

Note: desolder pull-up resistors on LCD I2C module

The diagram shows four separate circuit connections for different peripherals:

- Fan:** A 12V supply is connected to the positive terminal of a BYG22B diode (D5) and one terminal of a 1k resistor (R30). The diode's negative terminal is connected to the negative terminal of R30. The other end of R30 is connected to the positive terminal of an IRLML6244 MOSFET (Q6). The MOSFET's gate is connected to a 5V supply, and its negative terminal is connected to GND. The fan is connected between the MOSFET's drain and the 12V supply.
- I2C LCD:** A 5V supply is connected to pin 1 of a 4-pin connector (J3). Pin 2 is connected to the SCL pin, pin 3 to the SDA pin, and pin 4 to GND.
- Keypad:** A 5V supply is connected to pin 1 of a 9-pin connector (JP1). Pins 2 through 8 are connected to the keypad's rows (KP1 to KP8). Pin 9 is connected to the keypad's MOSI pin. A note indicates that the 9th pin is for a potential upgrade to a 4x5 keypad.
- Encoder:** A 5V supply is connected to pin 1 of a 5-pin connector (J8). Pins 2 through 5 are connected to the encoder's pins (ENC\_B, ENC\_A, ENC\_SW, and an unlabeled pin).

