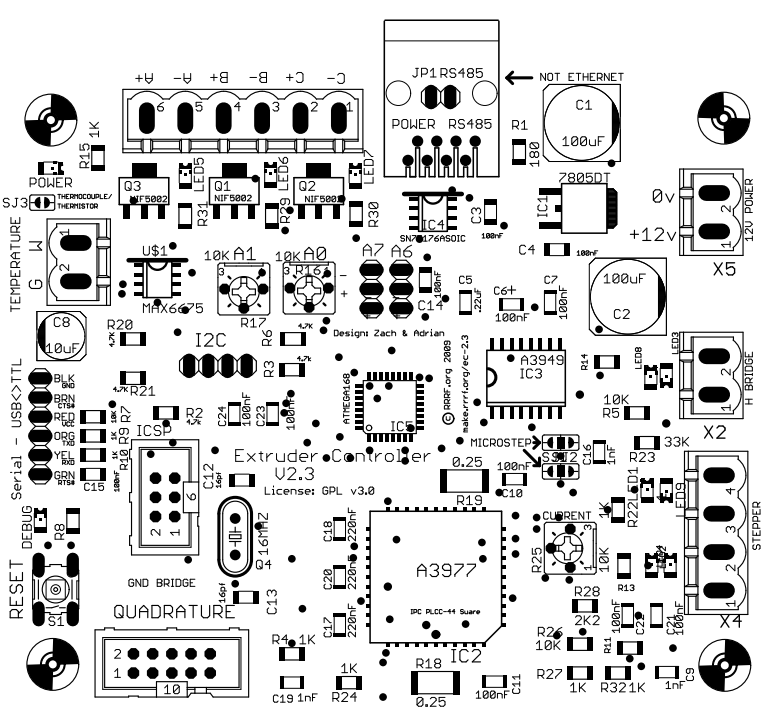
Extruder Controller
V2.3
License: GPL v3.0
Designs Zach & Adrian
JP1 RS485
NOT ETHERNET
POWER RS485
C1
100uF
R1
180
7805DT
IC1
0v
+12v
12V POWER
X5
C2
100uF
C3
100nF
C4
100nF
IC4
SN74176ASOIC
C5
22uF
C6+
100nF
C7
100nF
C14
100nF
A7 A6
A1 A0
U$1
MAX6675
R16
10K
R17
10K
R20
4.7K
R21
4.7K
I2C
R6
4.7K
R3
4.7K
R2
4.7K
R7
10K
R9
1K
R10
1K
C24
100nF
C23
100nF
ATMEGA168
IC5
www.ladyada.net/make/mrrf/avr.html
www.RRRF.org 2009
A3949
IC3
R14
LED8
10K
R5
H BRIDGE
X2
MICROSTEP
SJ2
C16
1nF
R23
33K
0.25
C10
100nF
R19
LED1
LED2
LED3
LED4
LED5
LED6
LED7
Q3
NIF5002
Q1
NIF5002
Q2
NIF5002
R31
R29
R30
SJ3
THERMOCOUPLE/
THERMISTOR
TEMPERATURE
G W
POWER
R15
1K
BLK GND
BRN CTS#
RED 5V
ORG RXD
YEL TXD
GRN RTS#
Serial - USB<>TTL
C15
100nF
ICSP
GND BRIDGE
DEBUG
R8
RESET
S1
Q4
16MHZ
C12
14pf
C13
14pf
QUADRATURE
R4
1K
C19
1nF
R24
1K
C18
220nF
C20
220nF
C17
220nF
A3977
IPC PLCC-44 Suare
IC2
R18
0.25
C11
100nF
CURRENT
R25
10K
R22
1K
R28
2K2
R26
10K
R27
1K
R32
1K
C9
1nF
R13
C21
100nF
C22
100nF
R11
STEPPER
X4