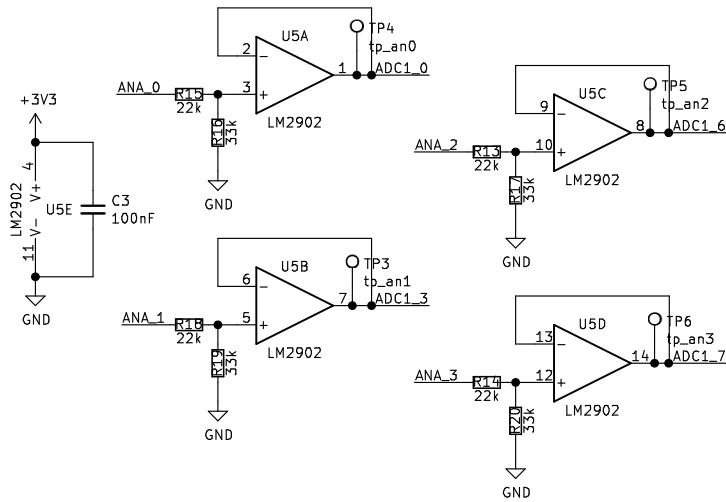
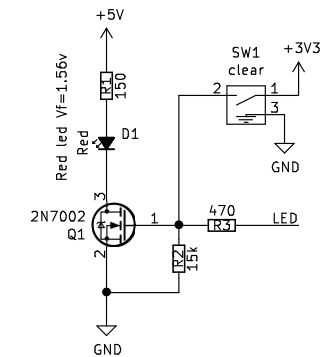


## ANALOG inputs

Translate 5v analog input to 3v  
(NOT 3.3v due to ESP32 non linearity)  
 $V+ = 5v \times 33k / 55k = 3v$   
op. amp as follower

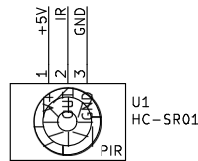


## LED and SWITCHES

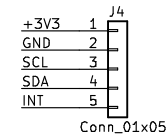
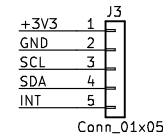
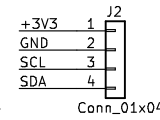
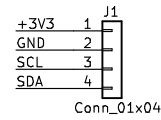


## PIR sensor

HC-SR01 V+ accepts from 5 to 20v  
OUT pin is 3.3 TTL

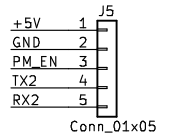


## I2C sensors connectors



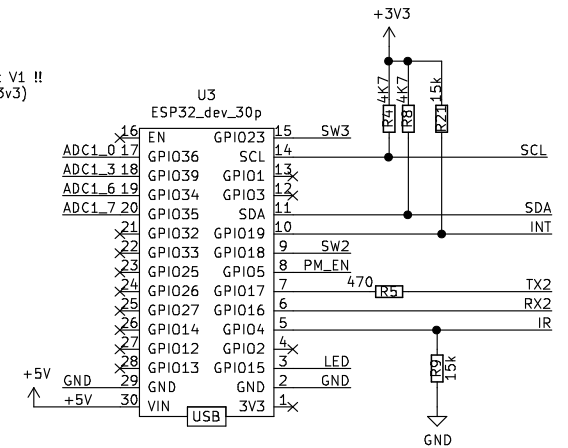
## Serial sensors connector

Notes about Particle Meters sensors  
- PM\_EN is optionally intended to enable/disable the particle meter (not to have it always on)

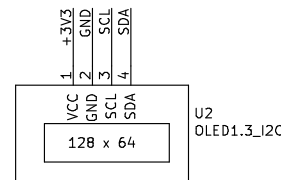


### Notes:

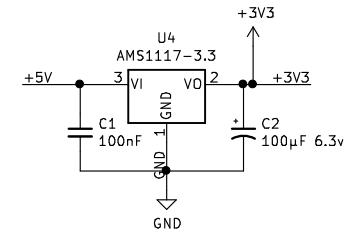
- GPIO5 has a 10k pull-up on +3v3 on devkit V1 !!
- GPIO5 reserved for Particle Meter ENable (3v3)
- GPIOX reserved for LED + clear sw
- GPIO13 reserved for noise sensor
- GPIO4 reserved for IR sensor (input)
- ADC2 pins cannot be used when WiFi in use
- prefer ADC1 pins (GPIO32 --> 39)
- GPIO1 & GPIO3 are serial0 (prog.)
- GPIO2 onboard blue led @ devkit V1
- EN must be floating !



## Display



## Power supply



## Board mounting holes

GND H1 3.2mm for MH3 screw

GND H2 3.2mm for MH3 screw

