



Bill of Materials for the NCP1216LEDGEVB Evaluation Board

Designator	Quantity	Description	Value	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
U1	1	100 kHz PWM Controller	N/A	DIP8	ON Semiconductor	NCP1216P100	NO	YES
U1SOC*	1	8 PIN SOCKET	N/A	DIP8	MIL-MAX	110-93-308-41-001	YES	YES
U2*	1	OPTO	N/A	DIP4	NEC-CEL	PS-2501-1A	YES	YES
U3*	1		N/A	SOT23-3	ON Semiconductor	TLV431ASN1T1G	NO	YES
D1-D4	4	Diode	STD RECOVERY	SMA	ON Semiconductor	MRA4003T3G	NO	YES
D5	1	Diode	ULTRAFAST	SMA	ON Semiconductor	MURA160T3G	NO	YES
D6*	1	Diode	Zener		ON Semiconductor	MMSZ5240G	NO	YES
D7	1	Diode	Switching		ON Semiconductor	MMSD4148G	NO	YES
C1	1	Capacitor	0.1uF 250V 10%	Through Hole	Panasonic	ECQ-E2104KF	YES	YES
C2	1	Capacitor	47uF 200V	Through Hole	UCC	KMX200VB47RM12X20LL	YES	YES
C3	1	Capacitor	22uF 200V	Through Hole	UCC	KMX200VB22RM12X20LL	YES	YES
C4	1	Capacitor	1nf 50V	Through Hole	Panasonic	B37979G5102J000	YES	YES
C5	1	Capacitor	10uF 25V	Through Hole	Panasonic	ECJ-3YB1E106K	YES	YES
C4	1	Capacitor	1nf 50V	Through Hole	Panasonic	B37979G5102J000	YES	YES
F1	1	Fuse	1A	Through Hole	LittleFuse	0251001.MRT1-	YES	YES
R1-R5	5	Resistor	5.1 ohm 1/4W 5%	603	Panasonic	ERD-S1TJ5R1V	YES	YES
R6	1	Resistor	18K 1/4 5%	Through Hole	Panasonic	ERD-S2TJ183V	YES	YES
R7	1	Resistor	1K ohm 1/4 5%	Through Hole	Panasonic		YES	YES
R8*	1	Resistor	1K ohm 1/4 5%				YES	YES
R9*	1	Resistor	1 ohm				YES	YES
R10*	1	Resistor	100K 1/8 5%	805	Panasonic	ERJ-6GEYJ104V	YES	YES
R11	1	Resistor	10K				YES	YES
R12	1	Resistor	1 ohm				YES	YES
Q1	1	MOSFET	MTD6N20E	DPAK	ON Semiconductor	MTD6N20ET4G	NO	YES
Q2*	1	MOSFET	MTD6N20E	DPAK	ON Semiconductor	MTD6N20ET4G	NO	YES
L1	1	Inductor		SMD	COILCRAFT	C1016-A	YES	YES
PCB	1	NCP1216 BUCK 1A LED DVR	REV A				NO	YES

* Parts marked with asterisk are optional