USB

VBUS

P1
USB_B
1 VBUS
2 D−
3 D+
Shield
GND
5 4
GND

R4 1.5k → PUR
R8 27 → D_MINUS
R9 27 → D_PLUS

Power Supplies

VBUS U2 MCP17003302E +3V3
2 VI   VO 3
1 GND
C2 1u   C4 1u
GND GND GND

+3.3V   +1V8
R20 15k
R21 18k   Cok1 0.1u
GND GND

+3.3V
Dok1 LED
Rok1 330
GND

Graph Link

+3V3
R5 10k   Rok2 10k
PN2222A U4A
1   3
2
MCU_TIP → D1B MBR150
D1A MBR150
MCU_RING
TI1
1 tip (red)
2 ring (white)
3 sleeve (black)
Wire
GND
+3V3
R6 10k   PN2222A U4B
Rok3 10k

Bus Powered Suspend

+3.3V
R1 15k
R24 33k → RESET
VREGEN
C7 1u   D2 1N4148
GND   SUSPEND

USB Microcontroller

+3V3 +1V8
3 25 4
VCC VCC VDD18
U3 TUSB3410
1 VREGEN   TEST0 23 TEST0
2 SUSPEND TEST1 24 TEST1
5 PUR
6 DP   P3.0 32
7 DM   P3.1 31
        P3.3 30 MCU_TIP
9 RESET P3.4 29 MCU_RING
12 WAKEUP
10 SDA   CTS 13
11 SCL   DCD 15
         DSR 14
         DTR 21
22 CLKOUT RTS 20
           RI/CP 16
C5 22p
27 X1/CLKI SIN/IR_SIN 17 — R2 10k — +3V3
26 X2   SOUT/IR_SOUT 19
Y1 12MHz
C1 22p
GND GND GND
8 18 28
GND

VREGEN
SUSPEND
PUR
D_PLUS
D_MINUS
RESET
SDA
SCL

EEPROM

+3.3V
U1 24LC256
8
1 A0   VCC   SDA 5 SDA
2 A1   SCL 6 SCL
3 A2   GND   WP 7
4
GND

Pullups

+3.3V   +3.3V
R28 5.1k R26 5.1k   R25 5.1k R30 5.1k
SCL   TEST0
SDA   TEST1