



Bill of Materials for the NCV7703CGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
VBAT	1	Banana Jack	---	---	BANANA	CINCH CONNECTIVITY SOLUTIONS	108-0740-001	Yes	Yes
GND	1	Banana Jack	---	---	BANANA	CINCH CONNECTIVITY SOLUTIONS	108-0740-001	Yes	Yes
C3, C4	2	Oscillator Load Capacitors	20pF	5%	0805	KEMET	C0805C200J5GACTU	Yes	Yes
C1, C6, C7, C5, C8, C12	6	Bypass Capacitors	0.1uF	10%	0805	KEMET	C0805C104K5RACTU	Yes	Yes
C2	1	5V Regulator Output Capacitor	22uF	20%	1206	KEMET	C1206C226M4PAC7800	Yes	Yes
C9, C10, C11	3	Output Capacitors	0.01uF	10%	0805	KEMET	C0805C103K5RACTU	Yes	Yes
D1	1	Reverse Battery Diode	3A, 400V	---	1N540X	ON SEMICONDUCTOR	1N5404RLG	Yes	Yes
J1-J4, J10-J14	9	Jumper Posts 100 mil, 2 post	---	---	JMP	3M	961102-6404-AR	Yes	Yes
J5, J6, J7, J9	4	Jumper Posts 100 mil, 3 post	---	---	JP3	3M	961103-6404-AR	Yes	Yes
N/A	13	Jumper Shunts 100 mil spacing	---	---	N/A	SULLINS CONNECTOR SOLUTIONS	QPC02SXGN-RC	Yes	Yes
R1	1	Oscillator Bias Resistor	1M	1%	0805	VISHAY DALE	CRCW08051M00FKEA	Yes	Yes
R2	1	Pull-Up Resistor	10K	1%	0805	VISHAY DALE	CRCW080510K0FKEA	Yes	Yes
R8	1	LCD Backlight Resistor	220	1%	0805	VISHAY DALE	CRCW0805220RFKEA	Yes	Yes
R12	1	Thumbwheel Potentiometer	10K	20%	3352E_POT	BOURNS INC	3352E-1-103LF	Yes	Yes
SW1, SW2, SW3	3	SPDT Mom-Off-Mom	---	---	MINITOGGLE_LARGE	E-SWITCH	100SP4T1B1M2QEH	Yes	Yes
SW4, SW5, SW6	3	Programming DIP Switches	---	---	DIP14	GRAYHILL	76STC04T	No	Yes
SW7	1	Transmit Pushbutton	---	---	SW_6x6_TACTILE	TE CONNECTIVITY ALCOSWITCH	1-1825910-0	Yes	Yes
TURRET 1, 2, 3	3	Off-Board Load Turrets	---	---	TURRET	MIL-MAX	2501-2-00-44-00-00-07-0	Yes	Yes
TP1-TP16	16	Test Points	---	---	TP	KEYSTONE ELECTRONICS	5012	Yes	Yes
U1	1	NCV7703C Triple Half-Bridge	---	---	SOIC14_N	ON SEMICONDUCTOR	NCV7703CD2G	No	Yes
U2	1	NCV4274A 5V Regulator	---	---	DPAK3_SMD	ON SEMICONDUCTOR	NCV4274ADT50RKG	Yes	Yes
U3	1	PCF8574T I/O Expander	---	---	SOIC16_W	NXP SEMICONDUCTOR	PCF8574T	No	Yes
Y1	1	16MHz Microprocessor Crystal	20pF	30ppm	XTAL	CTS-FREQUENCY CONTROLS	ATS16A	Yes	Yes
Arduino	1	Arduino-Based SPI Controller	---	---	N/A	ATMEL	ATMEGA328P-PU	No	Yes
SOCKET1	1	28 Pin DIP Socket for Arduino	---	---	DIP28	ON SHORE TECHNOLOGY INC	ED281DT	Yes	Yes
LCD	1	20x4 LCD Module	---	---	N/A	COFUFU	LCM TM204A	Yes	Yes
P_DISP	1	16 Pin Header for LCD Module	---	---	SIP-16P	SULLINS CONNECTOR SOLUTIONS	PRPC016SAAN-RC	Yes	Yes
MG1, MG2	2	12V DC Motor	---	---	FK-050SHB-07295-R	NICHIBO TAIWAN	FK-050SHB-07295-R	No	Yes