

Appendix A: Hardware Schematics and Component Data Sheets

Schematics

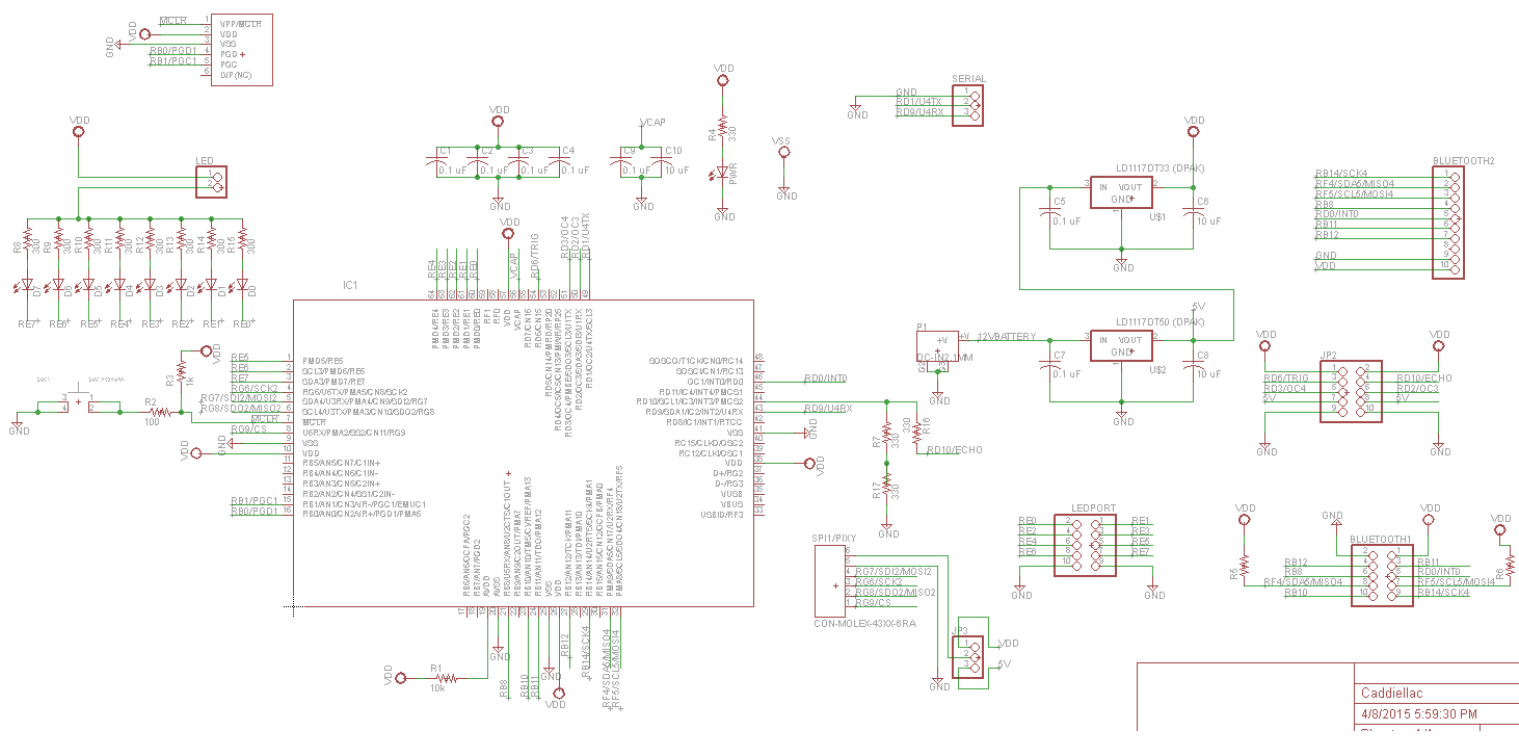


Figure 1. Caddiellac Board Schematic

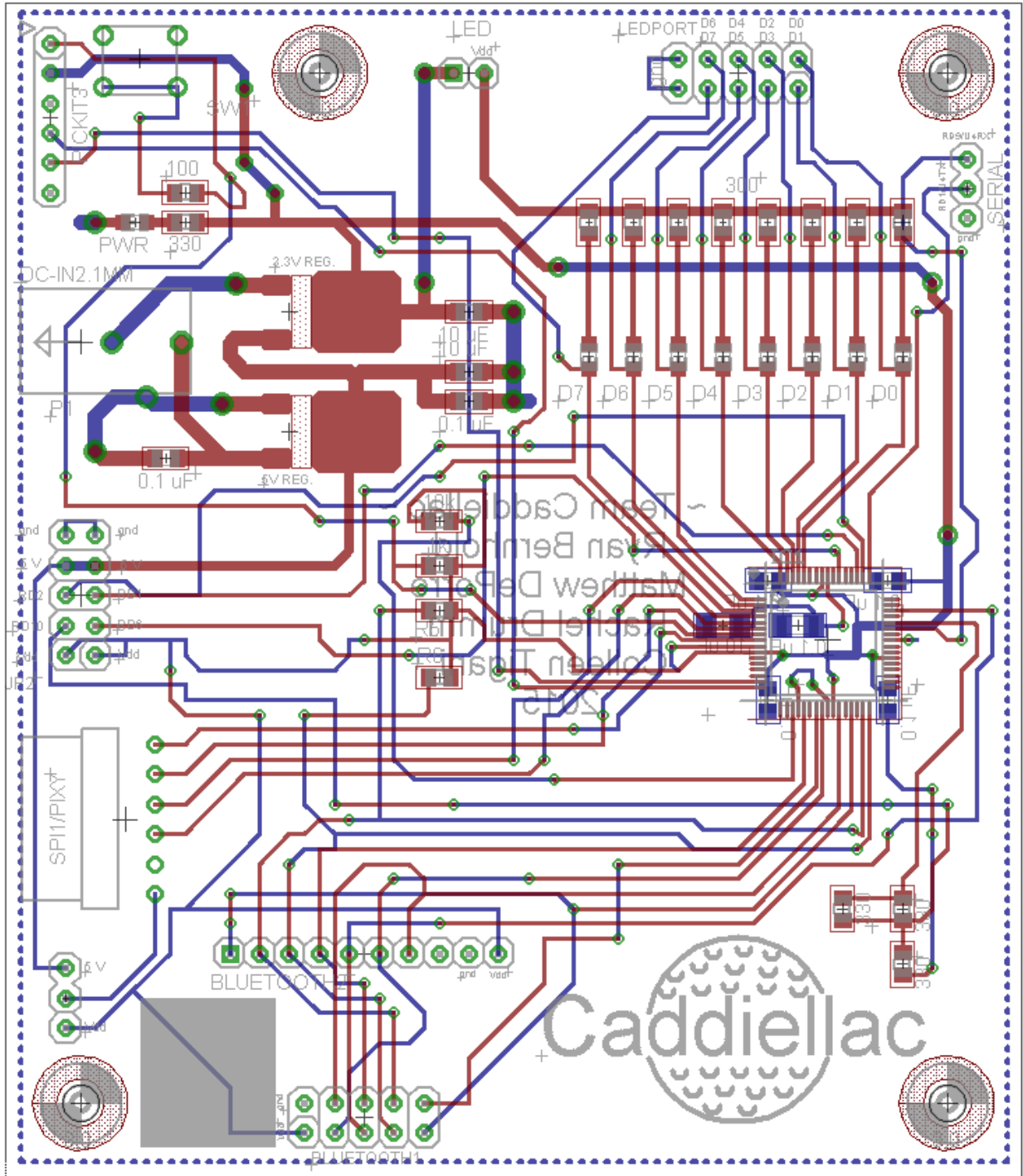


Figure 2. Caddiellac Board Layout

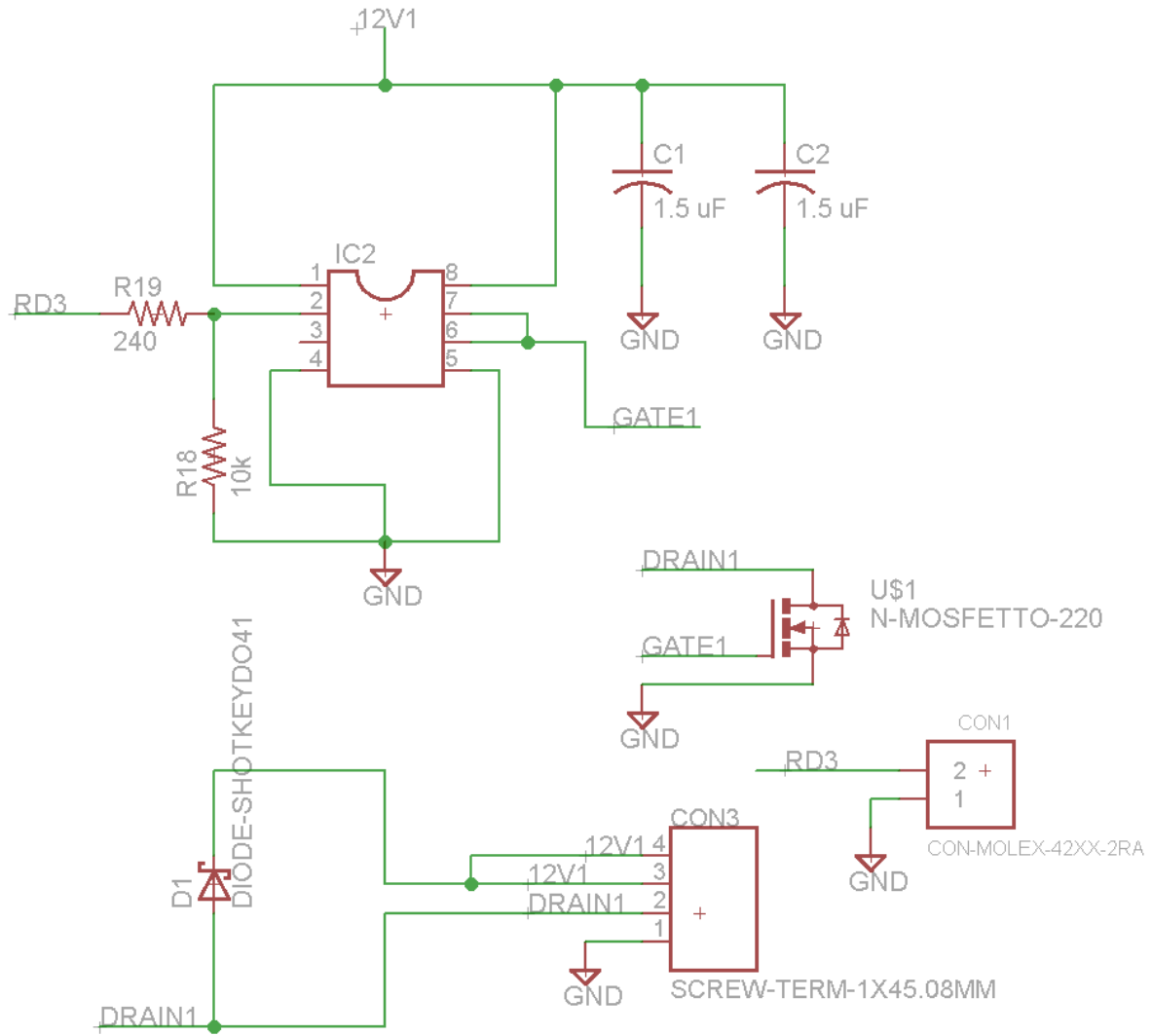


Figure 3. Motor Controller Schematic

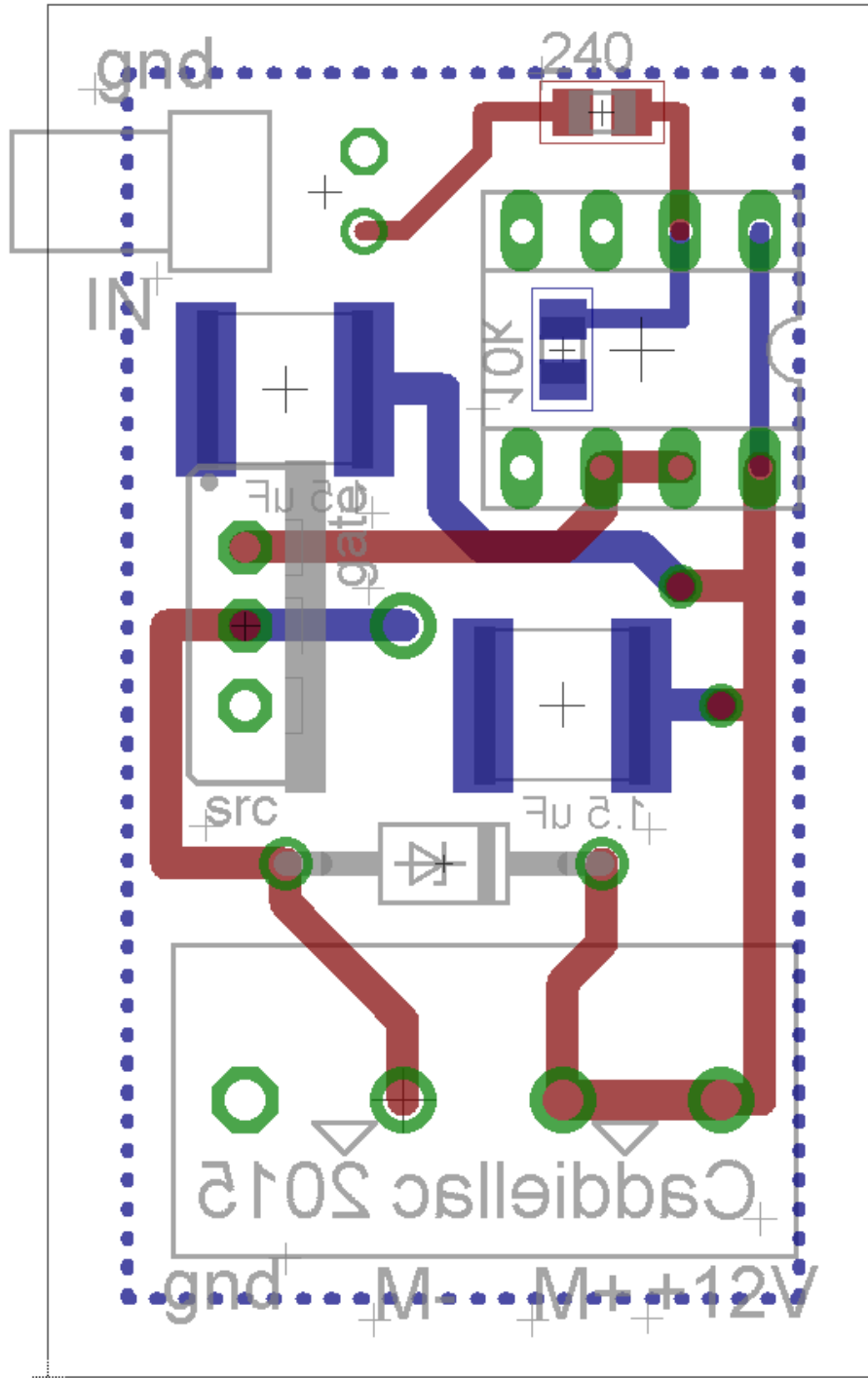


Figure 4. Motor Controller Layout

Datasheets

PIC32MX795F512H Microcontroller:

http://ww1.microchip.com/downloads/en/DeviceDoc/PIC32MX_Datasheet_v2_61143B.pdf

TC1411N MOSFET Driver:

<http://ww1.microchip.com/downloads/en/DeviceDoc/21390d.pdf>

IRLB8743 30V Power MOSFET:

<http://www.irf.com/product-info/datasheets/data/irlb8743pbf.pdf>

RS 775 Motor and PG 71 Gearbox:

<http://www.andymark.com/product-p/am-0914.htm>