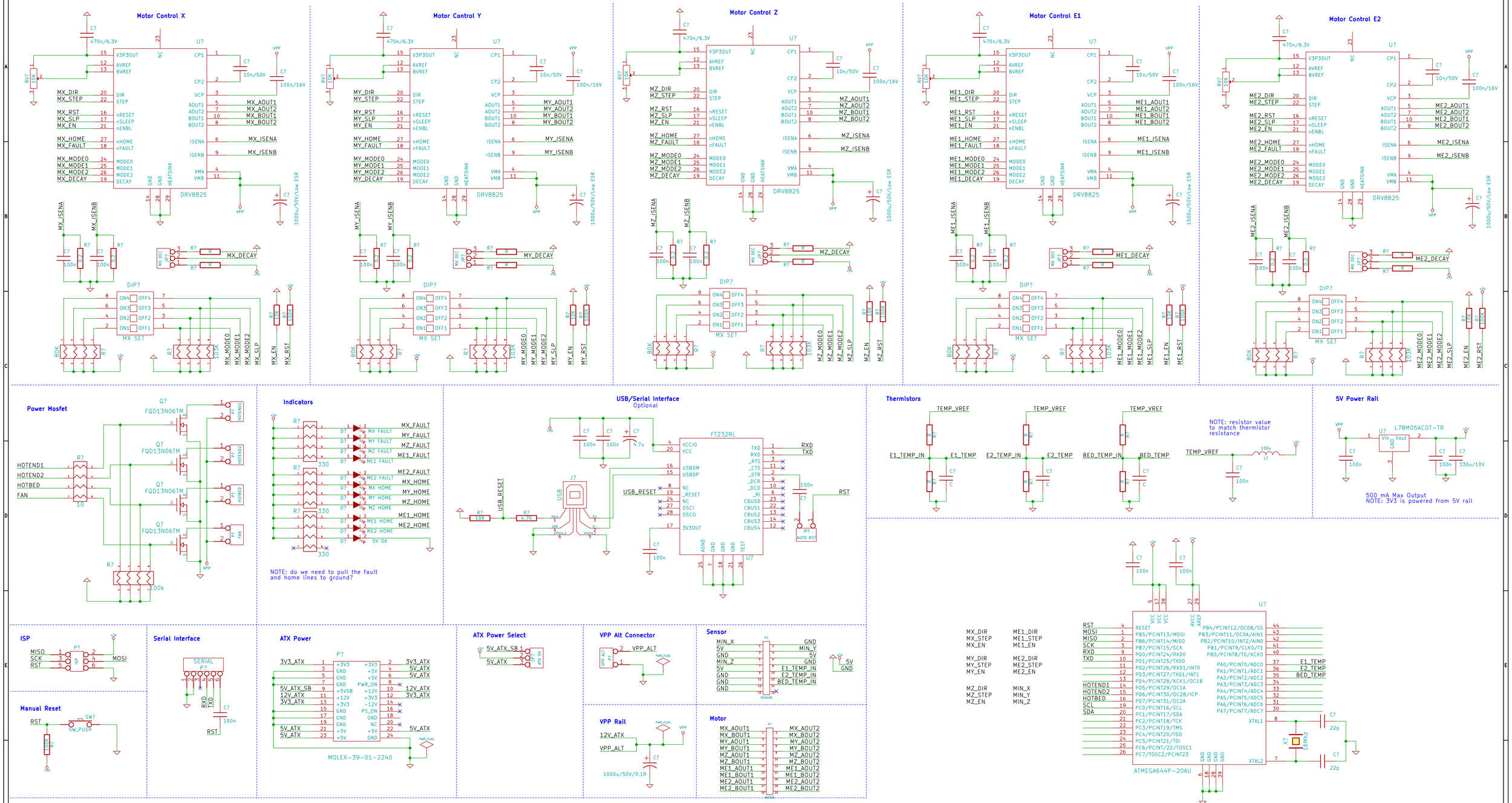

PINOUTS

```
#define X_STEP_PIN         15
#define X_DIR_PIN          18
#define X_ENABLE_PIN       19
#define X_MIN_PIN          20
#define X_MAX_PIN          21

#define Y_STEP_PIN         23
#define Y_DIR_PIN          22
#define Y_ENABLE_PIN       19
#define Y_MIN_PIN          25
#define Y_MAX_PIN          26

#define Z_STEP_PIN         29
#define Z_DIR_PIN          30
#define Z_ENABLE_PIN       31
#define Z_MIN_PIN           2
#define Z_MAX_PIN           1

#define E_STEP_PIN         12
#define E_DIR_PIN          16
#define E_ENABLE_PIN        3

#define SDPOWER           -1
#define SDSS          -1
#define LED_PIN             0
#define FAN_PIN            -1
#define PS_ON_PIN          -1
#define KILL_PIN           -1

#define HEATER_0_PIN       14
#define TEMP_0_PIN          4 //D27
// MUST USE ANALOG INPUT NUMBERING
NOT DIGITAL OUTPUT NUMBERING!!!!!!!!
```

Motor Controller Notes:

Ichop = Vref / (5 x Risense)
eg: VREF=2.5V, 0.25 R at ISense
2.5/(5 x 0.25) = 2A

Internal Resistors
DECAY: pullup = 130K, pulldown = 80K : ENBL: pulldown
SLEEP: pullup : MODE: pulldown : RESET: pulldown

TODO

- Varistor needed on VREF of controller ICs
- I2C Port Expander PCF8574
- Add Buzzer
- Move UI stuff to second board
- Rotary encoder or 3x4 Keypad??
- EEPROM

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