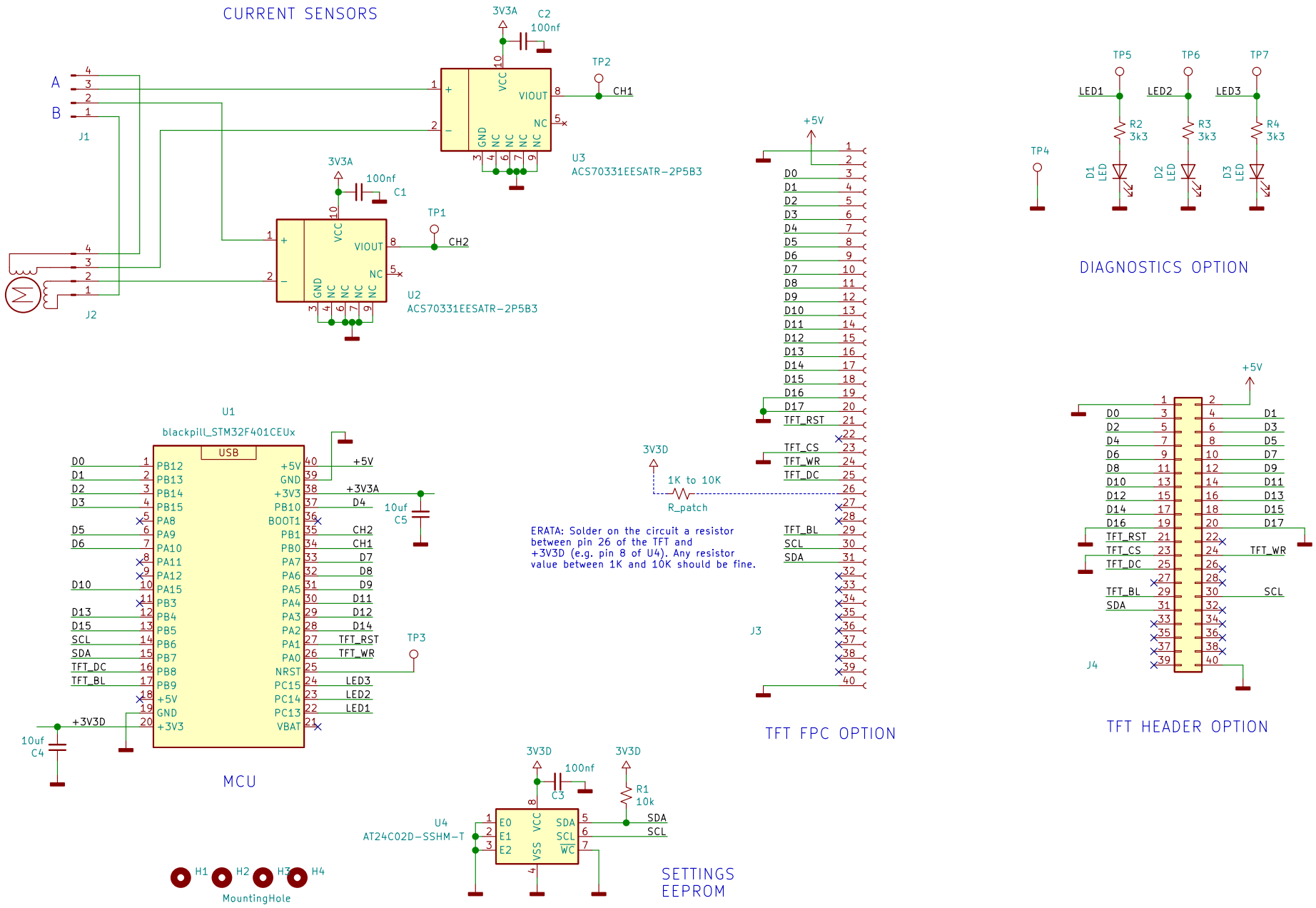
CURRENT SENSORS
3V3A
C2
100nf
TP2
CH1
A
B
J1
VCC
VIOUT
NC
GND
U3
ACS70331EESATR-2P5B3
3V3A
100nf
C1
TP1
CH2
U2
ACS70331EESATR-2P5B3
J2
TP5
TP6
TP7
LED1
LED2
LED3
R2
3k3
R3
3k3
R4
3k3
TP4
D1
LED
D2
LED
D3
LED
DIAGNOSTICS OPTION
+5V
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
D16
D17
TFT_RST
TFT_CS
TFT_WR
TFT_DC
TFT_BL
SCL
SDA
3V3D
1K to 10K
R_patch
ERATA: Solder on the circuit a resistor between pin 26 of the TFT and +3V3D (e.g. pin 8 of U4). Any resistor value between 1K and 10K should be fine.
J3
TFT FPC OPTION
+5V
J4
TFT HEADER OPTION
U1
blackpill_STM32F401CEUx
USB
PB12
PB13
PB14
PB15
PA8
PA9
PA10
PA11
PA12
PA15
PB3
PB4
PB5
PB6
PB7
PB8
PB9
+5V
GND
+3V3
+5V
GND
+3V3
PB10
BOOT1
PB1
PB0
PA7
PA6
PA5
PA4
PA3
PA2
PA1
PA0
NRST
PC15
PC14
PC13
VBAT
+3V3A
D4
CH2
CH1
D7
D8
D9
D11
D12
D14
TFT_RST
TFT_WR
LED3
LED2
LED1
10uf
C5
TP3
+3V3D
10uf
C4
MCU
3V3D
100nf
C3
3V3D
R1
10k
U4
AT24C02D-SSHM-T
E0
E1
E2
VCC
VSS
SDA
SCL
WC
SDA
SCL
SETTINGS
EEPROM
H1
H2
H3
H4
MountingHole