же низкочастотный ШИМ). Он основан на последней версии скетча с диммером, так что будет вести себя так же, как и у всех.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-143#post-229062](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-143#post-229062)

@Dmitrysh представил вариант скетча с таблицей мощности от угла открытия симистора. Для ценителей фазового регулирования:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-143#post-229092](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-143#post-229092)

@MRKHBotik представил видео о своей станции под управлением скетча из ветки 1.3.x.:

<http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F->

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-143#post-229192](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-143#post-229192)

... и ещё одно его видео:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-143#post-229199](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-143#post-229199)

о возможности «хирургически» перевести 3,5-дюймовый 8-битный TFT на ili9486 в 16-битный режим:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-143#post-229556](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-143#post-229556)

@Dmitrysh представил обновлённую версию скетча Mega2560 + TFT и программы для ПК. Добавлено управление станцией с ПК. Можно включать/выключать пайку, переключать профили, естественно редактировать их на ПК, сохранять/загружать профили на диск/с диска, отрисовка профиля в окне графиков:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-144#post-231365](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-144#post-231365)

@Dmitrysh – обновлена ветка одноканального контроллера для ВИ, уместающаяся в AtMega168p. Для тех, у кого уже есть термостол, преднагреватель плат, и нет желания строить полноценную станцию. Очень бюджетный вариант:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-145#post-231465](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-145#post-231465)

@Dmitrysh представил релиз скетча для Mega2560, который вообще не использует экран и клавиатуру, всё управляется с ПК. Единственное, что оставил, это возможность подключения кнопки CANCEL, на всякий случай:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-145#post-231546](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-145#post-231546)



почему нет универсальных настроек параметров в меню ПИД в ветках:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-146#post-231715](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-146#post-231715)

про поддельные силовые элементы:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-147#post-232063](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-147#post-232063)

@NikolayGraff выложил свою версию скетча ветки Mega2560 по мотивам релизов @revolover @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-147#post-232469](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-147#post-232469)

про обстановку с проектами в теме:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-147#post-232502](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-147#post-232502)

... и ещё о том же:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-147#post-232567](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-147#post-232567)

@Dmitrysh привел сравнение работы PT100 и термопары K-Type:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-147#post-233423](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-147#post-233423)

ещё полезные ссылки:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-149#post-235350](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-149#post-235350)

@Watashi представил новое видео по своему проекту и выложил ссылки на файлы проекта:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-149#post-235512](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-149#post-235512)

... и добавил пояснения:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-149#post-235641](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-149#post-235641)

ссылка на вариант защиты датчика у чипа от прямого нагрева от ВИ:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-149#post-235636](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-149#post-235636)

@Leonid0071 поделился с участниками ссылками на исходники своего проекта:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-149#post-235646](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-149#post-235646)

@Dmitrysh представил обновление версии для Mega2560. Изменен алгоритм ПИД и добавлена возможность инициализации встроенного тестового профиля:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-151#post-237273](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-151#post-237273)

о периоде расчета температур/мощностей и периоде управляющих сигналов:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-151#post-237273](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-151#post-237273)

[2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-151#post-237392...](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-151#post-237392...)

... и пояснения от @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-151#post-237429](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-151#post-237429)

ссылка на полный перечень проектов в темах:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-152#post-238171](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-152#post-238171)

ссылка на видео с термограммой подогревателя известного производителя:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-156#post-238778](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-156#post-238778)

@Watashi представил видео работы своего проекта на DUE:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-156#post-238934](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-156#post-238934)

ссылка на версию библиотеки для LCD i2c - со встроенной функцией создания меню:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-157#post-239342](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-157#post-239342)

вопрос по энкодеру:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-157#post-240121](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-157#post-240121)

... и ответ на этот вопрос:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-157#post-240127](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-157#post-240127)

@Dmitrysh сделал пояснения к коду своей версии скетча для Mega2560:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-160#post-241171](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-160#post-241171)

@Watashi сделал пояснения к коду своего проекта:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-160#post-241186](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-160#post-241186)

... и ещё добавил:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-161#post-242269](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-161#post-242269)

немного о карбоновых нагревателях:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-162#post-242610](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-162#post-242610)

о том как прикладывать градусы к секундам:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-162#post-242981](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-162#post-242981)

версия библиотеки UTFT, используемая @Dmitrysh:

<http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F->

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-162#post-243225](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-162#post-243225)

@Watashi сделал пояснение по использованию *DumpFile2C\_F* в своём проекте:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-165#post-244709](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-165#post-244709)

... и @Lenar сделал уточнение:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-165#post-244715](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-165#post-244715)

...и добавил в описание от @Watashi:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-165#post-244798](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-165#post-244798)

... и @Watashi прокомментировал добавки от @Lenar:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-165#post-245014](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-165#post-245014)

немного ссылок по пайке:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-165#post-244956](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-165#post-244956)

@Watashi о том, что не использует блок реле на своей станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-168#post-246763](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-168#post-246763)

... @Dmitrysh прокомментировал пост @Watashi про блок реле:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-169#post-246803](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-169#post-246803)

... @StDV попросил уточнить:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-169#post-246830](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-169#post-246830)

... и @Watashi уточнил:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-169#post-246839](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-169#post-246839)

... и пообещал реализовать переключение уровней управления блоком реле в скетче:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-169#post-246861](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-169#post-246861)

ссылка на статью о методах заземления и экранирования:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-169#post-246860](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-169#post-246860)

@Watashi представил очередное видео:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-170#post-249807](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-170#post-249807)

@Watashi сделал замечание по своему проекту и изменил инструкцию:

<http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F->

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-172#post-250621](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-172#post-250621)

@dth представил схему и чертеж печатной платы для ветки **UNO/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)**:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-172#post-251173](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-172#post-251173)

@MegaN опубликовал ссылку на фото своей станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-175#post-252753](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-175#post-252753)

@Dmitrysh высказался об управлении станцией единственным датчиком у чипа:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-175#post-252961](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-175#post-252961)

@Wigorca рассказал о своей станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-176#post-253081](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-176#post-253081)

@Dmitrysh выразил общее представление о коэффициентах ПИД для высокоинерционных излучателей:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-176#post-253373](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-176#post-253373)

немного о функционале обсуждаемых проектов на Mega2560:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-176#post-253373](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-176#post-253373)



[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-253516](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-253516)

@ShVV представил фото своей станции с контроллером проекта @Watashi:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-253525](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-253525)

@RSR3000 предположил развитие в сторону датчика внутри излучателя:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-253993](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-253993)

... и участники высказали свои мнения об этом:

1.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-254068](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-254068)

2.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-254126](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-254126)

... и описали характеристики разных типов излучателей:

1.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-254127](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-254127)

2.

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-254128](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-254128)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-254155](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-254155)

ссылка на вариант 2-х канальной силовой платы, по схеме из официального даташита Motorola для опотриаков без встроенной схемы ZCC:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-254226](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-254226)

@Watashi предоставил видео с новым устройством и размышлениями по его поводу:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-177#post-255226](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-177#post-255226)

... и представил фото совместной работы устройства с контроллером своего проекта:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-178#post-255384](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-178#post-255384)

@Watashi сделал пояснение к своему проекту:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-179#post-256955](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-179#post-256955)

@Watashi представил новое видео о развитии устройства «Паучок»:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-179#post-257217](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-179#post-257217)

@LessNICCKoff представил фото своей станции на котроллере ветки **UNO/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)**:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-179#post-257346](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-179#post-257346)

иногда датчик ВИ ставят на сам чип:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-180#post-257818](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-180#post-257818)

ссылки на материалы по пайке:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-180#post-257919](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-180#post-257919)

@Watashi переписал библиотеку энкодера:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-180#post-257941](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-180#post-257941)

@Dmitrysh представил поправленную версию своей программы irsp:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-181#post-258021](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-181#post-258021)

обновленная версия скетча для ветки **UNO/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)** :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-182#post-258078](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-182#post-258078)

@ShVV представил фото второй своей станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-182#post-258144](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-182#post-258144)

полезные скетчи для проверки модулей MAX6675 и плат arduino:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-182#post-258149](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-182#post-258149)

ссылки на материалы по пайке:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-182#post-258149](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-182#post-258149)

@d-nafanya обнаружил ошибку:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-183#post-258277](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-183#post-258277)

... и @Dmitrysh её исправил и добавил пояснение:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-184#post-258366](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-184#post-258366)

немного о выпрямлении сетки и её креплении:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-185#post-258896](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-185#post-258896)

@Watashi сделал пояснение по своему проекту:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-186#post-259066](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-186#post-259066)

ссылки на материалы по пайке:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-186#post-259066](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-186#post-259066)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-186#post-259140](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-186#post-259140)

обновление ветки **Pro MINI Mega168p, LCD1602 i2c и один модуль MAX6675** :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-187#post-259503](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-187#post-259503)

@Dmitrysh предложил вариант управления станцией по единственной термопаре:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-188#post-259547](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-188#post-259547)

@Watashi представил видео экспериментов с бесконтактным датчиком:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-189#post-259870](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-189#post-259870)

несколько цитат известного мастера:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-189#post-259901](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-189#post-259901)

... и ещё цитаты:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-190#post-259911](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-190#post-259911)

немного ссылок:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-191#post-260004](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-191#post-260004)

@Watashi представил видео с новым экспериментом:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-192#post-260054](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-192#post-260054)

@Dmitrysh представил релизы для ветки 1.3.x с исправлениями:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-193#post-260181](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-193#post-260181)

ссылка на программу для визуализации алгоритмов. Позволяет быстро построить блок-схему из кода:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-193#post-260373](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-193#post-260373)

варианты разводки плат силовой схемы:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-194#post-260924](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-194#post-260924)

обновления релизов ветки 1.3.x и ссылки:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-194#post-260931](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-194#post-260931)

@freizi представил фото своей станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-195#post-261223](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-195#post-261223)

цитаты и т.п.:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-195#post-261223](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-195#post-261223)

[2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-195#post-261229](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-195#post-261229)

@geleos27 представил альфа-версию своего проекта:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-195#post-261298](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-195#post-261298)

Как сделать корпус станции, если из инструментов только заклепочник, дрель и лобзик:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-195#post-261346](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-195#post-261346)

анимация влияния коэффициентов P.I.D на график:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-197#post-261545](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-197#post-261545)

@geleos27 представил измененную им версию SerialPortPlotter:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-198#post-261685](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-198#post-261685)

@Watashi представил новое видео:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-199#post-261900](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-199#post-261900)

@geleos27 представил первые результаты тестов своего проекта:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-200#post-261917](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-200#post-261917)



.... И ещё результаты:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-201#post-261956](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-201#post-261956)

@Dmitrysh представил релиз своей программы irsp:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-201#post-261987](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-201#post-261987)

очередные исправления в ветке 1.3.x:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-201#post-261987](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-201#post-261987)

@geleos27 поправил код измененного им SerialPortPlotter:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-202#post-262111](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-202#post-262111)

добавлен преднагрев НИ на инерционных излучателях в ветку 1.3.x:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-202#post-262169](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-202#post-262169)

@Dmitrysh представил обновленный релиз ветки **UNO/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)** :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-203#post-262261](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-203#post-262261)

цитаты @SNMar4enko по релизам ветки **UNO/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)** :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-203#post-262371](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-203#post-262371)

@Watashi добавил пояснения к изменениям в своём проекте:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-206#post-262636](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-206#post-262636)

@Dmitrysh представил релиз ветки **/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)** версия с rwm - для использования с силовой схемой на основе специализированной микросхемы KP1182ПМ1:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-207#post-262680](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-207#post-262680)

лирика по теме пайки:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-209#post-263055](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-209#post-263055)

@m2blit предложил интересный вариант отражателей для галогенок:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-211#post-263340](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-211#post-263340)

ссылки по теме:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-212#post-263365](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-212#post-263365)

версия для ветки 1.3.x с измененным @geleos27 алгоритмом ПИД НИ:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-212#post-263365](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-212#post-263365)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-212#post-263434](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-212#post-263434)

изменена схема для веток 1.3.x:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-212#post-263453](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-212#post-263453)

попытка добавить в ветку 1.3.x задание в меню минимального и максимального значений мощности ВИ для каждого шага профиля:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-213#post-263597](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-213#post-263597)

@geleos27 представил обновление своей версии SerialPortPlotter:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-213#post-263613](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-213#post-263613)

@Dmitrysh представил исправления для ветки 1.3.x:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-214#post-263734](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-214#post-263734)

@geleos27 представил обновление своей версии SerialPortPlotter:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-214#post-263741](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-214#post-263741)

очередное изменение в ветке 1.3.x и немного ссылок:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-214#post-263741](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-214#post-263741)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-214#post-263766](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-214#post-263766)

ссылки на варианты исполнения корпуса:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-214#post-263778](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-214#post-263778)

@Sema представил фото своей станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-214#post-263780](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-214#post-263780)

@Sema сделал замечания по работе релиза 1.3.x на его варианте станции:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-215#post-263876](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-215#post-263876)

... и ещё добавил:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-215#post-263889](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-215#post-263889)

обновление ветки **ProMini AtMega168p / 16MHz / 5v и LCD1602A+ 1xMAX6675 + PC(опция)**  
(только канал ВИ! Термостол независимый, какой есть под рукою!):

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-215#post-264171](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-215#post-264171)

@Dmitrysh представил новый «немного сырой вариант с 15 профилями и возможностью регулировки температуры НИ после ramпы» релиз для Mega2560:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-216#post-264444](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-216#post-264444)

... и добавил пояснения к нему:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-217#post-264450](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-217#post-264450)

ссылки по теме:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-221#post-264744](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-221#post-264744)

@geleos27 сделал пояснения к своему проекту:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-221#post-264793](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-221#post-264793)

... и ещё:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-221#post-264817](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-221#post-264817)

немного ссылок по теме:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-222#post-265014](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-222#post-265014)

если на дисплее зеркальное изображение:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-223#post-265030](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-223#post-265030)

... и ещё:

<http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F->

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-223#post-265057](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-223#post-265057)

@geleos27 дополнил свой проект:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-223#post-265079](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-223#post-265079)

@Watashi показал как изменить ориентацию тачскрина:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-225#post-265135](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-225#post-265135)

ссылка на фото реализации коммерческого контроллера:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-226#post-265170](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-226#post-265170)

@geleos27 сделал пояснения по работе с SerialPortPlotter (впрятано в спойлере):

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-226#post-265211](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-226#post-265211)

почему температура платы намного ниже температуры излучателей:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-227#post-265266](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-227#post-265266)

@geleos27 представил обновление для своей версии SerialPortPlotter:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-227#post-265357](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-227#post-265357)

@geleos27 разместил опросник по характеристикам строящихся/построенных станций для участников темы:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-229#post-265696](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-229#post-265696)

цитата 4uvak - автора проекта станции с сайта Паяльник:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-230#post-265704](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-230#post-265704)

да, да. И здесь могут халявщикам прочитать мораль. Ссылка в спойлере:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-233#post-266012](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-233#post-266012)

@Dmitrysh представил исправления к релизу ветки **/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC** + PC(опция) (версия с pwm. в версии **pwm** датчик нуля не используется. Эта версия под специализированную микросхему на выходе) :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-234#post-266186](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-234#post-266186)

очередное обновление для ветки 1.3.x:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-235#post-266216](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-235#post-266216)

@LessNICCKoff представил видео попыток настройки своей станции с контроллером из ветки **/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC** + PC(опция) (версия с pwm. в версии **pwm** датчик нуля не используется. Эта версия под специализированную микросхему на выходе) :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-235#post-266216](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-235#post-266216)



[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-235#post-266308](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-235#post-266308)

@geleos27 про функции загрузки профилей в EEPROM и чтения их оттуда, используемые в некоторых ветках:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-235#post-266438](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-235#post-266438)

@Dmitrysh напомнил об использовании делителей в функциях ПИД в наших ветках:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-235#post-266451](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-235#post-266451)

ссылки по теме и попытка вернуть задание для НИ 80-330°C в ветках 1.3.x:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-236#post-266506](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-236#post-266506)

... и поправленный код для этой попытки от @Dmitrysh:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-236#post-266568](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-236#post-266568)

@Dmitrysh представил версию для Mega2560 с возможностью выбирать тип преднагрева для НИ – для галогенок, или для инерционных излучателей.:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-236#post-266621](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-236#post-266621)

@tssergej поделился историей настройки своей станции под управлением контроллера проекта @Watashi под руководством @geleos27:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-236#post-266621](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-236#post-266621)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-236#post-266630](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-236#post-266630)

@Watashi представил версию скетча своего проекта для конструктива станции как у @tssergej:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-237#post-266649](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-237#post-266649)

обновление ветки 1.3.x:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-237#post-266662](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-237#post-266662)

ссылки по теме:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-237#post-266665](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-237#post-266665)

... и тут:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-237#post-266870](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-237#post-266870)

о типах нагрева:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-238#post-266891](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-238#post-266891)

немного про отражатели и промышленную станцию:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-238#post-266922](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-238#post-266922)

@geleos27 снова напомнил о желательности для участников пройти опрос по их станциям:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-238#post-266925](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-238#post-266925)

@Dmitrysh рассказал о необходимости компромисса при выборе количества излучателей и их мощности:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-238#post-267061](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-238#post-267061)

@Dmitrysh обновление версии для ветки **/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)** (версия с pwm. в версии **pwm** датчик нуля не используется. Эта версия под специализированную микросхему на выходе) :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-239#post-267117](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-239#post-267117)

@surf обнаружил недочет в проекте @Watashi:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-239#post-267115](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-239#post-267115)

...и @Watashi его исправил:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-240#post-267127](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-240#post-267127)

@LessNICCKoff рассказал немного о своей станции и приложил используемый им на тот момент вариант скетча для ветки **/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)** (версия с pwm. в версии **pwm** датчик нуля не используется. Эта версия под специализированную микросхему на выходе) :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-240#post-267262](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-240#post-267262)

... и немного ещё дополнил:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-240#post-267275](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-240#post-267275)

замечания @Dmitrysh по поводу особенностей керамических и иных инерционных излучателей:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-242#post-267474](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-242#post-267474)

... и про время опроса MAX6675 и расчета ПИДв наших ветках:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-243#post-267538](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-243#post-267538)

«классическая» версия с диммер и зсс для ветки **/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)** :

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-243#post-267544](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-243#post-267544)

@LessNICCKoff выложил схему своей силовой части станции для ветки **/NANO/ProMini (на 328p) + LCD1602 i2c + 2xMAX6675 + ZCC + PC(опция)** (версия с pwm. в версии **pwm** датчик нуля не используется. Эта версия под специализированную микросхему на выходе)

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-243#post-267547](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-243#post-267547)

@djzakkell задал вопрос про калибровку тащскрина в проекте @Watashi:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-244#post-267727](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-244#post-267727)

... и ему подсказал @vik56:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-244#post-267728](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-244#post-267728)

размышления о введении преднагрева ВИ в ветке 1.3.x:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-247#post-267849](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-247#post-267849)

примеры-скетчи, которые могут быть полезны при построении станции по проектам из темы:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-247#post-267930](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-247#post-267930)

ссылки по теме:

[http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn.10176/page-248#post-268010](http://forum.amperka.ru/threads/%D0%98%D0%9A-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%94%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn.10176/page-248#post-268010)

ссылка на тему-продолжение:

[http://forum.amperka.ru/threads/%D0%98%D0%BA-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%B4%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars\\_v2\\_lilium\\_jsn-%D1%87-2.21236/](http://forum.amperka.ru/threads/%D0%98%D0%BA-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-mega-2560-%D0%B4%D0%BE%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%BA%D0%B0-%D1%81%D0%BA%D0%B5%D1%82%D1%87%D0%B0-ars_v2_lilium_jsn-%D1%87-2.21236/)

ссылка на тему по общим вопросам построения ИК паяльных станций на arduino:

<http://forum.amperka.ru/threads/%D0%98%D0%BA-%D0%BF%D0%B0%D1%8F%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F-%D1%81%D1%82%D0%B0%D0%BD%D1%86%D0%B8%D1%8F-%D0%BD%D0%B0-arduino-%D0%BE%D0%B1%D1%89%D0%B8%D0%B5-%D0%B2%D0%BE%D0%BF%D1%80%D0%BE%D1%81%D1%8B.15569/>

