



Bill of Materials for the NCV7520GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	CAP CER 1000PF 50V 10% X7R 0805	1nF	10%	X7R 0805				Yes
C2,C10,C13	3	CAP CER 1UF 50V 10% X7R 0805	1uF	10%	0805				Yes
C8, C14	2	CAP CER 0.1nF 50V 10% 0805	0.1nF	10%	0805				Yes
C9	1	CAP CER 22UF 10V X6S 1206	22uF	-	X6S 1206				Yes
C11, C3	2	CAP CER 0.22UF 25V X7R 0805	0.22uF	-	X7R 0805				Yes
C12	1	CAP CER 10UF 1206	10uF	-	1206				Yes
D1-D14,D35,D37	16	LED GREEN CLEAR THIN 0805 SMD	Green	-	SMD	Lite-On Inc	LTST-C171GKT	Y	Yes
D15-D20	6	DIODE SCHOTTKY 20V 1A SMB	20V / 1A	-	SMB	ON Semiconductor	MBR5120T3G	N	Yes
D38, D43, D47, D51, D55, D59	6	DIODE ZENER 5% SOT23-3	44.65 V	5%	SOT23-3	ON Semiconductor	MMBZ47VALT1G	Y	Yes
D33	1	DIODE SCHOTTKY 40V 1A SMB	40V / 1A	-	SMB	ON Semiconductor	MBR5140T3G	N	Yes
J1,J4-J15,J45,J49,J59	16	SIL VERTICAL PC TAIL PIN HEADER (and 2 pin jumper)	2 Pos	-	-	Harwin Inc.	M20-9990246	Y	Yes
J2,J3,J18-J22,J25-J33,J55-J58	20	TEST POINT PC MULTI PURPOSE black	TP	-	-	Keystone Electronics	5001	Y	Yes
J16, J47	2	CONN HEADER 3 POS 2.54	3 Pos	-	-				Yes
J17	1	CONNECTOR EDGE 10x2	20 Pos	-	-	Sullins Connector Solutions	EBC10DRAS	N	Yes
J23,J35	2	CONN HEADER 8POS .100 STR TIN	8 Pos	-	-				Yes
J24	1	10POS SIL VERTICAL PIN HEADER	10 Pos	-	-				Yes
J34	1	SIL VERTICAL PC TAIL PIN HEADER	6 Pos	-	-				Yes
J39-J44,J50-J52	9	CONN TERM BLOCK 2POS 3.00MM PCB	2 Pos	-	-	Phoenix Contact	1729128	N	Yes
J53, J54	2	4MM SOCKET, THRU HOLE - UNINSULA	Banana jack	-	-	Cal Test Electronics	CT2224	Y	Yes
J65	1	CONN PWR JACK 2X5.5MM Solder	N/A	-	-	CUI Inc.	PJ-102A	N	Yes
MNT1, MNT2, MNT3, MNT4	4	HEX STANDOFF #4-40 ALUMINUM 3/4"	#4-40, 3/4"	-	-	Keystone Electronics	2204	Y	Yes
MNT1, MNT2, MNT3, MNT4	4	#4 HEX Nuts for Board Mounts	#4-40, 1/4"	-	-	Keystone Electronics	9900	Y	Yes
Q1-Q6	6	FETs		-		ON Semiconductor	NVMFS5C680NL	See Note	Yes
R1	1	RES SMD 16.5K OHM 1% 1/8W 0805	16.5k	1%	0805				Yes
R2	1	RES 10.0 OHM 1/8W 1% 0805 SMD	10	1%	0805 SMD				Yes
R3	1	POT 20K OHM THUMBWHEEL CERM ST	20K	-	-	Bourns Inc	3352E-1-203LF	N	Yes
R27-R32, (R42,R48,R55,R43,R49,R54), (R46,R52,R58,R47,R53,R59), (SO->IN0), R33,R34,R24	34	RES SMD 0 OHM JUMPER 1/8W 0805	0	-	0805				Yes
R12	1	RES 4.70K OHM 1/8W 1% 0805 SMD	4.7k	1%	0805 SMD				Yes
R25	1	RES 10.0K OHM 1/8W 1% 0805 SMD	10k	1%	0805 SMD				Yes
R26,R35-R41,R64-	16	RES 620 OHM 1/8W 1% 0805 SMD	620	1%	0805 SMD				Yes
R44,R74,R75,R76,R77,R78	6	RES 100 OHM 1/8W 1% 0805 SMD	100	1%	0805				Yes
R71	1	RES 249 OHM 1% 1/8W 0805	249	1%	0805				Yes

R73	1	RES SMD 1K OHM 1% 1/8W 0805	1k	1%	0805				Yes
SW1,SW2	2	PB SWITCH TACTILE SPST-NO 0.05A 24V	N/A	-	-	TE Connectivity ALCOSWITCH Switches	1-1825910-0	N	Yes
SW3	1	SWITCH SLIDE DIP SPST 150MA 30V	9 pos	-	-	Grayhill Inc.	78RB09ST	N	Yes
U1	1	<b>NCV 7520 footprint capable of QFN32 or TQFP32</b>	<b>N/A</b>	-	QFN32/TQFP32	<b>ON Semiconductor</b>			Yes
U2,U3	2	Latches for input and gate LED's	N/A	-	-	ON Semiconductor	MM74HC573WM	N	Yes
U5	1	IC REG LINEAR 5V 400MA DPAK	5V	-	-	ON Semiconductor	NCV4274CDT50RKG	N	Yes
U6	1	IC REG LINEAR 3.3V 400MA DPAK	3.3V	-	-	ON Semiconductor	NCV4274CDT33RKG	N	Yes
U7	1	Switch for shared PWM outs	N/A	-	-	ON Semiconductor	MC74HC4066ADG	N	Yes
UNO	1	ARDUINO UNO BOARD REV3	N/A	-	-	Arduino	A000066	N	Yes