



Bill of Materials for the D-LED-B-GEVK Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	CAP CER 220PF 100V X7R 0603	220pF 100V	±5%	0603	AVX Corporation	06031C221JAT2A	Yes	Yes
C2,C35	2	CAP CER 10UF 16V X5R 0805	10µF 16V	±20%	0805	Würth Electronics	885012107014	Yes	Yes
C3,C4	2	CAP CER 2.2UF 100V X7R 1210	2.2µF 100V	±10%	1210	Kemet	C1210C225K1RACTU	Yes	Yes
C5,C33,C34,C36	4	CAP CER 10UF 50V X7R 1210	10µF 50V	±20%	1210	Taiyo Yuden	UMK325AB7106MM-T	Yes	Yes
C7	1	CAP ALUM 22UF 20% 100V SMD	22µF 100V	±20%	0.315" Dia	Panasonic Electronic	EEE-TG2A220	Yes	Yes
C8,C10,C11,C14,C16,C17	6	-	-	-	-	-	-	Yes	Yes
C9	1	CAP CER 0.47UF 100V X7R 0805	0.47µF 100V	±10%	0805	AVX Corporation	08051C474KAZ2A	Yes	Yes
C12,C13	2	CAP CER 0.47UF 25V X7R 0805	0.47µF 25V	±10%	0805	Würth Electronics	885012207076	Yes	Yes
C15	1	CAP CER 0.1UF 50V X7R 0603	0.10µF 50V	±10%	0603	Würth Electronics	885012206095	Yes	Yes
C18	1	CAP CER 0.1UF 16V X7R 0603	0.10µF 16V	±10%	0603	Würth Electronics	885012206046	Yes	Yes
C19	1	CAP CER 2200PF 25V X7R 0603	2200PF 25V	±10%	0603	Würth Electronics	885012206061	Yes	Yes
C20,C24	2	CAP CER 10000PF 100V X7R 0805	10000PF 100V	±10%	0805	Kemet	C0805C103K1RACTU	Yes	Yes
C21,C22,C23,C25,C26,C27	6	CAP CER 0.1UF 100V X7R 0805	0.1UF 100V	±10%	0805	Kemet	C0805C104K1RACAUTO	Yes	Yes
C28,C29	2	47pF 50V Ceramic Capacitor C0G, NP0 0603	47pF 50V	±5%	0603	Würth Electronics	885012006055	Yes	Yes
C30,C31	2	CAP CER 220PF 100V X7R 0603	220PF 100V	±10%	0603	Yageo	CC0603KRX7R0BB221	Yes	Yes
D1	1	DIODE SCHOTTKY 100V 3A SMC	-	-	SMC	ON Semiconductor	MBRS3100T3G	No	Yes
D2,D3	2	DIODE SCHOTTKY 100V 2A SMA	-	-	SMA	ON Semiconductor	MBRA2H100T3G	No	Yes
D8	1	DIODE SCHOTTKY 100V 5A DPAK	-	-	DPAK-3	ON Semiconductor	MBRD5H100T4G	No	Yes
J1,J15	2	STACKING HEADER ARDUINO SHIELD	-	-	-	Samtec	ESW-108-14-G-S	Yes	Yes
J10,J12	2	2 Position Terminal Block Header, Male Pins, Shrouded (4 Side)	-	-	0.150" (3.81mm) 90°, Right Angle Through Hole	Würth Electronics	691322310002	Yes	Yes
J13	1	STACKING HEADER ARDUINO SHIELD	-	-	-	Samtec	ESW-110-14-G-S	Yes	Yes
J14	1	STACKING HEADER ARDUINO SHIELD	-	-	-	Samtec	ESW-106-14-G-S	Yes	Yes
J16	1	2 Position Terminal Block Header, Male Pins, Shrouded (4 Side)	-	-	0.150" (3.81mm) 90°, Right Angle Through Hole	Würth Electronics	691322310002	Yes	Yes
J20	1	2 Positions Header, Unshrouded Connector	-	-	0.100" (2.54mm) Through Hole Gold	Würth Electronics	61300211121	Yes	Yes
L1	1	Fixed Inductors XAL6060 High Current 22 uH 20% 5 A	22 uH 5A	20%	XAL6060-223MEB	Coilcraft Inc	XAL6060-223MEB	Yes	Yes
L2,L4	2	Fixed Inductors MSS1038T High Temp 100 uH 20% 1.45 A	100 uH 1.45 A	20%	10.5 mm x 10.2 mm	Coilcraft Inc	MSS1038T-104MLC	Yes	Yes
L3,L5	2	FERRITE BEAD 60 OHM 0805 1LN	60 OHM	-	0805	Würth Electronics	742792063	Yes	Yes
Q1	1	MOSFET N-CH 100V 17A	100V, 17A	-	DPAK-3	ON Semiconductor	NTD6416ANT4G	No	Yes

R1	1	RES SMD 100 OHM 1% 1/10W 0603	100 OHM 1/10W	1%	0603	Bourns Inc	CR0603-FX-1000ELF	Yes	Yes
R2	1	RES SMD 470 OHM 1% 1/10W 0603	470 OHM 1/10W	1%	0603	Yageo	RC0603FR-07470RL	Yes	Yes
R3	1	RES SMD 100K OHM 1% 1/10W 0603	100K OHM 1/10W	1%	0603	Yageo	RC0603FR-07100KL	Yes	Yes
R4	1	RES SMD 47 OHM 1% 1/8W 0805	47 OHM 1/8W	1%	0805	Yageo	RC0805FR-0747RLL	Yes	Yes
R5,R7,R8,R10,R11,R14,R25,R30,R31,R32,R33	11	RES SMD 0.0OHM JUMPER 1/10W 0603	Jumper, 1/10W	-	0603	Yageo	RC0603JR-070RL	Yes	Yes
R6	1	RES SMD 0.01 OHM 1% 1W 1206	0.01 OHM 1W	1%	1206	Bourns Inc	CRF1206-FX-R010EL	Yes	Yes
R9,R12	2	RES SMD 0.2 OHM 1% 1/2W 1206	0.2 OHM 1/2W	1%	1206	TT Electronics/Welwyn	LR1206-R20FW	Yes	Yes
R13,R15	2	RES SMD 10K OHM 1% 1/10W 0603	10K OHM 1/10W	1%	0603	Vishay Dale	CRCW060310K0FKEA	Yes	Yes
R16	1	RES SMD 470K OHM 1% 1/10W 0603	470K OHM 1/10W	1%	0603	Vishay Dale	CRCW0603470KFKEA	Yes	Yes
R17,R18	2	RES SMD 100 OHM 1% 1/10W 0603	100 OHM 1/10W	1%	0603	Yageo	RC0603FR-07100RL	Yes	Yes
R19,R24	2	RES SMD 22K OHM 1% 1/10W 0603	22k OHM 1/10W	1%	0603	Vishay Dale	CRCW060322K0FKEA	Yes	Yes
R20,R26,R27,R28	4	RES SMD 10K OHM 1% 1/10W 0603	10k OHM 1/10W	1%	0603	Vishay Dale	CRCW060310K0FKEA	Yes	Yes
R29	1	RES SMD 0.0 OHM JUMPER 1/8W 0805	Jumper 1/8W	-	0805	Yageo	RC0805JR-070RL	Yes	Yes
R34,R35,R36	3	RES SMD 10K OHM 1% 1/10W 0603	10k, 1/10W	-	0603	Vishay Dale	CRCW060310K0FKEA	Yes	Yes
TP5,TP9,TP10,TP11,TP12,TP13,TP14	7	-	-	-	-	-	-	Yes	Yes
U1	1	Power Ballast and Dual LED	-	-	32-QFN	ON Semiconductor	NCV78763MW0R2G	No	Yes
U22	1	IC I/O EXPANDER I2C 16B	-	-	QFN-24	ON Semiconductor	PCA9655EMTTXG	No	Yes
J10_FEMALE, J12_FEMALE, J16_FEMALE	3	2 Position Terminal Block Plug, Female Sockets	-	-	0.150"	Würth Electronics	691361300002	Yes	Yes