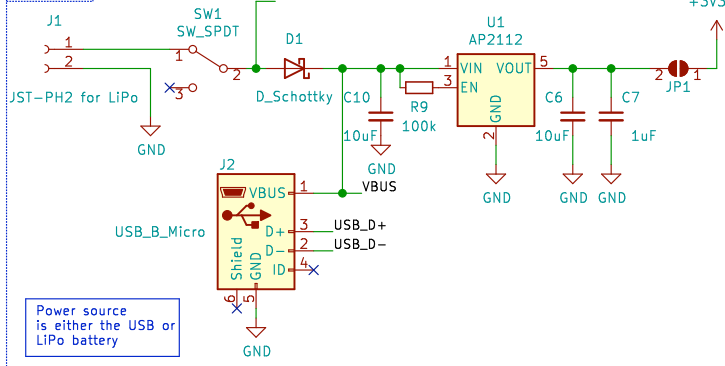
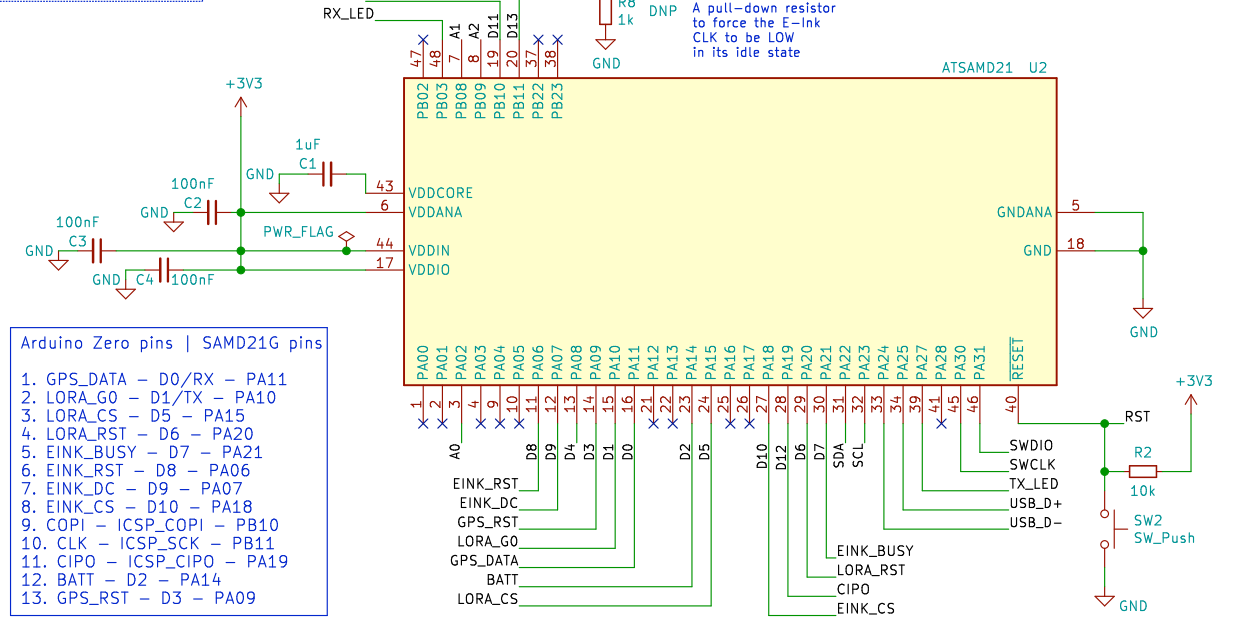


**Power**



Power source is either the USB or LiPo battery

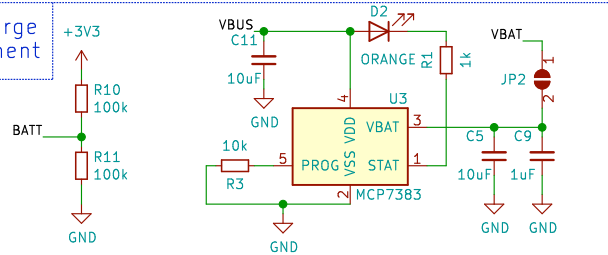
**Microcontroller**



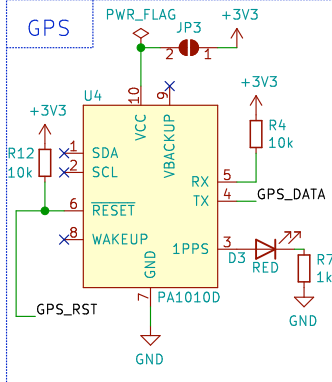
- Arduino Zero pins | SAMD21G pins
1. GPS\_DATA - D0/RX - PA11
  2. LORA\_GO - D1/TX - PA10
  3. LORA\_CS - D5 - PA15
  4. LORA\_RST - D6 - PA20
  5. EINK\_BUSY - D7 - PA21
  6. EINK\_RST - D8 - PA06
  7. EINK\_DC - D9 - PA07
  8. EINK\_CS - D10 - PA18
  9. COPI - ICSP\_COPI - PB10
  10. CLK - ICSP\_SCK - PB11
  11. CIPO - ICSP\_CIPO - PA19
  12. BATT - D2 - PA14
  13. GPS\_RST - D3 - PA09

A pull-down resistor to force the E-Ink CLK to be LOW in its idle state

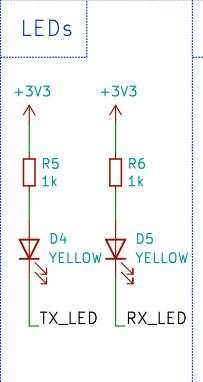
**LiPo Charge Management**



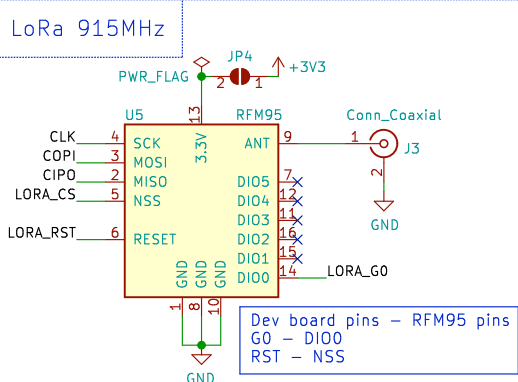
**GPS**



**LEDs**

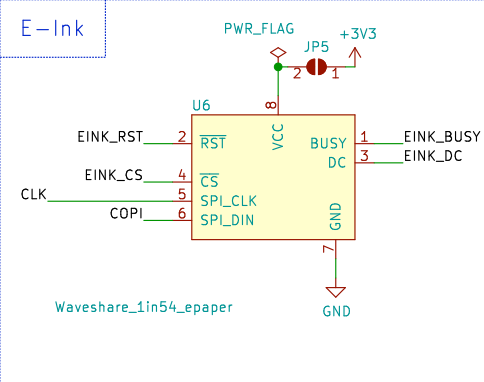


**LoRa 915MHz**

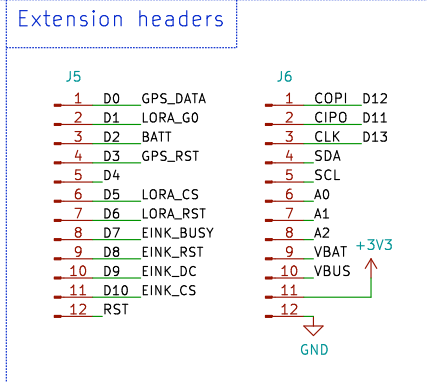


- Dev board pins - RFM95 pins
- GO - D10
  - RST - NSS

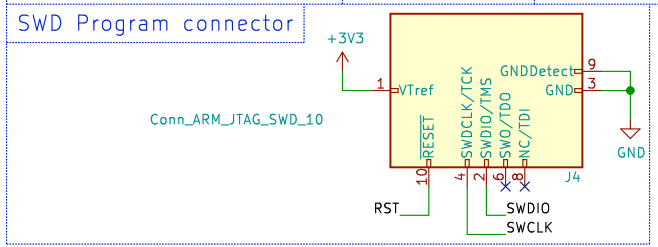
**E-Ink**



**Extension headers**



**SWD Program connector**



Authored by: Sayanee Basu <sayanee@gmail.com>  
 Project website: <https://hutscape.com/oak>  
 License: CC-BY-SA 4.0 or TAPR  
 Description: Measure outdoor distance between 2 keychain holders

<b>Hutscape</b>	
Sheet: /	File: Oak.sch
<b>Title: Oak</b>	
Size: A4	Date: 2020-11-24
KiCad E.D.A. kicad (5.1.6-0-10_14)	Rev: V1.0
	Id: 1/1