



## Bill of Materials for the NCV891930MW00-50GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
CBST, CDBIAS, CFL1, CIN1, CO1, CO26, CSSC, CV_CS, CV_SO	9	CAP CER 0.1UF 50V 10% X7R 0603	0.1uF	10%	603	Murata Electronics North America	GCM188R71H104KA57D		Yes
CDRV, CO2, CVCCX	3	CAP CER 1UF 16V X7R 0603	1uF	10%	603	Murata Electronics North America	GCM188R71C105KA64D		Yes
CFL2, CIN2, CVIN	3	CAP CER 1UF 50V 10% X7R 0805	1uF	10%	805	TDK Corporation	CGA4J3X7R1H105K125AE		Yes
CIN3, CIN4	Do Not Populate	CAP CER 4.7UF 50V X7R 1210	4.7uF	10%	1210	Kemet	C1210C475K5RACAUTO		Yes
CIN5, CIN6	2	CAP CER 4.7UF 50V X7R 1210	4.7uF	10%	1210	Kemet	C1210C475K5RACAUTO		Yes
CFL3	1	CAP ALUM POLY HYB 270UF 35V SMD	270uF	20%	FK V G	Chemi-Con	HHXB350ARA271MJA0G		Yes
CO3 thur CO15, CO19, CO20	15	CAP CER 10UF 16V X7R 1206 / CAP CER 10UF 25V X7R 1210	10uF	10%	1206 / 1210	Murata Electronics North America	GCM31CR71C106KA64L / GCM32ER71E106KA57L		No
CO16 thur CO18, CO21 thur CO23	Do Not Populate	CAP CER 10UF 16V X7R 1206 / CAP CER 10UF 25V X7R 1210	10uF	10%	1206 / 1210	Murata Electronics North America	GCM31CR71C106KA64L / GCM32ER71E106KA57L		No
COP1	Do Not Populate	CAP ALUM POLY 220UF 20% 6.3V SMD	220uF	20%	CAP_SMD_8P3	Panasonic Electronic Components	6SVQP220M		Yes
CSF1	Do Not Populate	CAP CER 100PF 50V C0G 0603	100pF	5%	603	Murata Electronics North America	GCM1885C1H101JA16D		Yes
CSNB	1	CAP CER 100PF 50V C0G 0603	100pF	5%	603	Murata Electronics North America	GCM1885C1H101JA16D		Yes
D1	1	DIODE SCHOTTKY 60V 2A SMB	60V / 2A	N/A	SMB_DIODE	ON Semiconductor	NRVBS260T3G		No
D2	Do Not Populate	DIODE SCHOTTKY 20V 1A POWERMITE	20V / 1A	N/A	POWERMITE	ON Semiconductor	MBRM120LT1G		No
L0	1	INDUCTOR POWER 2.2UH 15.9A SMD	2.2uH	20%	XAL60XX	Coilcraft	XAL6030-222ME		No
L1	1	INDUCTOR POWER 1.0UH 28A	1.0uH	20%	XAL80XX	Coilcraft	XAL7030-102ME		No
Q1, Q2	2	N-Channel Power MOSFET 40V 37A SO-8FL	40V / 37A	N/A	SO8_FL	ON Semiconductor	NVMF55C468NLWFT1G		No
RBST, RGH1, RGL1	3	RES SMD 0.0 OHM JUMPER 1/10W 0603	0	N/A	603	Vishay Dale	CRCW06030000Z0EA		Yes

REN, RRSTB	2	RES SMD 10K OHM 1% 1/10W 0603	10K	1%	603	Vishay Dale	CRCW060310K0FKEA		Yes
RINJ	1	RES SMD 10 OHM 1% 1/10W 0603	10	1%	603	Vishay Dale	CRCW060310R0FKEA		Yes
ROSC	Do Not Populate		TBD		603				
RSF1, RSF2	2	RES SMD 0.0 OHM JUMPER 1/10W 0603	0	N/A	603	Vishay Dale	CRCW06030000Z0EA		Yes
RSNB	1	RES SMD 9.1 OHM 1% 1/4W 1206	9.1	1%	1206	Stackpole Electronics Inc.	RMCF1206FT9R10		Yes
RSNS, RSNS1	2	RES SMD 0.018 OHM 5% 1W 1206	0.018	1%	1206	Panasonic Electronic Components	ERJ-8CWJR018V		Yes
RSNS2	Do Not Populate	RES SMD 0.018 OHM 5% 1W 1206	0.018	1%	1206	Panasonic Electronic Components	ERJ-8CWJR018V		Yes
RSYNC1	1	RES SMD 100 OHM 1% 1/10W 0603	100	1%	603	Vishay Dale	CRCW0603100RFKEA	1	Yes
RVIN	1	RES SMD 1 OHM 1% 1/10W 0603	1	1%	603	Vishay Dale	CRCW06031R00FKEA		Yes
RVSELL	Do Not Populate	RES SMD 10K OHM 1% 1/10W 0603	10K	1%	603	Vishay Dale	CRCW060310K0FKEA		Yes
RVSELH	1	RES SMD 10K OHM 1% 1/10W 0603	10K	1%	603	Vishay Dale	CRCW060310K0FKEA		Yes
GND1, GND2, VIN_FLT, VOUT_ENABLE, GND3 thru GND7, RSTB, SYNC1, VCCEXT, VIN1, VIN_FLT1, VOUT1_VSEL	4	CONN JACK BANANA UNINS PANEL MOUNT	N/A	N/A	BANANA	Emerson Network Power Connectivity Johnson	108-0740-001		No
BST, CSN, CSP, DBIAS, EN_MON, GH, GL, GND8, RCL1, RCL2, RVL1, RVL2, SSC, SW, SYNC0, V_CS, V_SO, VDRV	13	PIN INBOARD .042" HOLE 1000/PKG	N/A	N/A	TP	Vector Electronics	K24C/M		Yes
	Do Not Populate (18)	CIRCUIT PIN PRNTD .020"D .425"L	N/A	N/A	SMALLTP	Mill-Max Manufacturing Corp.	3128-2-00-15-00-00-08-0		Yes
J1	1	CONN HEADER 2POS .100 VERT GOLD	N/A	N/A	JMP	Molex Connector Corporation	22-28-4026		Yes
	1	CONN JUMPER SHORTING GOLD	N/A	N/A	JMP	Sullins Connector Solutions	SSC02SYAN		Yes
MNT1, MNT2, MNT3, MNT4	4	18-8 Stainless Steel Male-Female Threaded Hex Standoff, 1/4" Hex Size, 5/8" Length, 4-40 Thread Size	N/A	N/A	#4MOUNT	McMaster-Carr	91075A433		Yes
	4	18-8 Stainless Steel Locknut with External-Tooth Lock Washer, 4-40 Thread Size	N/A	N/A	#4MOUNT	McMaster-Carr	96278A005		Yes
U1	1	Low Iq 2MHz Automotive Synchronous Buck Controller	N/A	N/A	QFN24_4X4_P5	ON Semiconductor	NCV891930MW00AR2G		No