



Bill of Materials for the NCV898031SEPGVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1, C11, C13	3	CAP CER 0.1UF 50V 10% X7R 0805	100nF	10%	0805	Murata Electronics North America	GRM21BR71H104KA01L	Yes	Yes
C2	1	CAP ALUM 22UF 50V 20% RADIAL	22uF	20%	CAP_RAD_5X11	Chemi-Con	EKZE500ELL220ME11D	Yes	Yes
C3	1	CAP CER 1UF 16V 10% X7R 0603	1uF	10%	0603	Murata Electronics North America	GCM188R71C105KA64D	Yes	Yes
C4	1	CAP CER 6800PF 50V 10% X7R 0603	6800pF	10%	0603	Murata Electronics North America	GRM188R71H682KA01D	Yes	Yes
C5	1	CAP CER 680PF 50V 5% NPO 0603	680pF	5%	0603	Murata Electronics North America	GRM1885C1H681JA01D	Yes	Yes
C6, C10	2	CAP CER 4.7UF 50V 10% X7R 1206	4.7uF	10%	1206	TDK Corporation	C3216X7R1H475K	Yes	Yes
C7	1	CAP CER 1UF 50V 10% X7R 1206	1uF	10%	1206	Murata Electronics North America	GCM31MR71H105KA55L	Yes	Yes
C8	1	CAP CER 100PF 50V 5% NPO 0603	100pF	5%	0603	Murata Electronics North America	GCM1885C1H101JA16D	Yes	Yes
C9	1	CAP ALUM 56UF 10V 20% SMD	56uF	20%	Radial	Nichicon	RPS1A560MCN1GS	No	Yes
C12	1	CAP CER 120PF 50V 5% NPO 0603	120PF	5%	0603	Murata Electronics North America	GRM1885C1H121JA01D	Yes	Yes
D1	1	60 V, 3.0 A Schottky Rectifier	60V / 3A	-	SMC_DIODE	ON Semiconductor	NRVBS360T3G	No	Yes
D2, D3	2	DIODE SCHOTTKY 40V 1A SOD123FL	40V / 1A	-	SOD_123	ON Semiconductor	MBR140SFT1G	No	Yes
L1, L2	2	High Temp SMT Power Inductor 15uH 2.8A	15uH	20%	XAL4040	Coilcraft	XAL4040-153ME	No	Yes
Q1	1	N-CHANNEL MOSFET, LL, 60V 11.5mOHMS	60V / 29A	-	WDFN8	ON Semiconductor	NVTFS5820NL	No	Yes
R1	1	RES 3.01K OHM 1/10W 1% 0603 SMD	3.01K	1%	0603	Vishay Dale	CRCW06033K01FKEA	Yes	Yes
R2	1	RES 10.0K OHM 1/10W 1% 0603 SMD	10K	1%	0603	Vishay Dale	CRCW060310K0FKEA	Yes	Yes
R3	1	RES 48.7K OHM 1/10W 1% 0603 SMD	48.7K	1%	0603	Vishay Dale	CRCW060348K7FKEA	Yes	Yes
R4	1	RES 10.0 OHM 1/10W 1% 0603 SMD	10	1%	0603	Vishay Dale	CRCW060310R0FKEA	Yes	Yes
R5	1	RES 5.6 OHM 1/10W 5% 0603 SMD	5.6	1%	0603	Vishay Dale	CRCW06035R60JNEA	Yes	Yes
R6	1	RES 0.0 OHM 1/8W 0805 SMD	0	Jumper	0805	Vishay Dale	CRCW08050000Z0EA	Yes	Yes
R7	1	RES 1.00K OHM 1/10W 1% 0603 SMD	1K	1%	0603	Vishay Dale	CRCW06031K00FKEA	Yes	Yes
R8, R10	2	RES .22 OHM 1/3W 1% 0805 SMD	0.22	1%	0805	Susumu	RL1220S-R22-F	Yes	Yes
R9	1	RES 23.7 OHM 1/10W 1% 0603 SMD	23.7	1%	0603	Vishay Dale	CRCW060323R7FKEA	Yes	Yes
TP1, 3, 4, 7, 8, 14, 15, 16, 17, 18	10	PIN INBOARD .042" HOLE 1000/PKG	-	-	TP	Vector Electronics	K24C/M	Yes	Yes
TP2, 5, 6, 9	4	CIRCUIT PIN PRNTD .020"D .425"L	-	-	SMALLTP	Mill-Max Manufacturing Corp.	3128-2-00-15-00-00-08-0	Yes	Yes
TP10, 11, 12, 13	4	TERM SOLDER TURRET .219" .109"L	-	-	TURRET	Mill-Max Manufacturing Corp.	2501-2-00-44-00-00-07-0	Yes	Yes
U1	1	2 MHz Non-Synchronous SEPIC/Boost Controller	-	-	SOIC8_N_ADJ	ON Semiconductor	NCV898031D1R2G	No	Yes