



Bill of Materials for the NCV8871BSTGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	CAP CER 1UF 16V X7R 0603	1uF	10%	0603	Murata Electronics North America	GRM188R71C105KA12D	Yes	Yes
C2, C3	2	CAP ELECT 1000UF 50V FK SMD	1000uF	20%	FKV_CAP	Panasonic - ECG	EEE-FK1H102AM	No	Yes
C4	1	CAP CER 33000PF 50V X7R 0603	33000pF	10%	0603	Murata Electronics North America	GRM188R71H333KA61D	No	Yes
C5 thur C10, C18 thur C20	9	CAP 180UF 50V ELECT FM RADIAL	180uF	20%	CAP_8P0	Murata Electronics North America	EEU-FM1H181L	No	Yes
C11, C12, C13	3	CAP CER 1UF 50V X7R 1206	1uF	10%	1206	Murata Electronics North America	GCM31MR71H105KA55L	Yes	Yes
C14	1	CAP CER 2700PF 100V 10% X7R 0603	2700pF	10%	0603	Murata Electronics North America	GRM188R72A272KA01D	No	Yes
C15, C16	2	CAP CER .1UF 50V 10% X7R 0805	100nF	10%	0805	Murata Electronics North America	GRM21BR71H104KA01L	Yes	Yes
C17	0	Do Not Populate	-	-	0603	-	-	Yes	Yes
D1	1	45V, 30A D2PAK Schottky Rectifier	45V / 30A	N/A	D2PAK_3	ON Semiconductor	MBRB2545CTT4G	No	Yes
D2, D3	2	DIODE SCHOTTKY 40V 1A SOD123FL	40V / 1A	N/A	SOD_123	ON Semiconductor	MBR140SFT1G	No	Yes
J1	1	CONN HEADER 4POS R/A 1.5MM TIN	N/A	N/A	4PINCONN	Coilcraft Inc	292206-4	No	Yes
L1	1	High Temp SMT Power Inductor 6.8uH	6.8uH	30A	SER2900	Coilcraft Inc	SER2915H-682KL	No	Yes
Q1, Q2	2	MOSFET N-CH 40V 101A DPAK	40V / 101A	N/A	DPAK3_DMD	ON Semiconductor	NTD5802NT4G	No	Yes
R1	1	RES 0.008 OHM 3W 1% 3015 SMD	0.008	1%	3015	Susumu	KRL7638-C-R008-F-T1	No	Yes
R2	1	RES 6.34K OHM 1/10W 1% 0603 SMD	6.34K	1%	0603	Vishay/Dale	CRCW06036K34FKEA	Yes	Yes
R3	1	RES 14.0K OHM 1/10W 1% 0603 SMD	14.0K	1%	0603	Vishay/Dale	CRCW060314K0FKEA	Yes	Yes
R4	1	RES 1.00K OHM 1/10W 1% 0603 SMD	1.00K	1%	0603	Vishay/Dale	CRCW06031K00FKEA	Yes	Yes
R10, R11	2	RES 0.0 OHM 1/8W 0805 SMD	0	5%	0805	Vishay/Dale	CRCW08050000Z0EA	Yes	Yes
TP1 thur 6, 7, 9, 14 thur 17, 20	13	PIN INBOARD .042" HOLE 1000/PKG	N/A	N/A	TP	Vector Electronics	K24C/M	Yes	Yes
TP10, 11, 12, 13	4	CONN JACK BANANA UNINS PANEL MOU	N/A	N/A	BANANA	Emerson Network Power Conn Solutions	108-0740-001	No	Yes
U1	1	Automotive Non-Sync Boost Controller	N/A	N/A	SOIC8_N_ADJ	ON Semiconductor	NCV8871_00	No	Yes
U2	1	Automotive Non-Sync Boost Controller	N/A	N/A	10PINDFNP5	ON Semiconductor	NCV8872_00	No	Yes
MNT1, 2, 3, 4	4	Hex Spacer 4-40 1/2" Zinc Plated Steel	N/A	N/A	MOUNTHOLE125	McMaster-Carr	93620A432	Yes	Yes
	4	Hex Nut 4-40 1/4" Zinc Plated Steel	N/A	N/A	MOUNTHOLE125	McMaster-Carr	90480A005	Yes	Yes