

## Pulse Signal \* ¥#K Direction Signal A6 A5 8 9 10 11 12 13 14 15 A4 A3 A2 A1 A0 AREF \* \*\*\* DIR\_Z) | \*\* ¥ 13(SCK) (SPINDLE\_EN Remark: VCC is com natible with 5V or 24V: PWR\_FLAG Power connecto GRBL PINOUT REFERENCE +36V PWR\_IN1 GNDPWR P Conn\_01x02 All IN PINs has internal 20k pull up resistor to +5V PWR FLAG X motor and sensor socket PUL\_X\_OUT) 1 GNDS 3 DIR\_XROOT) 3 X PLUG SOCKET1 GNDS 2 GNDS 3 DIR\_YEOUT 3 GNDS 4 GNDS 5 +36V 6 Y1\_PLUG\_SOCKET1 GNDPWR } Y motor and sensor socket (same as above) PUL\_Y\_OUT) 1 Voltage regulator fixed 5V Diode for reverse voltage protection of the elektronics Not the motors and sensors. Add power on LED? Not needed. abort led is enough (provides the same function) GNDS 4 ALARM\_IN 5 +36V 6 Y2 PLUG SOCKET1 U15 IFX27001TFV50ATMA1CT-ND +36V D2 PWR\_FLAG GNDPWR 7 8 - C2 - C1 Z motor and sensor socket — 10uF R20 PUL\_Z\_OUT) 1 GNDS 2 DIR\_ZROUT 4 GNDS 4 ALARM\_IN 5 +36V 6 Z\_PLUG\_SOCKET1 PWR\_FLAG this O R is to control where the grounds join Signal to probe and spindle control Extra arduino decupling capacitors Invertek Optidrive For PWM w/o ext V soruce (Aliexpress) 0.1uF +5V DCM(COM) DIN1 (2) HI REF Jumper to 5V\_ISO Al1/D14 (6) 0-5V PWM output LOW REF jumper to GNDS 0V (7) 10uF Alarm opto. Drive through both with external signal to trigger SIGNAL\_SOCKET1 Conn\_01x08

JMC motor interface

Controller

(possibly uneccessay as there are 4.7uF and 0.1uF on the nano board)

RESET\_CAP\_JUMPERI 1 2 S

MH1 MH2 MH3 MH4
Mounting Mtdean of Mtdenting Hole

External serial connector (for Gcode streamer)

Female headers for Arduino∰Nano

Tx and Rx have 1k series resistor to UART IC