



Bill of Materials for the NCV73830V1GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1, C78, C88	3	CAPACITOR SMD	47NF_0805_50V_X7R	10%	CAP0805	PHYCOMP	2238 580 15645	Yes	Yes
C100, C101	2	CAPACITOR SMD	22PF_0603_50V_NP0	5%	CAP0603	KEMET	C0603C220J5GAC	Yes	Yes
C2	1	CAPACITOR SMD	47UF/50V ELKO		SMD	NICHICON	UUD1H470MCL1GS	Yes	Yes
C21, C31, C61, C64, C65, C90, C102, C111, C112, C114, CD1A, CD1B, CD1C, CD1D, CD1G, CD1H, CD4, CD6B, CD7A, CD7B, CD8A, CD8B	22	CAPACITOR SMD	100NF_0603_50V_X7R	10%	CAP0603	KEMET	C0603C104K5RAC	Yes	Yes
C22, C32	2	CAPACITOR SMD	10UF_1206_16V_X7R	10%	CAP1206	AVX	1206YC106KAT2A	Yes	Yes
C41, C62, C63, C75, C76, C85, C86	7	CAPACITOR SMD	100PF_0805_50V_NP0	5%	CAP0805	PHYCOMP	2238 861 15101	Yes	Yes
C60	1	CAPACITOR SMD	10NF_0603_50V_X7R	10%	CAP0603	EPCOS	B37931K5103K60	Yes	Yes
C77, C87	2	CAPACITOR SMD	12PF_0805_50V_NP0	5%	CAP0805	KEMET	C0805C120J5GAC	Yes	Yes
C77x, C87x	2	CAPACITOR SMD	4.7NF_0805_50V_X7R	10%	CAP0805	PHYCOMP	2238 580 15632	Yes	Yes
CD1E, CD1F	2	CAPACITOR SMD	220NF_0603_25V_X7R	10%	CAP0603	EPCOS	B37931K0224K60	Yes	Yes
CD1T	1	CAPACITOR SMD	10UF/16V TANTAL SMD C		SMC	AVX	TAJC106K016R	Yes	Yes
CD6A, CD6C	2	CAPACITOR SMD	4.7UF/16V TANTAL SMD B		SMB	AVX	TAJB475K016R	Yes	Yes
D1, D78, D88	3	600 Watt Peak Power Zener Bidirectional	1SMB36CA		SMB	ON SEMICONDUCTOR	1SMB36CAT3G	Yes	Yes
D2, D79, D89	3	Standard Recovery Power Rectifier 1A/300V	MRA4003T3		403D-02	ON SEMICONDUCTOR	MRA4003T3	Yes	Yes
D50, D51, D52	3	LED DIODE RED	HSMH-C191		D0603	AVAGO TECHNOLOGIES	HSMH-C191	Yes	Yes
D60, D101, D102, D103, D104, D105, D106, D107, D108	9	LED DIODE GREEN	HSMG-C191		D0603	AVAGO TECHNOLOGIES	HSMG-C191	Yes	Yes
D77, D87	2	DUAL LINE FLEXRAY BUS PROTECTOR	NUP2115L		SOT23	ON SEMICONDUCTOR	NUP2115L1G	Yes	Yes
GND	1	SCOPEGND	SCOPEGND		SCOPEGND				
H40, H41	2	HEADER 0.1" VERT 2 pins TIN plated	HEADER 1X2 LOCK		HEADER MC34631	MULTICOMP	MC34629	Yes	Yes
J1	1	DC POWER SOCKET, 2.1MM, 5A, 12V	POWER CON DC10A		DC10A_CLIFF	CLIFF ELECTRONIC COMP.	DC10A	Yes	Yes
J12, J73, J83	3	HEADER 2 ROWS 5 PINS	HEADER 2X5		X10ABPH	TE CONNECTIVITY	826632-5	Yes	Yes
J11, J63	2	HEADER 2 ROWS 2 PINS	HEADER 2X2		X4ABPH	TE CONNECTIVITY	826632-2	Yes	Yes
J3, J4, J10	3	HEADER 2 ROWS 3 PINS	HEADER 2X3		X6ABPH	TE CONNECTIVITY	826632-3	Yes	Yes
J40	1	HEADER 1 ROW 2 PINS	JUMPER2 TH		X2APH	TE CONNECTIVITY	5-826629-0	Yes	Yes
J52, J53, J54, J75, J85, J87, J89	7	SMD Strap Jumper	JUMPER3_STRAP		STRAP3				
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
L60, L113	2	WIREWOUND INDUCTOR SMD	ELJFA4R7JF		L1210	PANASONIC	ELJFA4R7JF	Yes	Yes
L70, L80	2	CM CHOKE COIL 100uH	B82789C-100UH-N1	30%	EPCOS_B82789-N	EPCOS	B82789C0104N001	Yes	Yes
O1, O2	2	DUAL OPTOCOUPLER, LOGIC GATE	ACPL074L		SOIC8	AVAGO TECHNOLOGIES	ACPL-074L-000E	Yes	Yes
R104, R121, R122	3	RESISTOR ARRAY SMD	10K_1206_0.063W_5%	5%	CRA3A4E	PHYCOMP	235003510103	Yes	Yes
R113	1	RESISTOR SMD	10R_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 10R	Yes	Yes
R123	1	RESISTOR SMD	51K_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 51K	Yes	Yes
R124	1	RESISTOR SMD	3.9K_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 3K9	Yes	Yes
R143, R144	2	RESISTOR ARRAY SMD	470R_1206_0.063W	5%	CRA3A4E	PHYCOMP	235003510471	Yes	Yes
R40, R63	2	RESISTOR SMD	120R_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 120R	Yes	Yes
R41, R62	2	RESISTOR SMD	220R_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 220R	Yes	Yes
R50, R51, R52	3	RESISTOR SMD	1.0K_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 1K	Yes	Yes
R60	1	RESISTOR SMD	820R_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 820R	Yes	Yes
R70, R71, R80, R81	4	RESISTOR SMD	24R_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 24R	Yes	Yes
R70x, R80x, R71x, R81x	4	RESISTOR SMD	47R_1206_0.25W_1%	1%	R1206	WELWYN	WCR1206-47RFI	Yes	Yes
R72, R82	2	RESISTOR SMD	47R_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 47R	Yes	Yes
R77, R78, R79, R87, R88, R89, R90, R103, R108, R111, R112	11	RESISTOR SMD	10K_0805_0.1W_1%	1%	R0805	MULTICOMP	MC 0.1W 0805 1% 10K	Yes	Yes
SW10, SW11	2	SWITCH SPNO SMD	SW-PB_SMD		PB300	TYCO ELECTRONICS	FSM2J5MA	Yes	Yes
SW12	1	SWITCH, HALF-PITCH SMD DIP, 8 way	SWDIP-8-SMD		DIL16_SMD	OMRON	A6H8101	Yes	Yes
TP_VCC, TP_VIO, TP_BP_B, TP_BM_B, TP_BM_A, TP_BP_A, TP_GND, TP_PWM0	8	TEST PIN	TP S200 H1.0 BLACK		TESTPIN2	VERO	20-2137	Yes	Yes
U1	1	16-bit MCU, 2ch FlexRay CC	MC9S12XF512_112LQFP		LQFP112	Freescall SEMICONDUCTOR	MC9S12XF512-112LQFP	No	Yes

U2	1	400 mA Low-Drop Voltage Regulator 3V3	NCV4276DT33		DPAK5	ON SEMICONDUCTOR	NCV4276DT33	Yes	Yes
U3	1	400 mA Low-Drop Voltage Regulator 5V	NCV4276DT50		DPAK5	ON SEMICONDUCTOR	NCV4276DT50	Yes	Yes
U4	1	High Speed Low Power CAN Transceiver	NCV7340D12		SOIC8	ON SEMICONDUCTOR	NCV7340D12G	Yes	Yes
U6	1	USB UART IC	FT232RL_CUSTOM		SSOP28	FTDI	FT232RL	No	Yes
U7, U8	2	Single-channel FlexRay bus driver, SPI	ONSEMI_NCV7383		TSSOP14	ON SEMICONDUCTOR	NCV7383DB0G	No	Yes
X1	1	CRYSTAL 8MHz, SMD	CMAC12SMX-B_8.0MHZ		CMAC_12SMX-B	CMAC	12SMX (B)	Yes	Yes