

Sheet: STM32 MCU

Sheet: Power Supply



PA5 < VBAT\_ADC  
PA8 < VBAT\_READ\_EN

PA9 < LS2\_FLASH\_EN VCC\_FLASH  
PA10 < LS1\_SENSORS\_EN VCC\_SENSORS

File: power-supply.sch

Sheet: LR1110

PA4\_SPI1\_NSS < LR\_NSS  
PB3\_SPI1\_SCK < LR\_SCK  
PB5\_SPI1\_MOSI < LR\_MOSI  
PB4\_SPI1\_MISO < LR\_MISO  
PB8 < LR\_DIO9  
PB9 < LR\_nRST  
PB10 < LR\_BUSY  
PB11 < LNA\_CTRL\_MCU

File: lr1110.sch

Sheet: Peripherals

NRST < NRST  
PA13\_SWDIO < SWDIO  
PA14\_SWCLK < SWCLK  
VCC\_SENSORS  
VCC\_FLASH

PA2\_USART2\_TX < T\_VCP\_Tx  
PA3\_USART2\_RX < T\_VCP\_Rx  
PB12\_SPI2\_NSS < FlashCS  
PB13\_SPI2\_SCK < SCK  
PB14\_SPI2\_MISO < MISO  
PB15\_SPI2\_MOSI < MOSI  
PA0 < ACCEL\_INT1  
PA1 < ACCEL\_INT2  
PB6\_I2C1\_SCL < SCL1  
PB7\_I2C1\_SDA < SDA1  
USB\_N < USB\_N  
USB\_P < USB\_P

PC13 < USR\_BTN  
PA6 < LED\_RED  
PA7 < LED\_GREEN  
PB0 < LED\_BLUE

File: mcu.sch

File: peripherals.sch

\*Pin attributions are subject to change  
for layout optimization

Drawn by: Orkhan Amiraslanov (azerimaker)  
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Sheet: /  
File: pcb-LR1110.sch

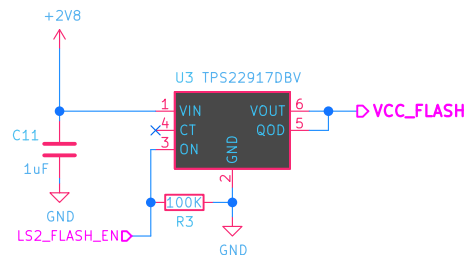
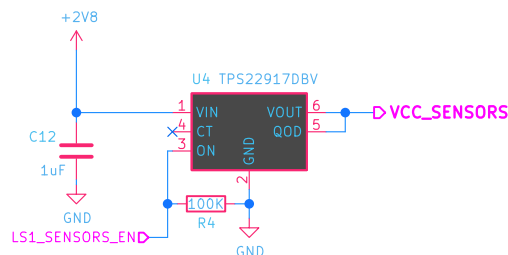
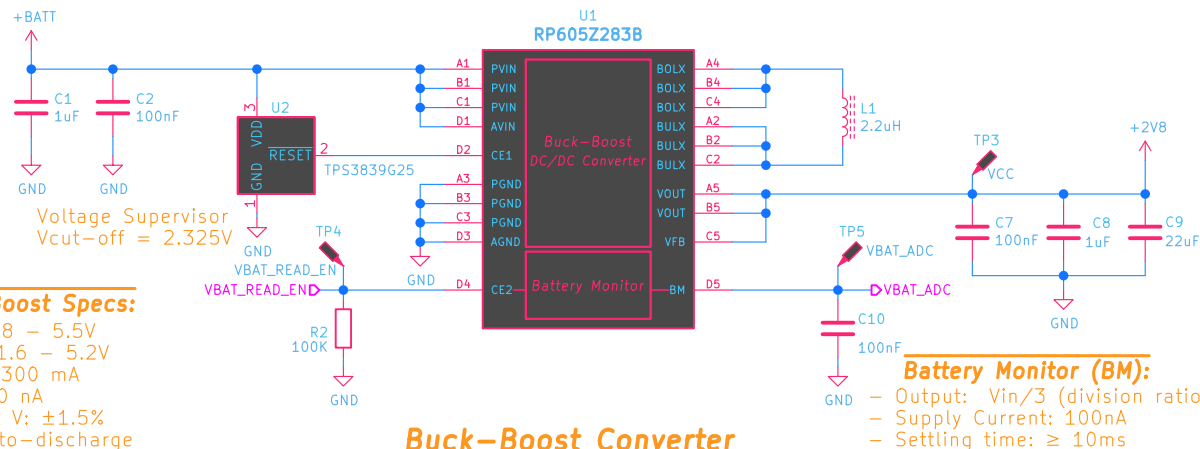
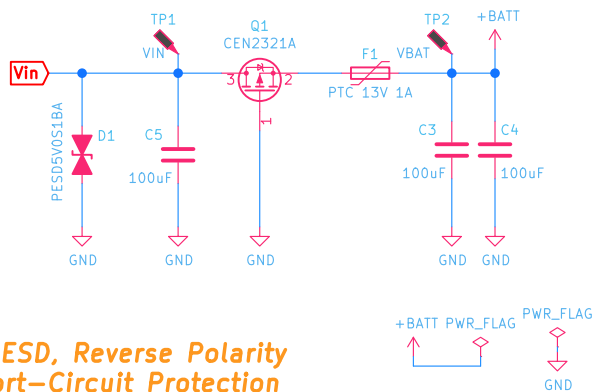
Title: Generic Node Tracker Edition (GNTE)

Size: A4 Date: 2020-12-01

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Rev: 0.1

Id: 1/5



Mounting Holes & Fiducials

Load Switch 1  
Sensors & Secure Element

Load Switch 2 - Flash

Enclosure & Logos

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Sheet: /Power Supply/  
 File: power-supply.sch

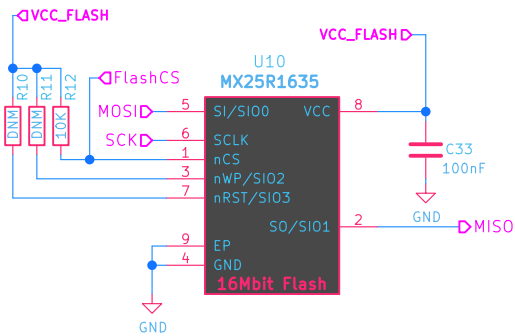
**Title: Generic Node Tracker Edition (GNTE)**

Size: A4 Date: 2020-12-01  
 KiCad E.D.A. kicad (5.1.8)-1

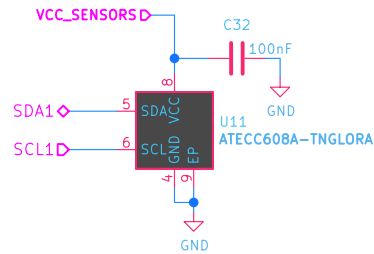
Rev: 0.1  
 Id: 2/5





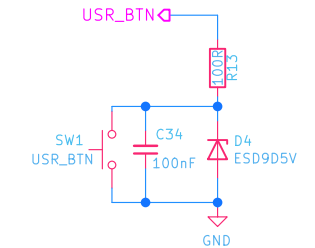
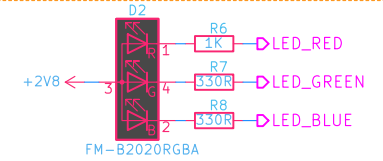


Flash Memory

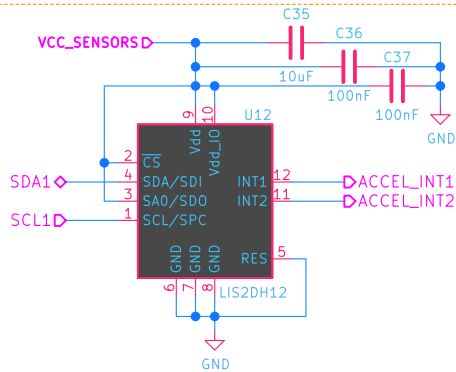


I2C address: 0xB2

Crypto Authentication (Secure Element)

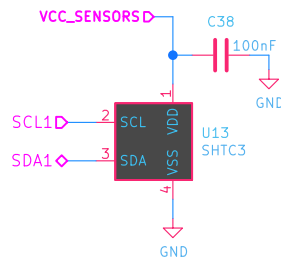


RGB LED & User Button



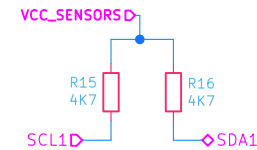
I2C address: 0x33

Accelerometer

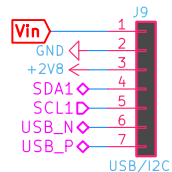
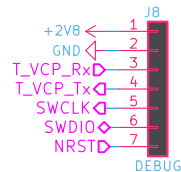


I2C address: 0x70

Temperature & Humidity



I2C pull-ups



DEBUG & Expansion Ports

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Size: A4 Date: 2020-12-01

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Rev: 0.1

Id: 4/5



Id: 5/5