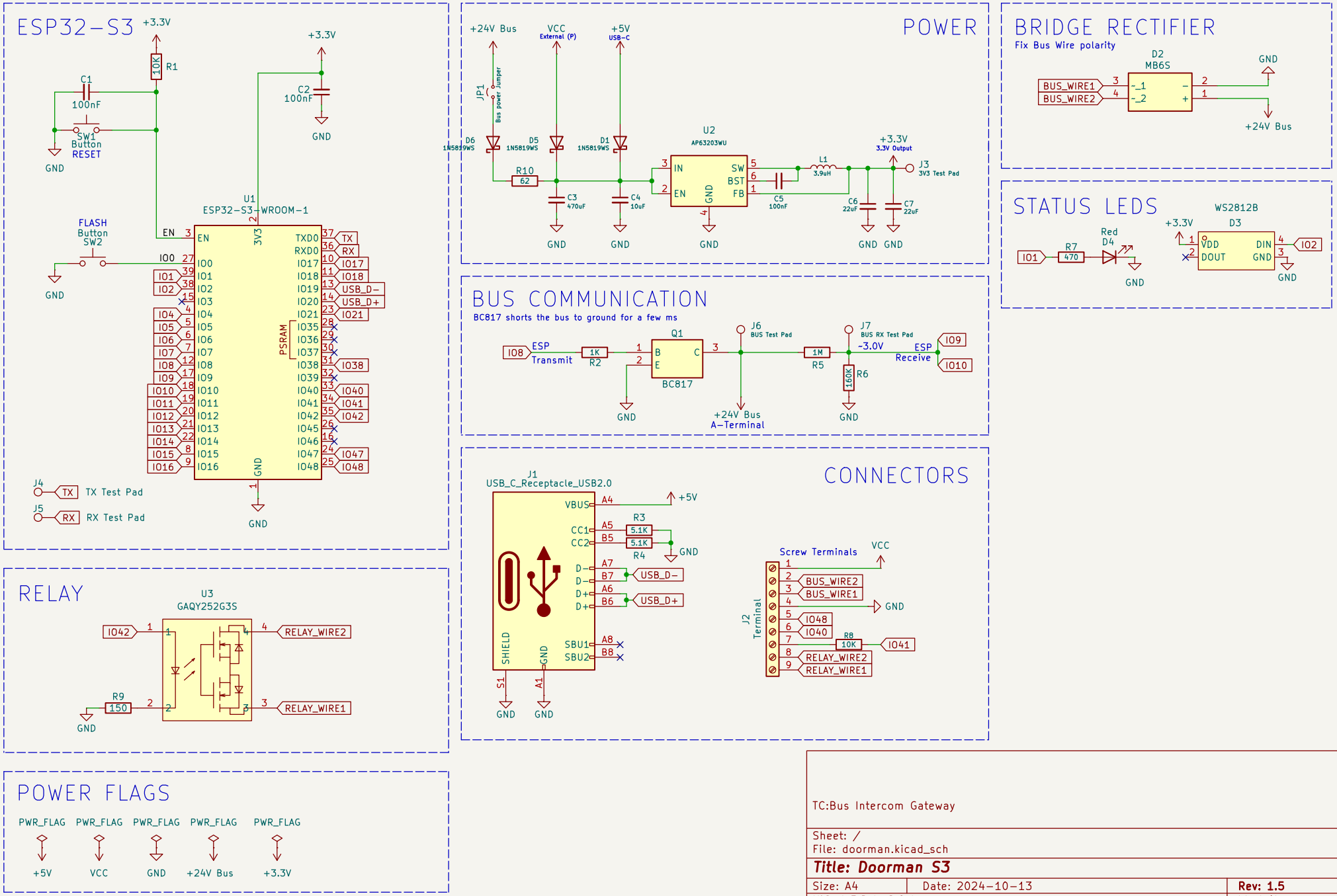
ESP32-S3
+3.3V
R1
10K
C1
100nF
SW1
Button
RESET
GND
C2
100nF
FLASH
Button
SW2
EN
IO0
U1
ESP32-S3-WROOM-1
3V3
TXD0
RXD0
PSRAM
TX
RX
USB_D-
USB_D+
J4
TX Test Pad
J5
RX Test Pad
POWER
+24V Bus
VCC
External (P)
+5V
USB-C
JP1
Bus power Jumper
D6
1N5819WS
D5
1N5819WS
D1
1N5819WS
R10
62
C3
470uF
C4
10uF
U2
AP63203WU
IN
EN
SW
BST
FB
GND
L1
3.9uH
C5
100nF
C6
22uF
C7
22uF
+3.3V
3.3V Output
J3
3V3 Test Pad
BUS COMMUNICATION
BC817 shorts the bus to ground for a few ms
IO8
ESP
Transmit
1K
R2
Q1
BC817
J6
BUS Test Pad
+24V Bus
A-Terminal
1M
R5
J7
BUS RX Test Pad
~3.0V
ESP
Receive
IO9
IO10
160K
R6
CONNECTORS
J1
USB_C_Receptacle_USB2.0
VBUS
CC1
CC2
D-
D+
SHIELD
SBU1
SBU2
R3
5.1K
R4
5.1K
Screw Terminals
VCC
J2
Terminal
BUS_WIRE2
BUS_WIRE1
IO48
IO40
R8
10K
IO41
RELAY_WIRE2
RELAY_WIRE1
RELAY
U3
GAQY252G3S
IO42
R9
150
BRIDGE RECTIFIER
Fix Bus Wire polarity
D2
MB6S
STATUS LEDS
IO1
R7
470
Red
D4
WS2812B
D3
VDD
DOUT
DIN
POWER FLAGS
PWR_FLAG
+5V
VCC
GND
+24V Bus
+3.3V
TC:Bus Intercom Gateway
Sheet: /
File: doorman.kicad_sch
Title: Doorman S3
Size: A4
Date: 2024-10-13
Rev: 1.5
KiCad E.D.A. 8.0.1
Id: 1/1