Sheet: Mounting

File: Mounting.sch

J1
Conn_01x05
nMCLR
IDTA
ICLK
RJPWR
VDD
GND

U1
PIC16F15375-IPT
nMCLR 18
ICK 16
IDTA 17
RA0 19
RA1 20
RA2 21
RA3 22
RA4 23
RA5 24
RA6 31
RA7 30
RB0 8
RB1 9
RB2 10
RB3 11
RB4 14
RB5 15
GND 6
GND 29
RD0 38
RD1 39
RD2 40
RD3 41
RD4 2
RD5 3
RD6 4
RD7 5
RC0 32
RC1 35
RC2 36
RC3 37
RC4 42
RC5 43
RC6 44
RC7 1
RE0 25
RE1 26
RE2 27
VDD 7
VDD 28
DRVA00
DRVA01
DRVA02
DRVA03
DRVA04
DRVA05
DRVA06
DRVA07
DRVA08
DRVA09
DRVA10
DRVA11
DRVB00
DRVB01
DRVB02
DRVB03
DRVB04
DRVB05
DRVB06
DRVB07
DRVA12
DRVA13
DRVA14
DRVA15
SERIN
LEDDRV
DRVB08

J4
Conn_01x03_Male
GND

J2
Conn_01x03_Male
VCC
R1
220
GND

Q9
AO3404
GND

U3
Teensy3.0
3:RLibraryParts:Teensy30_31_32_LC
GND 1
0_RX1_Touch DRVA00 2
1_TX1_Touch DRVA01 3
2_CS0 DRVA02 4
3_PWM DRVA03 5
4_PWM DRVA04 6
5_TX1_PWM DRVA05 7
6_CS1_PWM DRVA06 8
7_RX3_DOUT DRVA07 9
8_TX3_DIN DRVA08 10
9_RX2_CS1_PWM DRVA09 11
10_TX2_CS0_PWM DRVA10 12
11_DOUT DRVA11 13
12_DIN 14
VBat 15
3.3V 16
GND 17
Program 18
Reset 19
13_LED_SCK 20
14_A0_SCK DRVA12 21
15_A1_CS4_Touch DRVA13 22
16_A2_SCL_Touch DRVA14 23
17_A3_SDA_Touch DRVA15 24
18_A4_SDA_Touch 25
19_A5_SCL_Touch 26
A13 51
3.3V 50
33_Touch 49
32_Touch 48
31_TX2 47
30 46
45 45
28 44
27 43
26_RX2 42 SERIN
25_Touch 41 DRVB07
24 40 DRVB06
GND 39
A12 38
A11 37
A10 36
AREF 35
VUSB 34
Vin 33 VBUS
AGND 32
3.3V_max100mA 31
23_A9_Touch_CS2_PWM 30 DRVB05
22_A8_Touch_CS3_PWM 29 DRVB04
21_A7_RX1_CS3_PWM 28 DRVB03
20_A6_CS2_PWM 27 DRVB02

SERDRV

D1
SMD-LED-CLEAR-GREEN_0805_
LEDDRV
R2
DNP
GND

R5
220
SERDRV
DIN-5
J5
GND

M2
220
R4
GND

J6
Conn_01x04_Male
SAMB00
SAMB01
SAMB02
SAMB03
D10
D11
D12
D13
SK34

J7
Conn_01x04_Male
SAMB04
SAMB05
SAMB06
SAMB07
D2
D3
D4
D5

J10
Conn_01x01_Male
SAMB08
D6

J11
Conn_01x04_Male
SAMA00
SAMA01
SAMA02
SAMA03
D19
D27
D20
D28

J21
Conn_01x04_Male
SAMA04
SAMA05
SAMA06
SAMA07
D21
D29
D22
D30

J22
Conn_01x04_Male
SAMA08
SAMA09
SAMA10
SAMA11
D23
D31
D24
D32

J23
Conn_01x04_Male
SAMA12
SAMA13
SAMA14
SAMA15
D25
D33
D26
D34

SAMPWR

Use midi style serial port — isolated. Power from chest. Add UC. Downstream option still there.
RC6/7=TX/RX RB6/7=TX/RX2

R3
220
DIN-5
J3
Install for Peripheral In
VCC

U6
6N138
SERIN
R6
220
GND

J12
Conn_01x01
J13
Conn_01x01
J14
Conn_01x01
J15
Conn_01x01
J16
Conn_01x01
J17
Conn_01x01
J18
Conn_01x01
J19
Conn_01x01
J20
Conn_01x01
SAMPWR
GND

J9
Conn_01x02_Female
SAMPWR
GND

Q1A
Q1B
Q3A
Q3B
Q5A
Q5B
Q7A
Q7B
Q10A
Q10B
Q12A
Q12B
Q14A
Q14B
Q16A
Q16B
Q18A
Q26A
Q26B
Q28A
Q28B
Q30A
Q30B
Q32A
Q32B
SI4288
SAMA08
SAMA09
SAMA10
SAMA11
SAMA12
SAMA13
SAMA14
SAMA15
SAMA00
SAMA01
SAMA02
SAMA03
SAMA04
SAMA05
SAMA06
SAMA07
SAMB08
SAMB00
SAMB01
SAMB02
SAMB03
SAMB04
SAMB05
SAMB06
SAMB07
DRVA082
DRVA094
DRVA102
DRVA114
DRVA122
DRVA134
DRVA142
DRVA154
DRVA002
DRVA014
DRVA022
DRVA034
DRVA042
DRVA054
DRVA062
DRVA074
DRVB082
DRVB002
DRVB014
DRVB022
DRVB034
DRVB042
DRVB054
DRVB062
DRVB074
GND

J8
Conn_02x03_Odd_Even
SERIN
SERDRV
GND
VDD

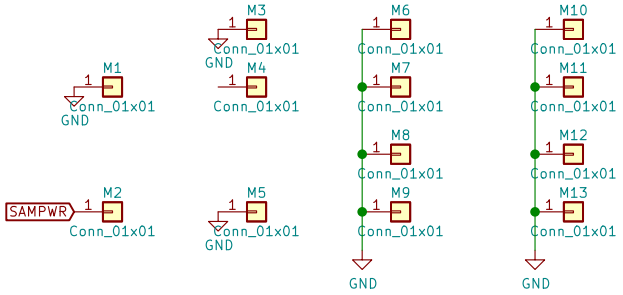
Sheet: PowerSupply

File: RJto10pin.sch

Sheet: /
File: PipeDriver24.sch

Title:

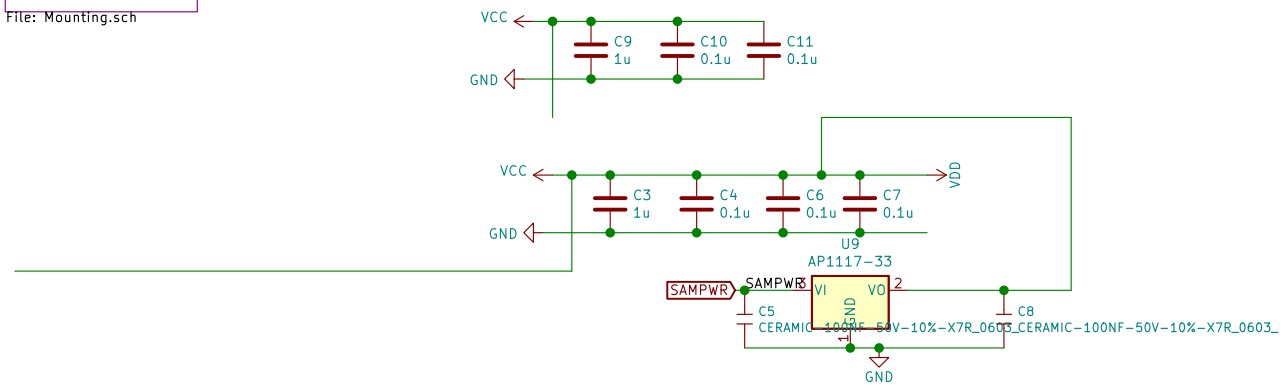
Size: B
Date:
Rev:
KiCad E.D.A. eeschema (5.1.7)-1
Id: 1/4



Sheet: /Mounting/		
File: Mounting.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. eeschema (5.1.7)-1		Id: 2/4

Sheet: Mounting

File: Mounting.sch



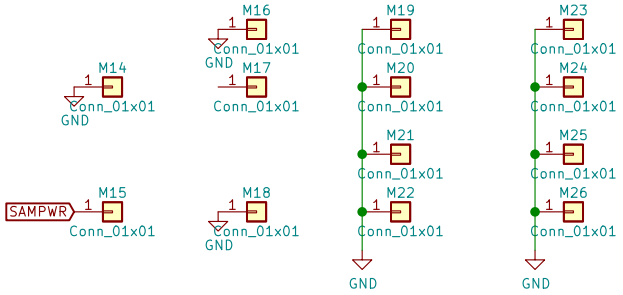
Install for Host Out

Install for Peripheral In

Sheet: /PowerSupply/
File: RJto10pin.sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. eeschema (5.1.7)-1		Id: 3/4



Sheet: /PowerSupply/Mounting/		
File: Mounting.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. eeschema (5.1.7)-1		Id: 4/4