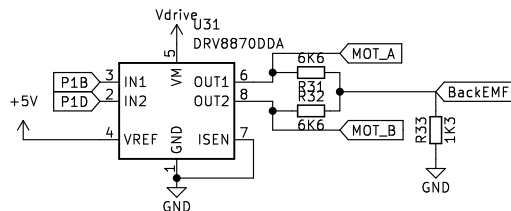
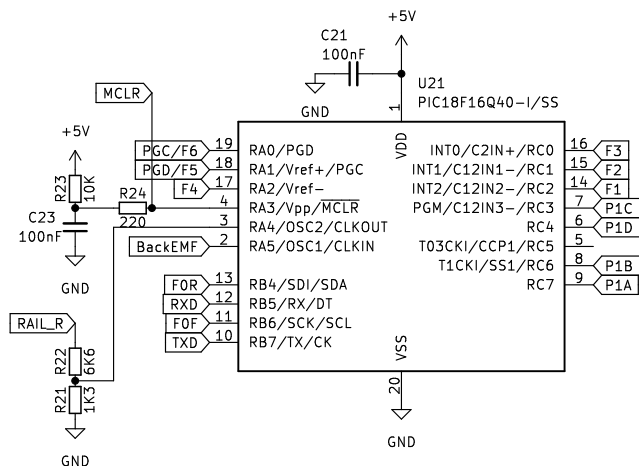
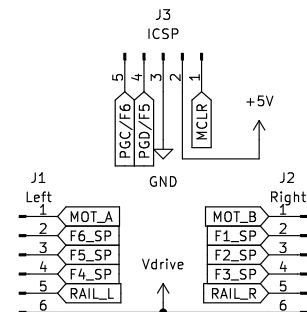


Rail power is fed into a bridge rectifier to generate 6–30V DC which is referenced as Vdrive.  
An AMS1117 5V Linear Regulator generates power for the micro-controller.



A Texas Instruments DRV8870DDA motor-driver IC provides an integrated H-Bridge, overload protection, and a much smaller form factor than discrete components.

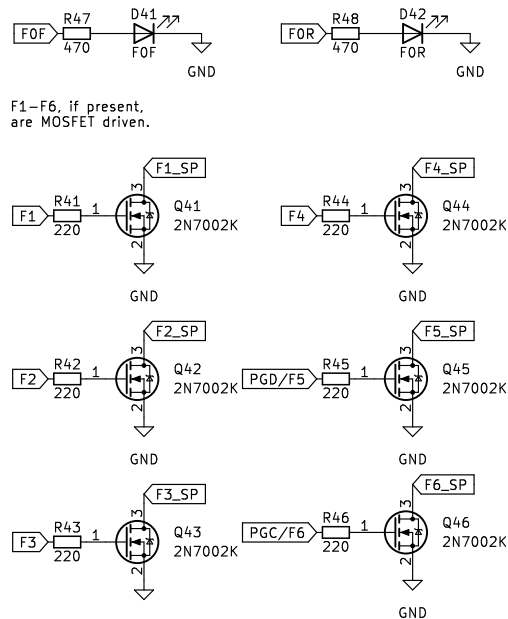
#### External Connectivity



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

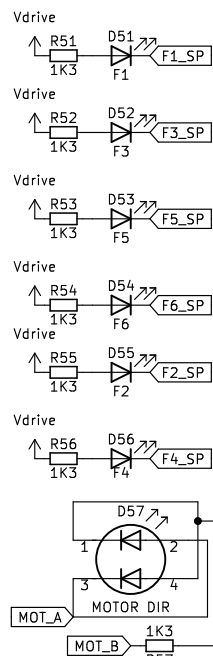
For info on motor driving, see:  
<http://www.ermicro.com/blog/?p=706>

Functions F0F/F0R are direct drive.

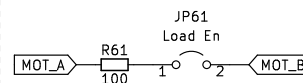


F1–F6, if present, are MOSFET driven.

Diagnostic LEDs  
Reference Decoders Only



Dummy Load  
Enables CV Readback  
Without a Motor



Sheet: /  
File: Breadboard-1.kicad\_sch

**Title:**

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

Date:  
Rev:  
Id: 1/1