



Bill of Materials for the NCV7691RCLV1GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1, C5, C6	3	Ceramic Capacitor SMD	100NF, 50V, X7R	10%	CAP0603	KEMET	C0603C104K5RAC	Yes	Yes
C3, C4	2	Ceramic Capacitor SMD	4.7NF, 50V, X7R	10%	CAP0603	AVX	06035C472KAT2A	Yes	Yes
C11, C21, C31, C41, C51, C61, C71, C81	8	Ceramic Capacitor SMD	10NF, 50V, X7R	10%	CAP0603	MULTICOMP	U0603R103KCT	Yes	Yes
R1	1	Resistor SMD	0.0R	-	R0603	YAGEO	RC0603JR-070R	Yes	Yes
R2, R3, R7, R9	4	Resistor SMD	10K	5%	R0603	PHYCOMP	232270260103	Yes	Yes
R4	1	Resistor SMD	100K	1%	R0603	MULTICOMP	MC0063W06031100K	Yes	Yes
R5	1	Resistor SMD	47K	1%	R0603	MULTICOMP	MC0063W0603147K	Yes	Yes
R6	1	Resistor SMD	560K	5%	R0603	YAGEO	RC0603JR-07560KL	Yes	Yes
R8, R10	2	Resistor SMD	47R	1%	R0603	TE CONNECTIVITY	CRGH0603F47R	Yes	Yes
R9, R12, R22, R32, R42, R52, R62, R72, R82	9	Resistor SMD	1.0K	5%	R0603	PHYCOMP	232270260102	Yes	Yes
R11, R21, R31, R41, R51, R61, R71, R81	8	Resistor SMD	1.5R	1%	R0603	WELWIN	ASC0603-1R5FT5	Yes	Yes
PTC	1	THERMISTOR PTC SMD	470R, 95C	-	R0603	EPCOS	B59641A95A62	Yes	Yes
U1	1	Single Current Controller for Automotive LED Lamps	NCV7691	-	SOIC8	ON Semiconductor	NCV7691D1G	No	Yes
D1	1	Standard Recovery Power Rectifier 1A/300V	MRA4003	-	SMA	ON Semiconductor	MRA4003T3G	No	Yes
D2	1	Small Signal Diode	1SS400	-	SOD523	ON Semiconductor	1SS400T1G	No	Yes
D11, D21, D31, D41, D51, D61, D71, D81	8	Switching Diode 200mA/100V	BAS16H	-	SOD323	ON Semiconductor	BAS16HT1G	No	Yes
ZD1	1	ZENER DIODE 4.7V ± 2%	MM3Z4V7S	2%	SOD323	ON Semiconductor	MM3Z4V7ST1G	No	Yes
Q1	1	TRANSISTOR MOSFET N-MOS	BSS138	-	SOT23	ON Semiconductor	BSS138LT3G	No	Yes
Q2	1	Transistor PNP	BC856	-	SOT23	ON Semiconductor	BC856BL	No	Yes
Q10, Q20, Q30, Q40, Q50, Q60, Q70, Q80	8	TRANSISTOR NPN, 80V/1A/1.5W/B>25	BCP56	-	SOT223	ON Semiconductor	BCP56T1G	No	Yes
LED_ERR	1	LED DIODE RED 25mA	HSMH-C191	-	D0603	AVAGO TECHNOLOGIES	HSMC-C191	Yes	Yes
LED11R, LED12R, LED13R, LED21R, LED22R, LED23R, LED31R, LED32R, LED33R, LED41R, LED42R, LED43R, LED51R, LED52R, LED53R, LED61R, LED62R, LED63R, LED71R, LED72R, LED73R, LED81R, LED82R, LED83R	24	LED DIODE RED 150mA, 16.5LM	ASMT-QRBD-AEF0E	-	PLCC-4	AVAGO TECHNOLOGIES	ASMT-QRBD-AEF0E	Yes	Yes
LED11W, LED12W, LED21W, LED22W, LED31W, LED32W, LED41W, LED42W, LED51W, LED52W, LED61W, LED62W, LED71W, LED72W, LED81W, LED82W	16	DO NOT POPULATE	-	-	-	-	-	Yes	Yes
VBAT	1	SOCKET, PCB, DC POWER, 2.1MM, 5A, 12V	DC10AS	-	CON_POWER_DC10A_S_CLIFF	CLIFF ELECTRONIC COMPONENTS	DC10AS	Yes	Yes
J1	1	SIL HEADER 5 pins Phosphor Bronze plated	TSM-105-04-T-SV	-	X5APH_SMD	SAMTEC	TSM-105-04-T-SV	Yes	Yes
OPEN1, OPEN2, OPEN3, OPEN4, OPEN5, OPEN6, OPEN7, OPEN7, SHORT1, SHORT2, SHORT3, SHORT4, SHORT5, SHORT6, SHORT7, SHORT8	16	SIL HEADER 2 pins Tin plated	TSM-102-04-T-SV	-	X2APH_SMD	SAMTEC	TSM-102-04-T-SV	Yes	Yes
OPEN1, OPEN2, OPEN3, OPEN4, OPEN5, OPEN6, OPEN7, OPEN7,	8	Jumper, 2 pins	Jumper 1x2	-	-	FCI	68786-202	Yes	Yes
B, Col1, Col5, FB1, FB5, GND, GND1, GND2, VS	9	TESTPIN 3.25MM SMD	S1751-46	-	TESTPIN_S1751	HARWIN	S1751-46	Yes	Yes