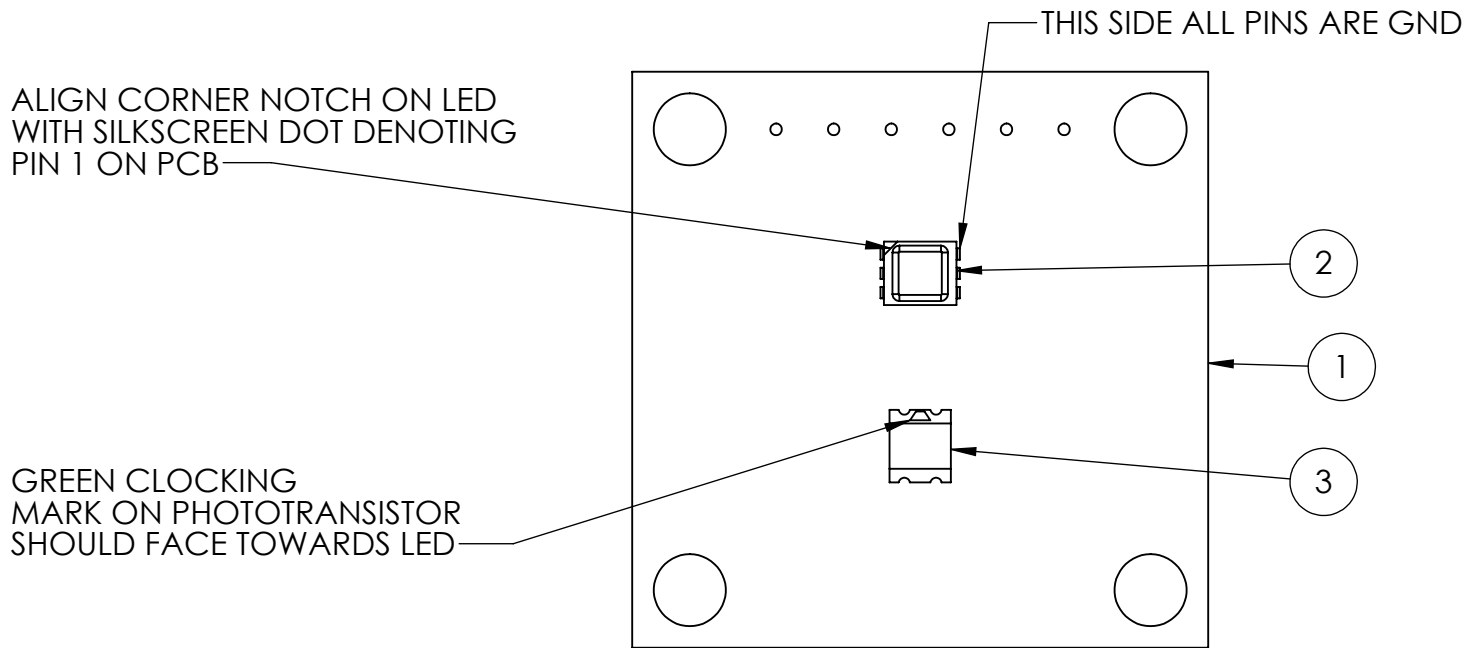


Part	Engineer	Manager	Date	Rev.
LED+Sensor Assembly	Nick Wright	Dan Block	Aug 8, 2018	1.0



NOTES:

- SIX PIN HEADER (OR WIRES) SHOULD BE SOLDERED NORMALLY AND THEN TRIMMED FLUSH WITH PCB SURFACE.
- ON REVERSE, USE THE FOLLOWING 1206 PACKAGE COMPONENT VALUES:
 RIGHT SIDE RESISTORS: QTY(3) - 220 OHM AS INDICATED FOR RGB LED's
 LEFT SIDE RESISTOR: QTY(1) - 68.1 KOHM FOR PHOTOTRANSISTOR
 OR
 QTY(1) - 2.2 KOHM FOR PHOTORESISTOR
 LEFT SIDE CAPACITOR: QTY(1) 0.1 μ F FOR PHOTOTRANSISTOR. MAY BE OMITTED IF USING PHOTORESISTOR
- TEST LED'S PRIOR AND SUBSEQUENT TO SOLDERING USING MULTIMETER'S CONTINUITY SETTING
- HEADER PIN VALUES:
 VCC = 3.3V INPUT
 $V_{OUT} = (\text{OUTPUT CURRENT PROPORTIONAL TO LIGHT INTENSITY}) \times (\text{RESISTOR VALUE})$
 GND = GROUND
 R = GPIO INPUT TO RED LED
 G = GPIO INPUT TO GREEN LED
 B = GPIO INPUT TO BLUE LED

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	LED_PCB	PCB for LED + Phototransistor	1
2	AAAF3529SEKJ3ZGKQBKS	3.5 x 2.8 mm Surface Mount SMD Chip RGB LED	1
3	APS3227SP1C-P22	Ambient Light Photo Sensor (Phototransistor)	1