

Bill of Materials for NCV7381A0V2GEVB Evaluation Board

ON Semiconductor®



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Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free	Comments
BB2	1	Bread board on PCB (16 holes)	BREADBOARD 4X4	-	-	-	-	-	-	
C1, C78, C88	3	Capacitor SMD	47NF_0805_50V_X7R	10%	CAP0805	MULTICOMP	MC0805B473K500CT	Yes	Yes	
C100, C101	2	Capacitor SMD	22PF_0603_50V_NP0	5%	CAP0603	KEMET	C0603C220J5GACTU	Yes	Yes	
C2	1	Capacitor SMD	100UF/50V ELKO	20%	NICHICON_UD_8X10	NICHICON	UUD1H101MNL1GS	Yes	Yes	
C20, C30	2	Capacitor SMD	1.0UF/50V ELKO	20%	NICHICON_UD_4X6	NICHICON	UWX1H101MCL1GB	Yes	Yes	
C21, C31, C61, C64, C65, C70, C71, C80, C81, C102, C112, C114, CD1A, CD1B, CD1C, CD1D, CD1G, CD1H, CD4, CD6B, CD7A, CD7B, CD7C, CD8A, CD8B, CD8C	26	Capacitor SMD	100NF_0603_50V_X7R	10%	CAP0603	KEMET	C0603C104K5RAC7081	Yes	Yes	
C22, CD1T	2	Capacitor SMD	10UF/16V TANTAL	10%	SMC	AVX	TAJC106K016RNJ	Yes	Yes	
C32	1	Capacitor SMD	22UF/16V TANTAL	10%	SMC	AVX	TAJC226K016RNJ	Yes	Yes	
C60	1	Capacitor SMD	10NF_0603_50V_X7R	10%	CAP0603	MULTICOMP	MCU0603R103KCT	Yes	Yes	
C62, C63	2	Capacitor SMD	100PF_0603_50V_NP0	5%	CAP0603	KEMET	C0603C101J5GACTU	Yes	Yes	
C75, C76, C85, C86	4	RESISTOR SMD	0.0R_0805_0.1W		R0805	MULTICOMP	MC01W08050R	Yes	Yes	
C75, C76, C85, C86	4	Capacitor SMD	100PF_0805_50V_NP0	5%	CAP0805	KEMET	C0805C101K5GACTU	Yes	Yes	Not Assembled
C75, C76, C85, C86	4	0 Ohms	0 Ohms		0805	YAGEO	RC0805JR-070RL	Yes	Yes	
C77, C87	2	Capacitor SMD	12PF_0805_50V_NP0	5%	CAP0805	KEMET	C0805C120J5GACTU	Yes	Yes	Not Assembled
C77x, C87x	2	Capacitor SMD	4.7NF_0805_50V_X7R	10%	CAP0805	MULTICOMP	MC0805B472K500CT	Yes	Yes	
CD1E, CD1F	2	Capacitor SMD	220NF_0603_25V_X7R	10%	CAP0603	KEMET	C0603C224K3RACTU	Yes	Yes	
CD6A, CD6C	2	Capacitor SMD	4.7UF/16V TANTAL	10%	SMB	AVX	TAJB475K016R	Yes	Yes	
D1, D78, D88	3	36V/600W BIDIRECTIONAL TVS DIODE	1SMB36CA		SMB	ON SEMICONDUCTOR	1SMB36CAT3G	Yes	Yes	
D130, D131, D132	3	LED DIODE RED	HSMH-C191		D0603	BROADCOM LIMITED	HSMH-C191	Yes	Yes	
D2	1	3A/200V ULTRAFAST RECTIFIER	MURS320		SMC	ON SEMICONDUCTOR	MURS320T3G	Yes	Yes	
D20, D21, D30, D31	4	DUAL DIODE SCHOTTKY 70V/70mA	BAS70-05		SOT23-3	MULTICOMP	BAS70-05	Yes	Yes	
D60, D101, D102, D103, D104, D105, D106, D107, D108	9	LED DIODE GREEN	HSMG-C191		D0603	BROADCOM LIMITED	HSMG-C191	Yes	Yes	
D77, D87	2	DUAL LINE FLEXRAY BUS PROTECTOR	NUP2115L		SOT23	ON SEMICONDUCTOR	NUP2115LT1G	No	Yes	
D79, D89	2	2A/200V ULTRAFAST RECTIFIER	MURS220		SMB	ON SEMICONDUCTOR	MURS220T3G	Yes	Yes	
GND1	1	SCOPEGND	SCOPEGND		-	HARWIN	D3082F05	Yes	Yes	
H40, H41	2	HEADER 0.1" VERT 2 pins TIN plated	HEADER 1X2 LOCK		HEADER MC34631	MULTICOMP	MC34629	Yes	Yes	
HWA, HWB	2	HEADER 1 ROW 2 PINS	HEADER 1X2		X2APH	TE CONNECTIVITY	5-826629-0	Yes	Yes	
J1	1	DC POWER SOCKET, 2.1MM, 5A, 12V	POWER CON DC10A		DC10A_CLIFF	CLIFF ELECTRONIC COMP.	DC10A+DCPP1	Yes	Yes	
J10	1	HEADER 2 ROWS 3 PINS	HEADER 2X3		X6ABPH	TE CONNECTIVITY	826632-3	Yes	Yes	
J11	1	HEADER 2 ROWS 2 PINS	HEADER 2X2		X4ABPH	TE CONNECTIVITY	826632-2	Yes	Yes	
J12	1	HEADER 2 ROWS 5 PINS	HEADER 2X4		X8ABPH	TE CONNECTIVITY	826632-5	Yes	Yes	
J2	1	HEADER 1 ROW 2 PINS	HEADER 1X2		X2APH	TE CONNECTIVITY	5-826629-0	Yes	Yes	
J20, J30, J40	3	HEADER 1 ROW 2 PINS	JUMPER2 TH		X2APH	TE CONNECTIVITY	5-826629-0	Yes	Yes	
J23	1	HEADER 1 ROW 3 PINS	JUMPER3 TH		X3APH	TE CONNECTIVITY	5-826629-0	Yes	Yes	
J32, J33, J52, J70, J71, J80, J81	7	SMD Strap Jumper	0.0R_0805_0.1W		R0805	MULTICOMP	MC01W08050R	Yes	Yes	
J60	1	USB PANEL SOCKET PCB TYPE B	USB-B_SOCKET		USB-B_SOCKET	LUMBERG	2411 02	Yes	Yes	
J72, J82	2	D-CONNECTOR 9 PINS MALE	DB9MR		DB9MR	ITW MCMURDO	SDEX9PNTD	Yes	Yes	
J73, J83	2	HEADER 2 ROWS 5 PINS	HEADER 2X5		X10ABPH	AMP - TE CONNECTIVITY	826632-5	Yes	Yes	
L60, L113	2	WIREWOUND INDUCTOR 4.7uH/345mA	LB2518T4R7_4.7UH		L1007	TAIYO YUDEN	LBR2518T4R7M	Yes	Yes	
L70, L80	2	CM CHOKE COIL 100uH	DLW43SH101XK2		DLW43S	MURATA	DLW43SH101XK2	Yes	Yes	
O1, O2	2	DUAL OPTOCOUPLER, LOGIC GATE	ACPL074L		SOIC8	BROADCOM LIMITED	ACPL-074L-000E	Yes	Yes	
R104, R120, R121	3	RESISTOR ARRAY SMD	10K_1206_0.063W_5%	5%	YC164	YAGEO	YC164-JR-0710KL	Yes	Yes	
R113	1	RESISTOR SMD	10R_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X10R0FTL	Yes	Yes	
R122	1	RESISTOR ARRAY SMD	100K_1206_0.063W_5%	5%	YC164	YAGEO	YC164-JR-07100KL	Yes	Yes	
R130, R131, R132	3	RESISTOR SMD	1.0K_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X1001FTL	Yes	Yes	
R143, R144	2	RESISTOR ARRAY SMD	1K_1206_0.063W_5%	5%	YC164	YAGEO	YC164-JR-071KL	Yes	Yes	

R20, R31	2	RESISTOR SMD	100K_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X1003FTL	Yes	Yes	
R40	1	RESISTOR SMD	120R_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X1200FTL	Yes	Yes	
R60	1	RESISTOR SMD	820R_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X8200FTL	Yes	Yes	
R62, R63	2	RESISTOR SMD	220R_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X2200FTL	Yes	Yes	
R70, R71, R80, R81	4	RESISTOR SMD	24R_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X24R0FTL	Yes	Yes	Not Assembled
R70x, R71x, R80x, R81x	4	RESISTOR SMD	47R_1206_0.25W_2%	2%	R1206	MULTICOMP	MCWR12X47R0FTL	Yes	Yes	
R72, R82	2	RESISTOR SMD	47R_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X47R0FTL	Yes	Yes	Not Assembled
R73, R74, R83, R84	4	RESISTOR SMD	0.0R_0805_0.1W		R0805	MULTICOMP	MC01W08050R	Yes	Yes	
R75, R85	2	RESISTOR SMD	33K_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X3302FTL	Yes	Yes	
R76, R86	2	RESISTOR SMD	3.3K_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X3301FTL	Yes	Yes	
R77, R87, R103, R108, R112	5	RESISTOR SMD	10K_0805_0.1W_1%	1%	R0805	MULTICOMP	MCWR08X1002FTL	Yes	Yes	
SW10, SW11, SW70, SW80	4	SWITCH SPNO SMD	SW-PB_SMD		PB300	AMP - TE CONNECTIVITY	FSM2JSMA	Yes	Yes	
SW12	1	SWITCH, HALF-PITCH SMD DIP, 8 way	SWDIP-8-SMD		DIL16_SMD	OMRON	A6H-8101	Yes	Yes	
TP_BM_A, TP_BM_B, TP_BP_A, TP_BP_B, TP_INH1_A, TP_INH1_B, TP_INH2_A, TP_INH2_B	8	TEST PIN	TP S200 H1.0 BLACK		-	VERO	20-2137	Yes	Yes	
U1	1	16-bit MCU, 2ch FlexRay CC	MC9S12XF512MLM		LQFP112	NXP	MC9S12XF512MLM	No	Yes	
U2, U3	2	400 mA Low-Drop Voltage Regulator	NCV4276CDT50		DPAK5	ON SEMICONDUCTOR	NCV4276CDT50RKG	Yes	Yes	
U4	1	High Speed Low Power CAN Transceiver	NCV7340D13		SOIC8	ON SEMICONDUCTOR	NCV7340D13R2G	Yes	Yes	
U6	1	USB UART IC	FT232RL		SSOP28	FTDI	FT232RL	No	Yes	
U7, U8	2	Single-channel FlexRay Bus Driver	NCV7381A		SSOP16	ON SEMICONDUCTOR	NCV7381ADP0R2G	No	Yes	
X1	1	CRYSTAL 8MHz, SMD	IQD12SMX-B_8.0MHZ		IQD_12SMX-B	IQD FREQUENCY PRODUCTS	LFXTAL026380	Yes	Yes	