

PCB populating reference

Component	value	Discription	Link	Comment
R1	10k	RES SMD 10K OHM 1% 1/8W 0805	Digikey Part Number: 311-10.0KCRCT-ND	
R2	226k	RES SMD 226K OHM 1% 1/8W 0805	Digikey Part Number: 311-226KCRCT-ND	
R3	249	RES SMD 249 OHM 1% 1/4W 0805	Digikey Part Number: 311-249CRCT-ND	
R4	1k	RES SMD 1K OHM 1% 1/8W 0805	Digikey Part Number: 311-1.00KCRCT-ND	
R5	10k	RES SMD 10K OHM 1% 1/8W 0805	Digikey Part Number: 311-10.0KCRCT-ND	
R6	100k	RES SMD 100K OHM 1% 1/8W 0805	Digikey Part Number: 311-100KCRCT-ND	
R7	100k	RES SMD 100K OHM 1% 1/8W 0805	Digikey Part Number: 311-100KCRCT-ND	
R8	1k	RES SMD 1K OHM 1% 1/8W 0805	Digikey Part Number: 311-1.00KCRCT-ND	
R9	Short	RES SMD 0 OHM JUMPER 1/8W 0805	Digikey Part Number: 311-0.0ARCT-ND	SHORT
R10	NS			
R11	49.9	RES SMD 49.9 OHM 1% 1/8W 0805	Digikey Part Number: 311-49.9CRCT-ND	
R12	49.9	RES SMD 49.9 OHM 1% 1/8W 0805	Digikey Part Number: 311-49.9CRCT-ND	
R13	49.9	RES SMD 49.9 OHM 1% 1/8W 0805	Digikey Part Number: 311-49.9CRCT-ND	
R14	NS			
R15	1k	RES SMD 1K OHM 1% 1/8W 0805	Digikey Part Number: 311-1.00KCRCT-ND	
R16	10k	RES SMD 10K OHM 1% 1/8W 0805	Digikey Part Number: 311-10.0KCRCT-ND	
R17	Short	RES SMD 0 OHM JUMPER 1/8W 0805	Digikey Part Number: 311-0.0ARCT-ND	Short
R18	NS			
R19	NS			NS
R20	10k	RES SMD 10K OHM 1% 1/8W 0805	Digikey Part Number: 311-10.0KCRCT-ND	
R24	24.9k	RES SMD 24.9K OHM 1% 1/8W 0805	Digikey Part Number: RMCF0805FT24K9CT-ND	
R25	NS			NS
D1	500ma diode	DIODE SCHOTTKY 40V 500MA SOD123	Digikey Part Number: MBR0540CT-ND	Has direction
D2	500ma diode	DIODE SCHOTTKY 40V 500MA SOD123	Digikey Part Number: MBR0540CT-ND	Has direction
L1	47uH	FIXED IND 47UH 170MA 1.3 OHM SMD	Digikey Part Number: 490-4063-1-ND	
L2	2.5k Ferrite Bead	FERRITE BEAD 2.5 KOHM 0805 1LN	Digikey Part Number: 587-1919-1-ND	
C1	22pF	CAP CER 22PF 50V NPO 0805	Digikey Part Number: 399-1113-1-ND	
C2	0.47uF	CAP CER 0.47UF 50V X7R 0805	Digikey Part Number: 399-8100-1-ND	
C3	1uF	CAP CER 1UF 50V Y5V 0805	Digikey Part Number: 587-1308-1-ND	
C4	10uF	CAP CER 10UF 6.3V X5R 0805	Digikey Part Number: 490-1718-1-ND	
C5	0.1uF	CAP CER 0.1UF 50V X7R 0805	Digikey Part Number: 399-1170-1-ND	
C6	20nF	CAP CER 20nF 50V X7R 0805	Digikey Part Number: 1276-2472-1-ND	
C7	10.0pF	CAP CER 10PF 50V COG/NPO 0805	Digikey Part Number: 1276-1109-1-ND	
C8	10 nF	CAP CER 10000PF 50V X7R 0805	Digikey Part Number: 311-1136-1-ND	
C9	10 nF	CAP CER 10000PF 50V X7R 0806	Digikey Part Number: 311-1136-1-ND	
C10	10 nF	CAP CER 10000PF 50V X7R 0807	Digikey Part Number: 311-1136-1-ND	
C11	10 nF	CAP CER 10000PF 50V X7R 0808	Digikey Part Number: 311-1136-1-ND	
C14	Short	RES SMD 0 OHM JUMPER 1/8W 0805	Digikey Part Number: 311-0.0ARCT-ND	SHORT
C15	0.1uF	CAP CER 0.1UF 50V X7R 0805	Digikey Part Number: 399-1170-1-ND	
C16	10uF	CAP CER 10UF 6.3V X5R 0805	Digikey Part Number: 490-1718-1-ND	
C17	0.1uF	CAP CER 0.1UF 50V X7R 0805	Digikey Part Number: 399-1170-1-ND	
C18	1uF	CAP CER 1UF 50V Y5V 0805	Digikey Part Number: 587-1308-1-ND	
U1	LT3461	3MHz Step-Up DC/DC Converters	http://www.linear.com/product/LT3461A	Has direction
U2	LT1807IS8#PBF	325MHz, Dual, Rail-to-Rail Input and Output, Precision Op Amps	http://www.linear.com/product/LT1807	Has direction
U7	NS			NS

Main PCB SiPM PCB
 SD card PCB

U6	3.3V regulator	IC REG LINEAR 3.3V 300MA SOT23-3	Digikey part number: AP2210N-3.3TRG1DICT-ND	Has direction
U8	SD card socket	SMT SMD Cell Phone TF Micro SD Memory Card Slot Holder Sockets	https://www.amazon.com/Uxcell-a14061000ux0287-Memory-	
U10	Non-Inverting Buffer	High Speed CMOS Logic Hex Non-Inverting Buffers	Mouser Part Number: 595-CD74HC4050M96,	Has direction
SIPM1	SIPM	SIPM MicroFC-60035-SMT	https://www.digikey.com/en/products/detail/onsemi/MICROFC-	Has direction
Reset	Reset button	SWITCH TACTILE SPST-NO 0.02A 15V	Digikey part number: P122155-ND	
2x4 SD header	2x3 header +2x1	header for mounting SD card PCB. 2x3 + 1x2	Comes with Arduino	
15x1 header	15x1 header	2x headers for mounting Arduino, should come with Arduino	Comes with Arduino	
Arduino_Nano	Arduino Nano	16 MHz CH340/Atmega328P Arduino Nano		
BNC receptacle	BNC header	CONN BNC JACK R/A 50 OHM PCB	Digikey part number: WM5514-ND	
OLED_header	4 pin header	CONN FEMALE 4POS .100" R/A TIN	Digikey part number: S5440-ND	Bottom
LED	LED light	Any color, 5mm	https://www.amazon.com/Diffused-Lighting-Electronics-	
6-pin Header	6-pin Header	SOCKET 7 MM SOLDER TAIL DOUBLE	Digikey Part Number: 1212-1229-ND	
3.5 mm jack	3.5mm jack	CONN JACK 4COND 3.5MM SMD R/A	Digikey Part Number: CP-43515RSSJCT-ND	
Temp	TMP36	Temperature Sensors TMP36 Precision Linear Analog Output		
SIPM PCB 6-Pin	6-pin Pins	WM17457-ND	WM17457-ND	