#### Linux based scout UAV LinuxベースのスカウトUAV

Sheetname: osd32mp1-1-power

File: osd32mp1-1-power.kicad\_sch
Sheetname: osd32mp1-2

File: osd32mp1-2.kicad\_sch
Sheetname: osd32mp1-3

File: osd32mp1-3.kicad\_sch
Sheetname: battery-power

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Sheetname: power-section-1

File: power-section-1.kicad\_sch
storage

File: storage.kicad\_sch
long-range-radio-1

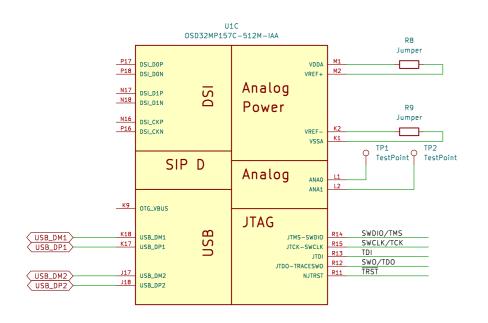
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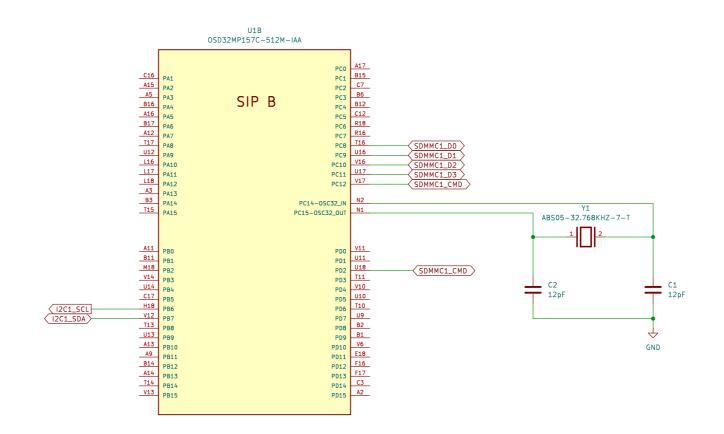
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GNSS

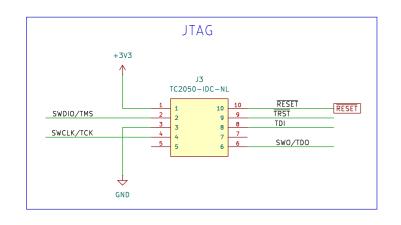
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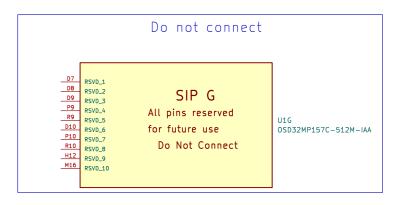
OSD32MP1 power +VIN U1E OSD32MP157C-512M-IAA +3V3 U1A OSD32MP157C-512M-IAA VSS\_36 N11 VSS\_37 E12 SIP E PMIC\_VOUT4\_2 VSS\_38 VSS\_39 G12 +BST VSS\_41 N12 Power Inputs PMIC\_BSTOUT\_1 VSS\_43 Power Outputs PMIC\_BSTIN\_1 +VSW VSS\_45 VSS\_46 H13 VSS\_10 VSS\_11 VSS\_12 VSS\_13 VSS\_14 M8 PMIC\_BSTIN\_2 L9 PMIC\_BSTIN\_3 M9 PMIC\_BSTIN\_4 P5 E6 F6 VSS\_48 L13 PMIC\_SWOUT\_1
PMIC\_SWOUT\_2 VSS\_50 N13 VSS\_15 VSS\_16 VSS\_51 VSS\_52 F14 VSS\_17 VSS\_18 PMIC\_SWIN\_1 VSS\_53 H9 PMIC\_SWIN\_2 NOTE: Can use pours to pads instead of a via VSS\_19 VSS\_20 PMIC\_VBUSOTG K8 VSS\_55 J14 VSS\_22 VSS\_23 VSS\_57 F8 PMIC\_LD025IN N8 P8 VSS\_59 N14 VSS\_24 VSS\_25 VSS\_60 VSS\_61 F15 +VLD02 VSS\_26 VSS\_27 VSS\_62 F10 VSS\_29 F10 VSS\_30 VSS\_64 SIP A N10 VSS\_30 VSS\_31 VSS\_32 VSS\_33 VSS\_34 VSS\_35 VSS\_66 VSS\_67 VSS\_68 N15 VSS\_69 J16 PMIC\_LD05 PONKEY PMIC\_PONKEYN PMIC\_LD06 VDDI RESET M3 Internal Use Only VDD\_1 Connect VDD\_3 Pull down to enable Together Can be used VDD\_5 for boot config Internal Use Only GND to program EEPROM GND VDD\_9 Together EEPROM\_WP P4 EEPROM\_WP User config and reset control Connect to VDD VRAT SIP F R4 VDD\_CORE VDD\_DDR VTT\_DDR VREF\_DDR Config Power Rails SW1 SW\_DIP\_x04 R5
R8
VDD3V3\_USB
VDDA1V1\_REG
VDDA1V8\_REG
VDD1V2\_DSI\_REG R7 10K Do Not Use Test Point per S1 B3U-1000P signal RESET recommended J2 HSE\_OSC\_TP OSD32MP157C-512M-IAA Processor Control L3 PAO/PMIC\_INTN D6
PC13/PMIC\_WAKEUP
PWR\_ON/PMIC\_PWRCTRL GND K6
M6
L6
PWR\_LP
PDR\_ON
PDR\_ON\_CORE Do Not Use Test Point per NRST\_CORE signal recommended Sheet: /osd32mp1-1-power/ File: osd32mp1-1-power.kicad\_sch Title: Size: A3 Date: KiCad E.D.A. 8.0.6

#### 05D32MP1









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05D32MP1 U1D OSD32MP157C-512M-IAA SIP C PH2 B13 C13 PH4 U6 PH5 T6 PH6 B5 PH7 C5 PH8 T4 U3 PH10 U2 PH11 U2 PH11 T1 PH15 T2 PIO T3
PI1 R1
PI2 R2
PI3 R3
PI4 P1
PI5 P2
PI6 P3
PI7 N3
PI8 C1
PI9 C2
PI10 B4
PI11 C4 V8 PF0
V8 PF1
T18 PF2
C6 PF3
V7 PF4
B PF5
F18 PF5
G16 G16
G17
G18
PF7
G18
B18 PF1
C11 PF12
A10 PF13
B10 PF14
C10 PF15 C8 PG0

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H17 PG7

D16 PG8

M17 PG9

C14 PG11

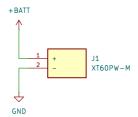
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B7 PG14

V9 PG15 Sheet: /osd32mp1-3/ File: osd32mp1-3.kicad\_sch Title: Size: A3 Date: KiCad E.D.A. 8.0.6 Rev: Id: 4/11

## Battery Power バッテリー電源

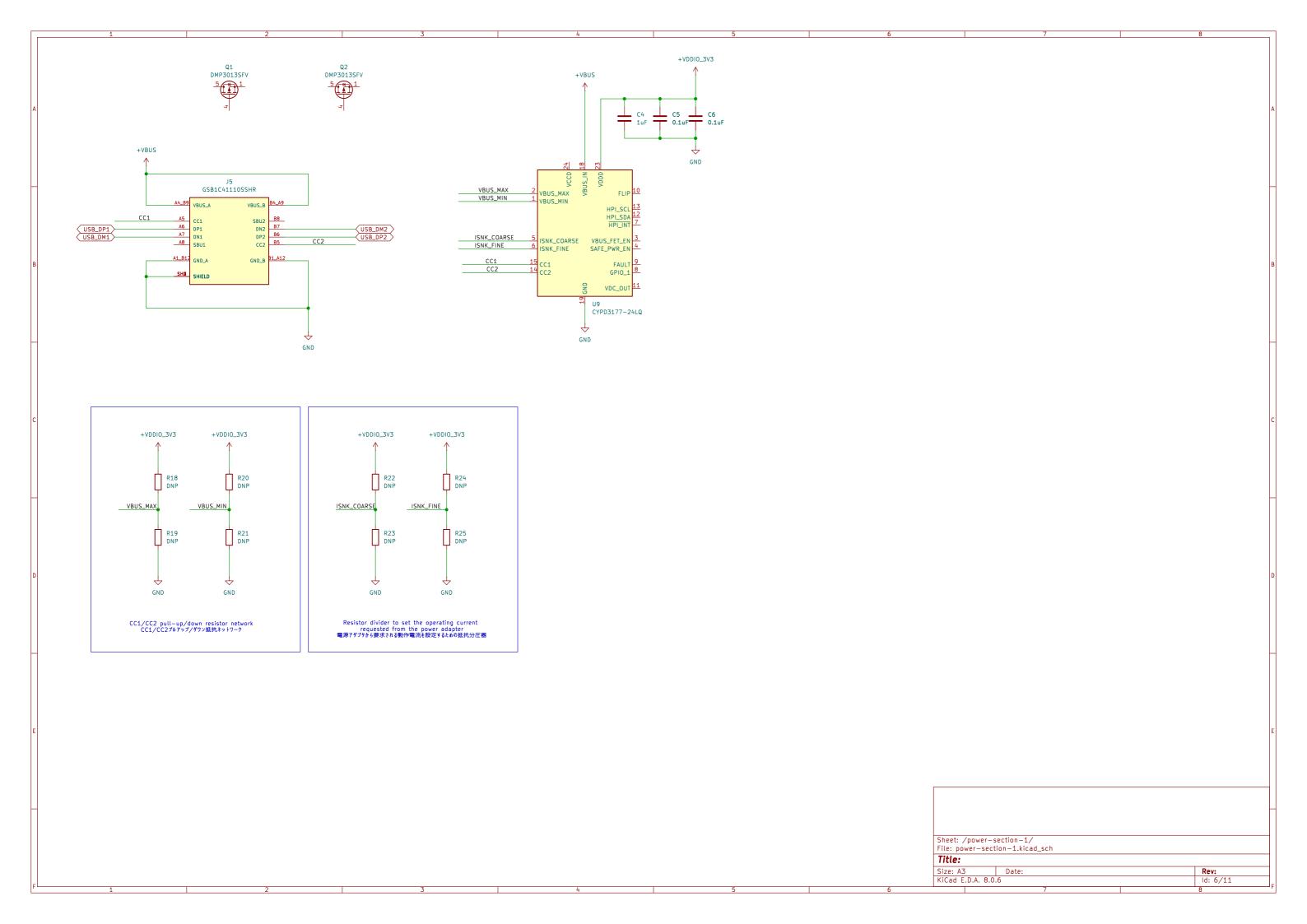
#### 2S-6S LiPo battery



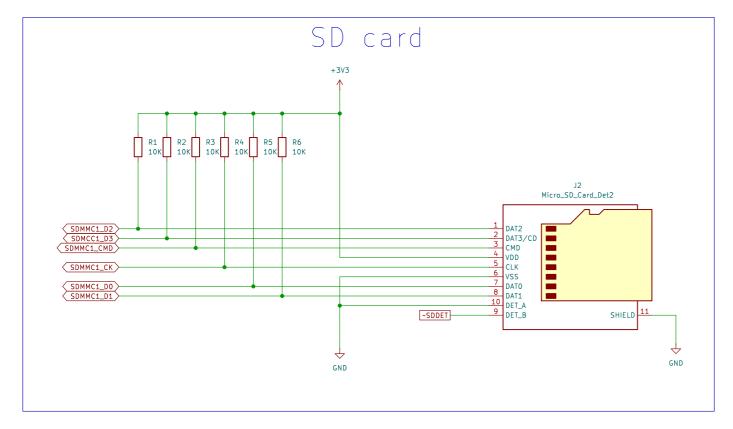


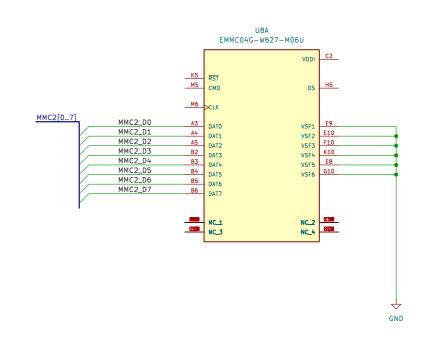
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# Storage





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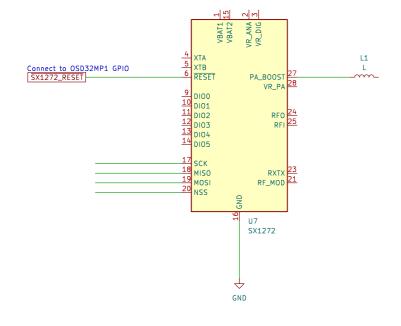
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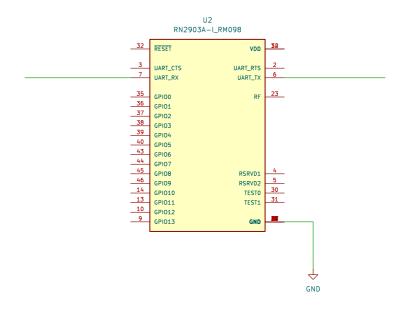
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### Long range radio

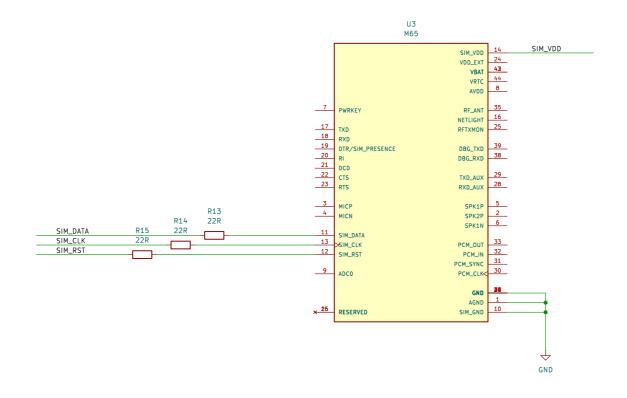
#### SX1272 LoRaWAN IC option

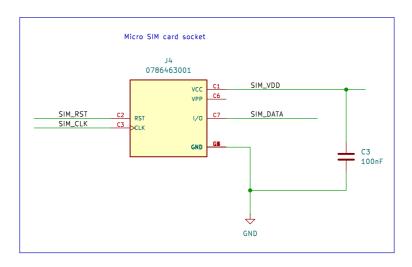


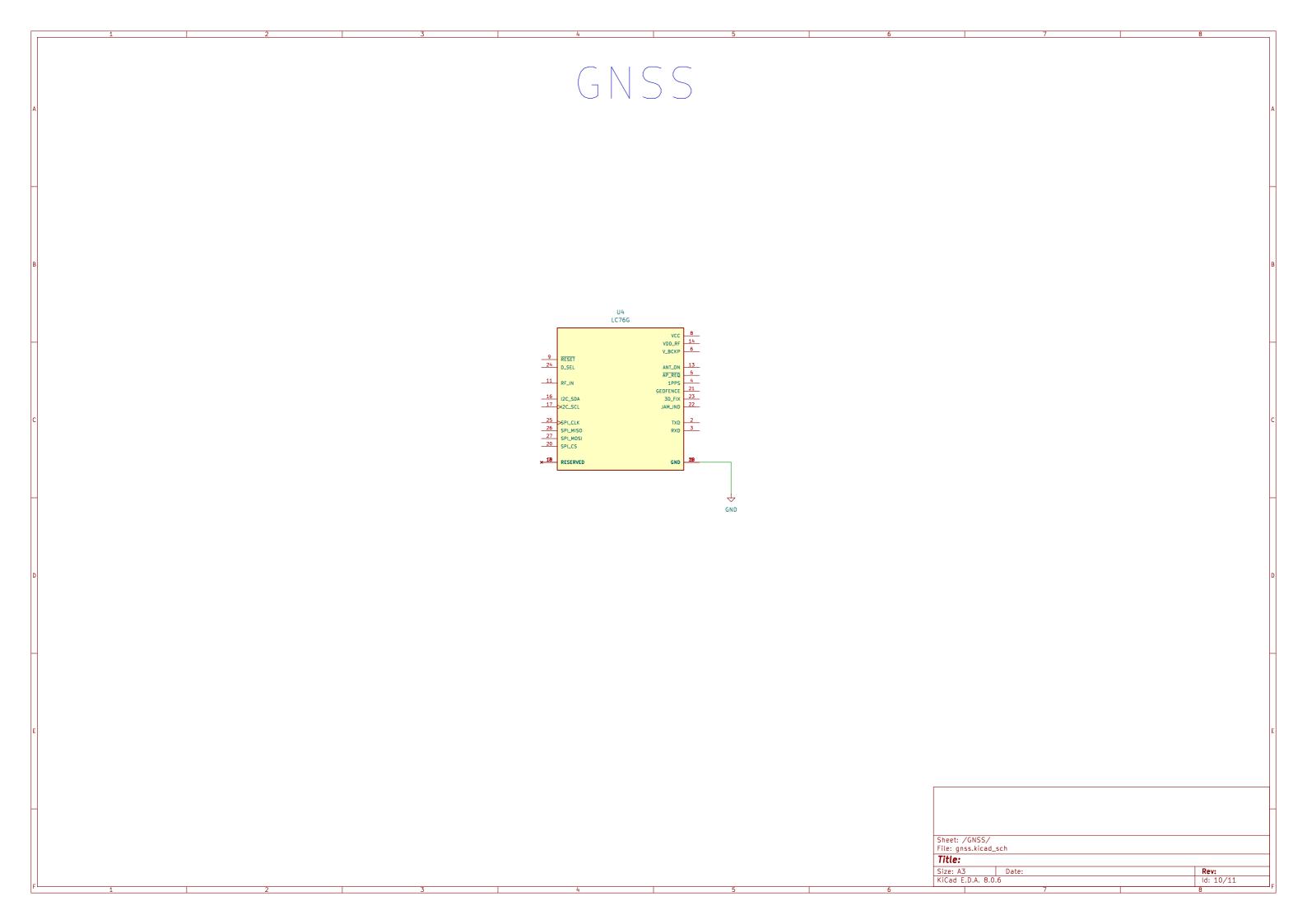
#### RN2903 LoRa module option



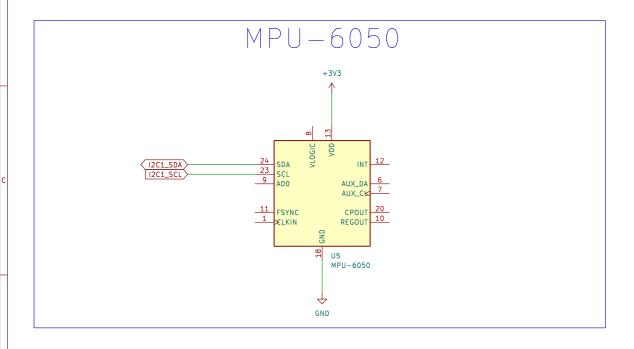
### GSM/GPRS 2G Comms

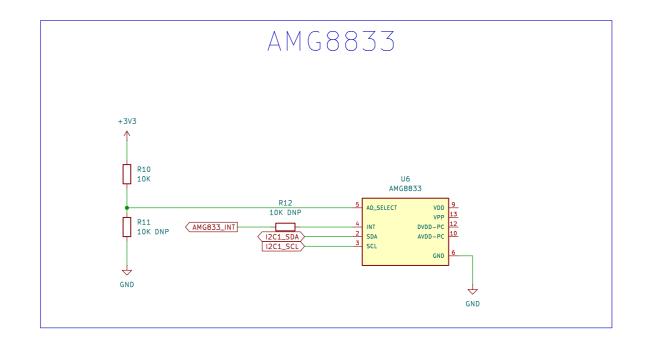


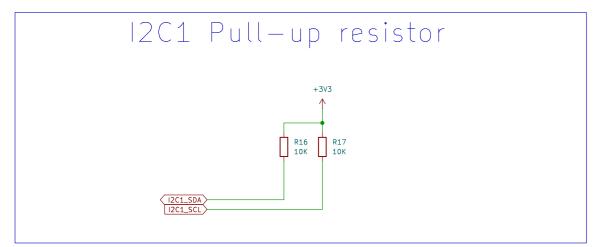




### Sensors tyt-







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