



Bill of Materials for the NCVP1568DC48WGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1 C3 C29 C44	4	Capacitor, Ceramic, 25V, 10%	0.1uF,25v		402	Wurth	/885012105018	Yes	Yes
C52	1	Capacitor, Ceramic, 25V, 10%	0.1uF,25v		603	Wurth	/885012206071	Yes	Yes
C6 C26 C45 C48	4	Capacitor, Ceramic, Chip, 10%	0.22uF,450V		1210	TDK	C3225X7T2W224K	Yes	Yes
C9 C34	2	Capacitor, Ceramic, 50V, 10%	101		402	Wurth	/885012205055	Yes	Yes
C42	1	Capacitor, Ceramic, 50V, 10%	102		402	Wurth	/885012205061	Yes	Yes
C46-47	2	Capacitor, Ceramic, 50V, 10%	102		402	Wurth	/885012205061	Yes	Yes
C8	1	Capacitor, Ceramic, 10%	1uF,25v		603	Wurth	/885012206076	Yes	Yes
C43	1	Capacitor, Ceramic, 25V, 10%	1uF,25v		603	Wurth	/885012206076	Yes	Yes
C12	1	Capacitor, Ceramic, SMD, 5%	2.2nF,100v		603	TDK	C1608X7R2A222K	Yes	Yes
C56-57 C60 C62	4	Capacitor, Ceramic, SMD, 5%	22uF		1206	TDK	C3216X5R1V226M160AC	Yes	Yes
C27	1	Capacitor, Ceramic, 16V, 10%	4.7uF,16V		603	TDK	C1608X6S1C475M	Yes	Yes
C10	1	Y Capacitor,safety standard approved, 10%	470pF,Y1		Lead type	TDK	CS65-B2GA101KYNKA	Yes	Yes
D6	1	Swiching diode, 0.2A, 250V	0.2A,250V		SOD323	ON	BAS21HT1G	No	Yes
D26 D29	2	Schottky diode, SMD	0.2A,30V		SOD523	ON	BAT54XV2T1G	No	Yes
D22	1	Ultrafast diode, SMD	1A,600V		SOD123	ON	ES1JFL	No	Yes
D1	1	Schottky Rectifier, 5A, 100V	5A,100V		SOD123FL	ON	NTSAF5100T3G	No	Yes
F1	1	Micro Fuse, 1.6A/250V	1.6A, 250Vac		Axial lead	Hollyfuse	20T-016H	Yes	Yes
U8	1	PROGRAMMABLE PRECISION REFERENCE			SOT23	ON	NCP431ACSNT1G	No	Yes
U2	1	ACF controller			TSSOP16	ON	NCP1568S02DBR2G	No	Yes
U7	1	Syn. Rectified Controller			DFN10 4X4	ON	NCP4306AADZZAMNTWG	No	Yes
U1	1	HB driver			DFN10 4X4	ON	NCP51530AMNTWG	No	Yes
NTC1	1	replaced by 13k resistor	100k		603	Shunlord	SDNT1608X104J4250HTF	Yes	Yes
U4	1	optical coupler, standard SOP package			LSOP4	ON	FODM1009	No	Yes
L6	1	WE-HCI SMD Flat Wire High Current Inductor	2uH		7050	Wurth	/744314200	Yes	Yes
R6 R72	2	Resistor, Chip, 1/16W, 1%	1		402	Std	Std	Yes	Yes
R18	1	Resistor, Chip, 1/16W, 1%	1.6k		402	Std	Std	Yes	Yes
R32 R91-92	3	Resistor, Chip, 1/16W, 1%	100k		402	Std	Std	Yes	Yes
R37	1	Resistor, Chip, 1/16W, 1%	120k		402	Std	Std	Yes	Yes
R13	1	Resistor, Chip, 1/16W, 1%	150		402	Std	Std	Yes	Yes
R17	1	Resistor, Chip, 1/16W, 1%	16k		402	Std	Std	Yes	Yes
R1 R22	2	Resistor, Chip, 1/16W, 1%	1K		402	Std	Std	Yes	Yes
R9	1	Resistor, Chip, 1/16W, 1%	22		402	Std	Std	Yes	Yes

R8	1	Resistor, Chip, 1/16W, 1%	24k	603	Std	Std	Yes	Yes
R89-90	2	Resistor, Chip, 1/16W, 1%	4.7	402	Std	Std	Yes	Yes
R2 R20	2	Resistor, Chip, 1/16W, 1%	47k	402	Std	Std	Yes	Yes
R3	1	Resistor, Chip, 1/16W, 1%	510	402	Std	Std	Yes	Yes
R45	1	Resistor, Chip, 1/16W, 1%	56k	402	Std	Std	Yes	Yes
R7	1	Resistor, Chip, 1/16W, 1%	91k	402	Std	Std	Yes	Yes
R29	1	Resistor, Chip, 1/16W, 1%	nc	402	Std	Std	Yes	Yes
R4	1	Resistor, Chip, 1/2W, 1%	0.62	1206	Panasonic	ERJ8BQFR062V	Yes	Yes
R5	1	Resistor, Chip, 1/2W, 1%	0.68	1206	Panasonic	ERJ8BQFR068V	Yes	Yes
R31	1	Resistor, Chip, 1/4W, 1%	1k	1206	Std	Std	Yes	Yes
R12 R34	2	Resistor, Chip, 1/5W, 1%	20	805	Std	Std	Yes	Yes
R83	1	Resistor, Chip, 1/4W, 1%	300K	1206	Std	Std	Yes	Yes
T1	1	RM7, 8Pin		TH type	Wurth	750344366.Rev01	Yes	Yes
C13-14	2	size:6.3mmx12mm	470uF,16V	6.3mmx12mm	CapXon	PX471M016E120P	Yes	Yes
C21	1	size:6.3mmx11mm	47uF,25V	5mmx11mm	CapXon	KF Series	Yes	Yes
C32	1	size:8mmx12mm	6.8uF,420V	8mmx12mm	CapXon	KF Series	Yes	Yes
Q18	1	MOSFET, NChan, 100V		QFN5X6	ON	NTMFS6B03NT1G	No	Yes
Q23-24	2	MOSFET, NChan, 600V		ThinkPAK5X6	INFINEON	IPL60R360P6S	Yes	Yes
ZD11	1	GENERIC ZENER-DIODE	15v	SOD323	ON	MM3Z15VT1G	No	Yes
12V4A GND V+ V-	4	connection terminal or wire		Ø1mm	Std	Std	No	Yes