

LED Pulser BOM:

Electronic Components

Part Reference	Manufacturer	Manufacturer Part #	Description	Supplier	Supplier Part #	Quantity for One Unit
C1,C17,C29,C44,C60,C64,C66,C70,C71,C72,C73,C74,C75,C76	Murata Electronics	GCM155R71H104KE02J	CAP CER 0.1UF 50V X7R 0402	Digikey	490-14514-1-ND	14
C2,C18,C30,C45,C61,C65,C67,C68,C69	Samsung Electro-Mechanics	CL10B105M08NNWC	CAP CER 1UF 16V X7R 0603	Digikey	1276-6524-1-ND	9
C3,C10,C19,C24,C31,C38,C46	TDK Corporation	C0510X5R0J105M030BC	CAP CER 1UF 6.3V X5R 0204	Digikey	445-9091-1-ND	7
C4,C11,C20,C25,C32,C39,C47	Murata Electronics	NFM15PC474R0J3D	CAP FEEDTHRU 0.47UF 6.3V 0402	Digikey	490-16920-1-ND	7
C5,C6,C12,C13,C21,C22,C26,C27,C33,C34,C40,C41,C48,C49,C77,C78,C79,C80,C81,C82,C83	TDK Corporation	C0510X7R1E473M030BA	CAP CER 0.047UF 25V X7R 0204	Digikey	445-C0510X7R1E473M030BACT-ND	21
C7,C9,C14,C16,C35,C37,C42	Murata Electronics	GCM155R71E103KA37D	CAP CER 10000PF 25V X7R 0402	Digikey	490-6043-1-ND	7
C8,C15,C23,C28,C36,C43,C50	KYOCERA AVX	02012K4R78BSTR	CAP THIN FILM 4.7PF 10V 0201	Digikey	478-4386-1-ND	7
C51,C53,C62,C63	TDK Corporation	C2012X5R1E475K125AB	CAP CER 4.7UF 25V X5R 0805	Digikey	445-4116-1-ND	4
C52,C57,C59	Murata Electronics	GCM155R71H103KA55D	CAP CER 10000PF 50V X7R 0402	Digikey	490-4762-1-ND	3
C54,C55,C56,C58	TDK Corporation	CGA4J1X751E106K125AC	CAP CER 10UF 25V X7S 0805	Digikey	445-181405-1-ND	4
D1	Rohm Semiconductor	SML013BNTT86	CHIP LED WITH REFLECTOR: SML-01	Digikey	846-SML013BNTT86CT-ND	1
D2	Vishay Semiconductor Opto Division	VLMU3100-GS08	EMITTER UV 405NM 30MA PLCC	Digikey	VLMU3100-GS08CT-ND	1
D3	LC LED	UT-69UV365P	LED 0603 UV SMD LED 365nm	LC LED	UT-69UV365P	1
D4	Photon Wave	PKE-02-F35	LED 295nm 15mW 3535	IRTRONIX Inc	PKE-10-F35	1
D5	Photon Wave	PKD-02-F35	LED 278nm 3.5mW 3535	IRTRONIX Inc	PKD-02-F35	1
D6	Photon Wave	PKB-02-F35	LED 255nm 3.5mW 3535	IRTRONIX Inc	PKB-02-F35	1
D7	Silanna UV	SF1-3C3FWL1	LED 235nm 0.45mW 3535	Silanna UV	SF1-3C3FWL1-TR	1
D8	SMC Diode Solutions	DSS14U	SCHOTTKY 40V SOD-123FL	Digikey	1655-DSS14UCT-ND	1
D9	Diodes Incorporated	SMAJ5.0A-13-F	TVS DIODE 5VWM 9.2VC SMA	Digikey	SMAJ5.0A-FDICT-ND	1
D10,D11,D12,D13	Semtech Corporation	RCLAMP3331ZATFT	TVS DIODE 3.3V 7.5V SLP0603P2X3F	Digikey	RCLAMP3331ZATFTCT-ND	4
J1,J2,J3,J4,J5,J6,J7	Molex	734152063	CONN MMXC JACK STR 50 OHM SMD	Digikey	WM3914CT-ND	7
J8	CUI Inc.	PJ-037AH	CONN PWR JACK 2X5.5MM SOLDER	Digikey	CP-037AH-ND	1
J9,J10	Molex	734152063	CONN MMXC JACK STR 50 OHM SMD	Digikey	WM3914CT-ND	2
J11	METZ CONNECT USA Inc.	PR20204VBNN	PIN HEADER, THR, SINGLE ROW, .10	Digikey	1849-PR20204VBNN-ND	1
J12	Amphenol ICC (FCI)	78208-106H1F	CONN HEADER R/A 6POS 2.54MM	Digikey	609-2452-ND	1
L1,L2,L3,L4,L5,L6,L7	Delta Electronics/Components	0402HC-3N6EDTS	FIXED IND 3.6NH 900MA 40MOHM SMD	Digikey	2035-1343-1-ND	7
L8	Sumida America Components Inc.	CDRH4D16FB/NP-100MC	FIXED IND 10UH 1.2A 118 MOHM SMD	Digikey	308-2011-1-ND	1
Q1,Q2,Q3,Q4,Q5,Q6,Q7	EPC	EPC8004	GANFET N-CH 40V 4A DIE	Digikey	917-1072-1-ND	7
R3,R9,R23,R27,R35,R41,R53,R67,R73	Yageo	RC0402FR-07100RL	RES SMD 100 OHM 1% 1/16W 0402	Digikey	311-100LRCT-ND	9
R4,R6,R14,R16,R24,R25,R30,R31,R36,R37,R46,R48,R54,R55	Vishay Dale	CRCW02012R00FXED	RES SMD 2 OHM 1% 1/20W 0201	Digikey	541-CRCW02012R00FXEDCT-ND	14
R5,R10,R15,R19,R38,R42,R47,R72,R74	YAGEO	RC0402FR-0711KL	RES 1K OHM 1% 1/16W 0402	Digikey	311-1.00KLRCT-ND	9
R7,R18,R26,R32,R39,R50,R56	Vishay Dale	CRCW020168R0FKED	RES SMD 68 OHM 1% 1/20W 0201	Digikey	541-68.0AABCT-ND	7
R8,R12,R17,R20,R40,R44,R49	YAGEO	RC0402FR-0749R9L	RES 49.9 OHM 1% 1/16W 0402	Digikey	311-49.9LRCT-ND	7
R2,R13,R29,R34,R45,R52	YAGEO	RC0402JR-074R3L	RES 4.3 OHM 5% 1/16W 0402	Digikey	311-4.3JRCT-ND	6
R22	YAGEO	RC0402JR-072R2L	RES 2.2 OHM 5% 1/16W 0402	Digikey	311-2.2JRCT-ND	1
R58	Bel Fuse Inc.	OZCF0030FF2C	PTC RESET FUSE 60V 300MA 2920	Digikey	507-1740-1-ND	1
R59	Samsung Electro-Mechanics	RC1005F205CS	RES SMD 2M OHM 1% 1/16W 0402	Digikey	1276-4293-1-ND	1
R60,R65,R66,R69,R71,R80	Samsung Electro-Mechanics	RC1005F103CS	RES SMD 10K OHM 1% 1/16W 0402	Digikey	1276-3431-1-ND	6
R62	YAGEO	RC0402FR-07169KL	RES 169K OHM 1% 1/16W 0402	Digikey	YAG3000CT-ND	1
R63	YAGEO	RC0402FR-07200KL	RES 200K OHM 1% 1/16W 0402	Digikey	311-200KLRCT-ND	1
R64	YAGEO	RC0402FR-0753K6L	RES 53.6K OHM 1% 1/16W 0402	Digikey	311-53.6KLRCT-ND	1
R68	Yageo	RC0805FR-130RL	RES 0 OHM JUMPER 1/8W 0805	Digikey	13-RC0805FR-130RLCT-ND	1
R70	Yageo	RC0805FR-0749R9L	RES SMD 49.9 OHM 1% 1/8W 0805	Digikey	311-49.9CRCT-ND	1
R76	YAGEO	RC0402FR-07330RL	RES 330 OHM 1% 1/16W 0402	Digikey	311-330LRCT-ND	1
R77	YAGEO	RC0402FR-0740K2L	RES 40.2K OHM 1% 1/16W 0402	Digikey	311-40.2KLRCT-ND	1
U1,U4,U8,U11	Texas Instruments	DS90C402MX/NOPB	IC RECEIVER 0/2 8SOIC	Digikey	296-35381-1-ND	4
U2,U3,U5,U6,U7,U9,U10	Texas Instruments	LMG1020YFFR	IC GATE DRVR LOW-SIDE 60S8GA	Digikey	296-50208-1-ND	7
U12	Diodes Incorporated	AP3015AKTR-G1	IC REG BOOST ADJ 75MA SOT23-5	Digikey	AP3015AKTR-G1DICT-ND	1
U13	Analog Devices Inc.	ADP122AUJZ-3.3-R7	IC REG LINEAR 3.3V 300MA TSOT5	Digikey	505-ADP122AUJZ-3.3-R7CT-ND	1
U14	Analog Devices Inc.	LT3061EMS8E#TRPBF	IC REG LIN POS ADJ 100MA BMSOP	Digikey	LT3061EMS8E#TRPBFCT-ND	1
U15	Texas Instruments	DS90LV018ATMX/NOPB	IC RECEIVER 0/1 8SOIC	Digikey	DS90LV018ATMX/NOPBCT-ND	1
U16	Analog Devices Inc.	ADP7118AUJZ-5.0-R7	IC REG LINEAR 5V 200MA TSOT23-5	Digikey	505-ADP7118AUJZ-5.0-R7CT-ND	1
U18	Diodes Incorporated	AP22804AW5-7	IC PWR SWITCH P-CHAN 1:1 SOT25	Digikey	AP22804AW5-7DICT-ND	1
U17	Texas Instruments	DS90LV011AQMF/NOPB	IC DRIVER 1/0 SOT23-5	Digikey	DS90LV011AQMF/NOPBCT-ND	1
U19	Microchip Technology	AVR64DD32-I/RXB	64KB, 8KB RAM, 32P, 24MHZ, MVIO,	Digikey	150-AVR64DD32-I/RXB-ND	1
U20	Skyworks Solutions, Inc.	SIS3315-B-GM	Clock Buffer Universal 2:10 low-jitter clock buffer/leve	Mouser	634-SIS3315-B-GM	1
Y1	Murata Electronics	CSTNE24M0VH3C000R0	3.2X1.3MM 24.0MHZ CERAMIC RESONA	Digikey	490-CSTNE24M0VH3C000R0CT-ND	1

Power Adapter, Comm Cable, Fibers:

Part Reference	Manufacturer	Manufacturer Part #	Description	Supplier	Supplier Part #	Quantity for One Unit
J12	FTDI	TTL-232R-3V3	CABLE USB EMBO UART 3.3V .1"HDR	Digikey	768-1015-ND	1
D1	Thorlabs	M80L005	Ø200 µm Core, 0.22 NA, FC/PC to Ø2.5 mm Ferrule Pat	Thorlabs	M80L005	1
D1	Taoglas Limited	CAB.01402	CBL ASSY SMA-MMXC RG174 3.937"	Digikey	931-1099-ND	2
D1	Bivar Inc.	SMFLP36.0	LIGHT PIPE FLEXIBLE CLEAR 4MM	Digikey	SMFLP36.0-ND	1
J8	CUI Inc.	SWI6-5.9-N-P7	AC/DC WALL MNT ADAPTER 5.9V 7.1W	Digikey	102-3608-ND	1