



## Bill of Materials for the NCV8871LVBGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1, C6	2	CAP CER .1UF 50V 10% X7R 0805	100nF	10%	0805	Murata Electronics North America	GRM21BR71H104KA01L	Yes	Yes
C2	1	CAP CER 1UF 16V X7R 0603	1uF	10%	0603	Murata Electronics North America	GRM188R71C105KA12D	Yes	Yes
C3, C4, C7, C8	4	CAPACITOR ALUM ELEC 330UF, 35V, RADIAL	330uF	20%	FCA_CAP10X12P5	RubyCon	35ZLH330M10X12.5	No	Yes
C5	1	CAP CER 1UF 35V X7R 10% 0805	1uF	10%	0805	Murata Electronics North America	GCM21BR7YA105KA55L	Yes	Yes
C9	1	CAP CER 100PF 50V X7R 10% 0603	100pF	10%	0603	TDK Corporation	C1608X7R1H101K	Yes	Yes
C10	1	CAP CER 820PF 50V 10% X7R 0603	820pF	10%	0603	Murata Electronics North America	GRM188R71H821KA01D	Yes	Yes
C11	1	CAP CER 1500PF 50V 10% X7R 0603	1500pF	10%	0603	Murata Electronics North America	GRM188R71H152KA01D	Yes	Yes
D1, D2	2	DIODE SCHOTTKY 40V 1A SOD123FL	40V / 1A	-	SOD_123	ON Semiconductor	MBR140SFT1G	No	Yes
D3	1	DIODE SCHOTTKY 40V 3A SMA	40V / 3A	-	SMA_DIODE	ON Semiconductor	MBRA340T1G	No	Yes
L1	1	High Temp SMT Power Inductor 15uH 2.46A	15uH	20%	COIL_MSS1038	Coilcraft Inc	MSS1048T-153ML	No	Yes
Q1	1	Power MOSFET 40V 23A N-Channel DPAK	40V / 23A	-	MOS_DPAK	ON Semiconductor	NTD5807NT1G	No	Yes
R1	1	RES 21.5K OHM 1/10W 1% 0603 SMD	21.5K	1%	0603	Vishay/Dale	CRCW060321K5FKEA	Yes	Yes
R2	1	RES .08 OHM 1/4W 1% 1206 SMD	80mohms	1%	1206	Vishay/Dale	WSL1206R0800FEA	No	Yes
R3	1	RES 78.7K OHM 1/10W 1% 0603 SMD	78.7K	1%	0603	Vishay/Dale	CRCW060378K7FKEA	Yes	Yes
R4	1	RES 10.0K OHM 1/10W 1% 0603 SMD	10.0K	1%	0603	Vishay/Dale	CRCW060310K0FKEA	Yes	Yes
TP1, TP3-5, 7, 8, 11-17	13	PIN INBOARD .042" HOLE 1000/PKG	-	-	TP	Vector Electronics	K24C/M	Yes	Yes
TP2, 6, 9, 10	4	TERM SOLDER TURRET .219" .109"L	-	-	TURRET	Mill-Max Manufacturing Corp.	2501-2-00-44-00-00-07-0	Yes	Yes
U1	1	Automotive Non-Sync Boost Controller	-	-	SOIC8_N_ADJ	ON Semiconductor	NCV887100D1R2G	No	Yes
MNT1, 2, 3, 4	4	Hex Spacer 4-40 1/2" Zinc Plated Steel	-	-	MOUNTHOLE125	McMaster-Carr	93620A432	Yes	Yes
	4	Hex Nut 4-40 1/4" Zinc Plated Steel	-	-	MOUNTHOLE125	McMaster-Carr	90480A005	Yes	Yes