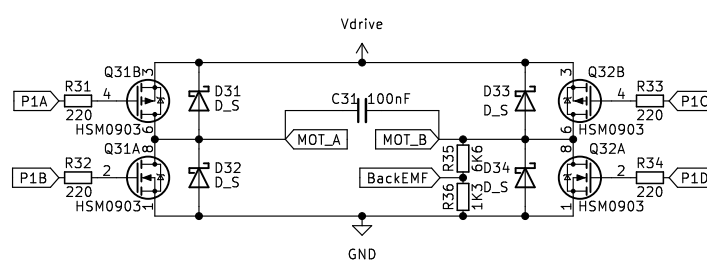
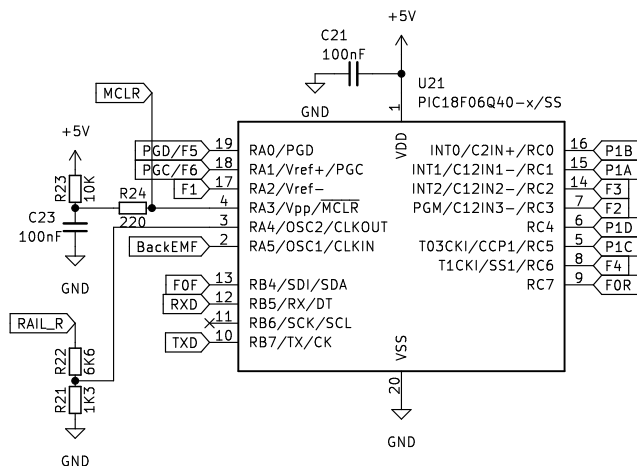
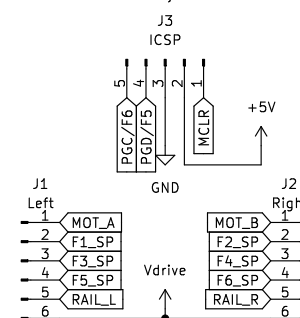


Rail power is fed into a bridge rectifier to generate 6–30V DC which is referenced as Vdrive.
An AMS1117 5V Linear Regulator generates power for the micro-controller.



A dual N/P-Channel MOSFET is used for each side of the H-bridge.
External diodes provide additional protection, if space allows.
A 100nF capacitor improves BackEMF detection.
A resistor divider puts the BackEMF measurement within range of the ADC on the uC.

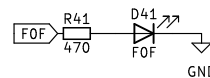
External Connectivity



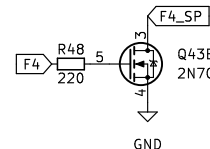
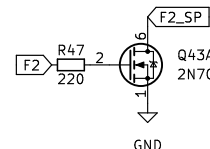
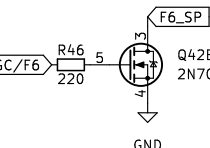
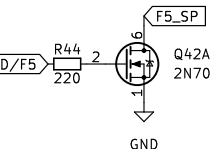
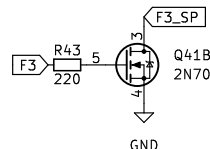
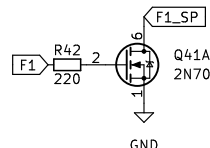
The uC provides all control logic.
Supporting components include a decoupling capacitor, hold up on MCLR, and an ICSP programming header.

For info on motor driving, see:
<http://www.ermicro.com/blog/?p=706>

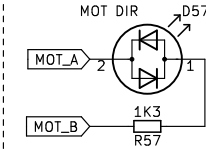
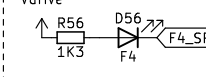
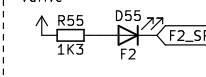
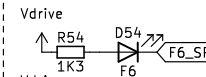
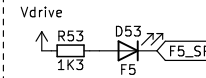
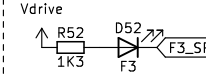
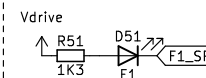
Functions F0F/F0R are direct drive.



F1–F6, if present, are MOSFET driven.



Diagnostic LEDs
Reference Decoders Only



Sheet: /
File: Breadboard-1.kicad_sch

Title:

Size: A4
KiCad E.D.A. kicad (6.0.1-0)

Date:

Rev:

Id: 1/1