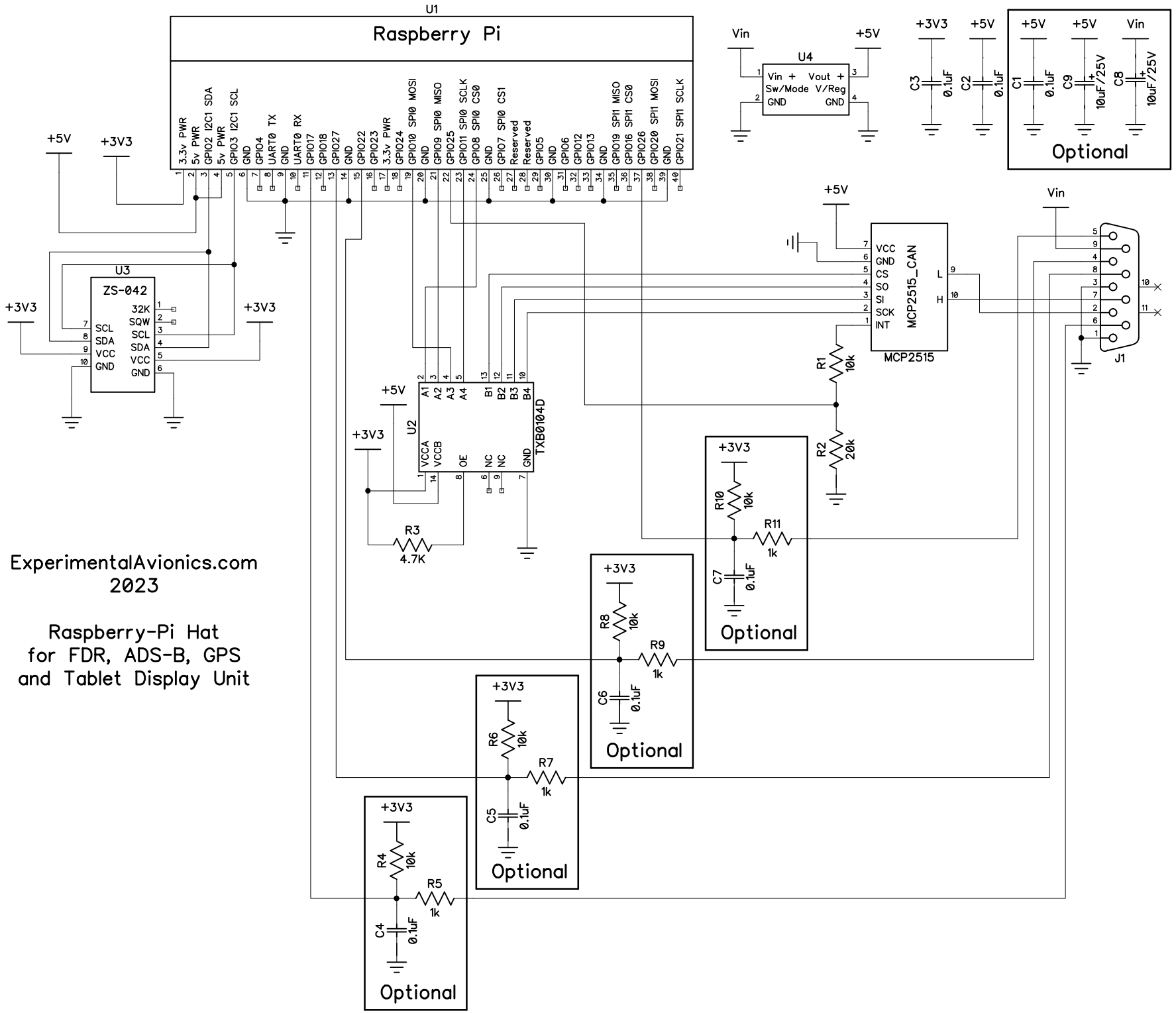
U1
Raspberry Pi
3.3v PWR
5v PWR
GPIO2 I2C1 SDA
5v PWR
GPIO3 I2C1 SCL
GND
GPIO4
UART0 TX
GND
UART0 RX
GPIO17
GPIO18
GPIO27
GND
GPIO22
GPIO23
3.3v PWR
GPIO24
GPIO10 SPI0 MOSI
GND
GPIO9 SPI0 MISO
GPIO25
GPIO11 SPI0 SCLK
GPIO8 SPI0 CS0
GND
GPIO7 SPI0 CS1
Reserved
Reserved
GPIO5
GND
GPIO6
GPIO12
GPIO13
GND
GPIO19 SPI1 MISO
GPIO16 SPI1 CS0
GPIO26
GPIO20 SPI1 MOSI
GND
GPIO21 SPI1 SCLK
U4
Vin
+5V
Vin + Vout +
Sw/Mode V/Reg
GND GND
+3V3
+5V
+5V
+5V
+5V
Vin
C3 0.1uF
C2 0.1uF
C1 0.1uF
C9 10uF/25V
C8 10uF/25V
Optional
U3
ZS-042
32K
SQW
SCL
SDA
VCC
GND
U2
TXB0104D
VCCA
VCCB
OE
NC
NC
GND
MCP2515
MCP2515_CAN
VCC
GND
CS
SO
SI
SCK
INT
L
H
J1
R1 10k
R2 20k
R3 4.7K
R4 10k
R5 1k
C4 0.1uF
R6 10k
R7 1k
C5 0.1uF
R8 10k
R9 1k
C6 0.1uF
R10 10k
R11 1k
C7 0.1uF
Optional
Optional
Optional
Optional
ExperimentalAvionics.com
2023
Raspberry-Pi Hat
for FDR, ADS-B, GPS
and Tablet Display Unit