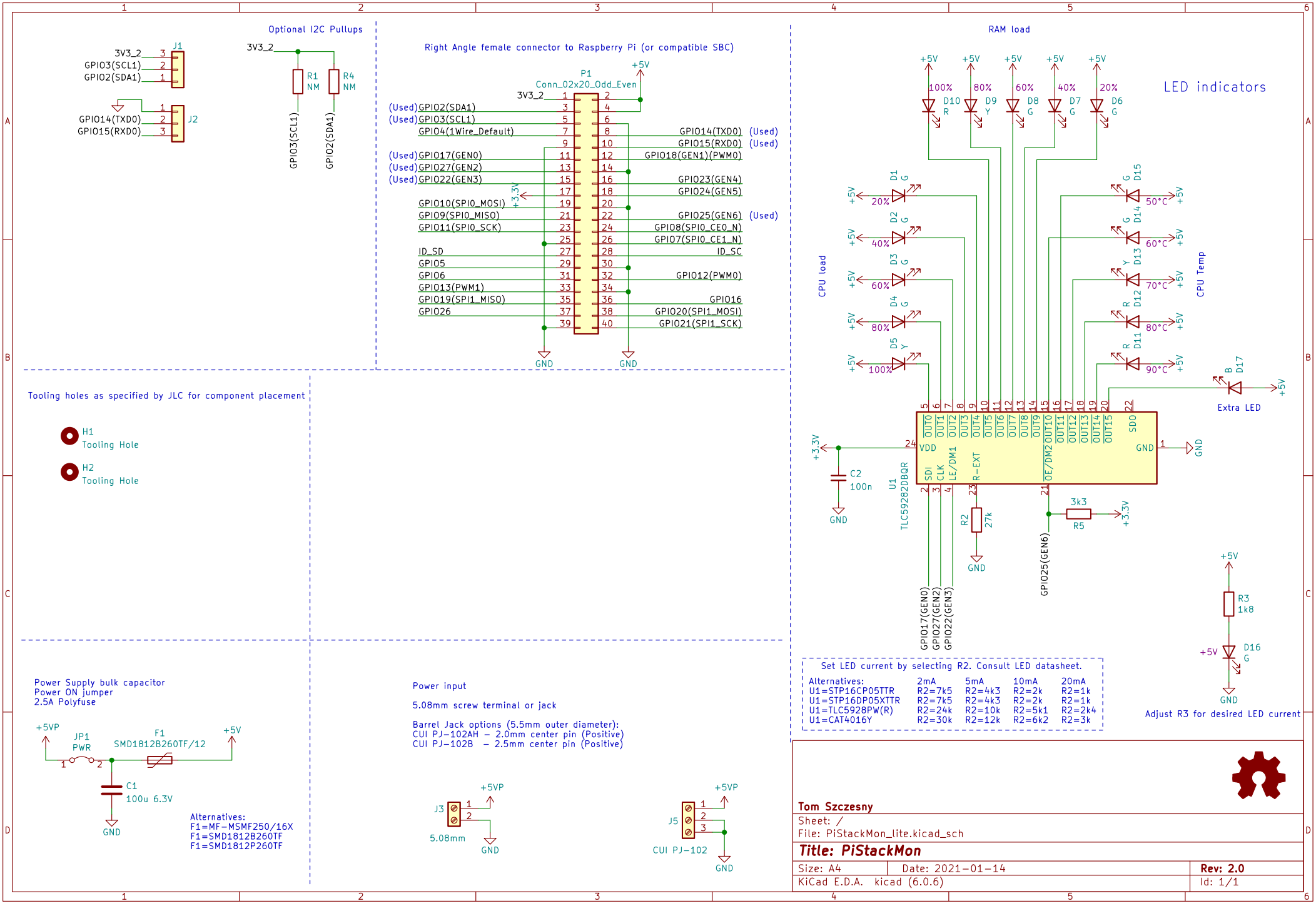
Optional I2C Pullups
3V3_2
GPIO3(SCL1)
GPIO2(SDA1)
J1
GPIO14(TXD0)
GPIO15(RXD0)
J2
R1 NM
R4 NM
Right Angle female connector to Raspberry Pi (or compatible SBC)
P1
Conn_02x20_Odd_Even
+5V
+3.3V
GND
(Used)GPIO2(SDA1)
(Used)GPIO3(SCL1)
GPIO4(1Wire_Default)
(Used)GPIO17(GEN0)
(Used)GPIO27(GEN2)
(Used)GPIO22(GEN3)
GPIO10(SPI0_MOSI)
GPIO9(SPI0_MISO)
GPIO11(SPI0_SCK)
ID_SD
GPIO5
GPIO6
GPIO13(PWM1)
GPIO19(SPI1_MISO)
GPIO26
GPIO14(TXD0) (Used)
GPIO15(RXD0) (Used)
GPIO18(GEN1)(PWM0)
GPIO23(GEN4)
GPIO24(GEN5)
GPIO25(GEN6) (Used)
GPIO8(SPI0_CE0_N)
GPIO7(SPI0_CE1_N)
ID_SC
GPIO12(PWM0)
GPIO16
GPIO20(SPI1_MOSI)
GPIO21(SPI1_SCK)
RAM load
LED indicators
CPU load
CPU Temp
Extra LED
U1
TLC59282DBQR
VDD
SDI
CLK
LE/DM1
R-EXT
OE/DM2
SDO
GND
C2
100n
R2
27k
3k3
R5
GPIO25(GEN6)
GPIO17(GEN0)
GPIO27(GEN2)
GPIO22(GEN3)
R3
1k8
D16
Adjust R3 for desired LED current
Set LED current by selecting R2. Consult LED datasheet.
Alternatives: 2mA 5mA 10mA 20mA
U1=STP16CP05TTR R2=7k5 R2=4k3 R2=2k R2=1k
U1=STP16DP05XTTR R2=7k5 R2=4k3 R2=2k R2=1k
U1=TLC5928PW(R) R2=24k R2=10k R2=5k1 R2=2k4
U1=CAT4016Y R2=30k R2=12k R2=6k2 R2=3k
Tooling holes as specified by JLC for component placement
H1
Tooling Hole
H2
Tooling Hole
Power Supply bulk capacitor
Power ON jumper
2.5A Polyfuse
+5VP
JP1
PWR
F1
SMD1812B260TF/12
C1
100u 6.3V
Alternatives:
F1=MF-MSMF250/16X
F1=SMD1812B260TF
F1=SMD1812P260TF
Power input
5.08mm screw terminal or jack
Barrel Jack options (5.5mm outer diameter):
CUI PJ-102AH - 2.0mm center pin (Positive)
CUI PJ-102B - 2.5mm center pin (Positive)
J3
5.08mm
J5
CUI PJ-102
Tom Szczesny
Sheet: /
File: PiStackMon_lite.kicad_sch
Title: PiStackMon
Size: A4
Date: 2021-01-14
Rev: 2.0
KiCad E.D.A. kicad (6.0.6)
Id: 1/1