



Bill of Materials for the NCV7383GEVK

NCV7383GEVK kit includes

Description	Quantity	Value
NCV73830V1GEVB Evaluation Board	2	-
FlexRay Bus Cable	2	2 x D-SUB9 female connectors, 16in length

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, 50V, X7R	10%	0805	Phycomp	2238 580 15645	Yes	Yes
C100, C101	2	Capacitor SMD	22pF, 50V, NP0	5%	0603	KEMET	C0603C220J5GAC	Yes	Yes
C2	1	Capacitor SMD	47uF, 50V, ELKO	20%	Radial	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, 50V, X7R	10%	0603	KEMET	C0603C104K5RAC	Yes	Yes
C22, C32	2	Capacitor SMD	10uF, 16V, X7R	10%	1206	AVX	1206YC106KAT2A	Yes	Yes
C41, C62, C63, C75, C76, C85, C86	7	Capacitor SMD	100pF, 50V, NP0	5%	0805	Phycomp	2238 861 15101	Yes	Yes
C60	1	Capacitor SMD	10nF, 50V, X7R	10%	0603	Epcos	B37931K5103K60	Yes	Yes
C77, C87	2	Capacitor SMD	12pF, 50V, NP0	5%	0805	Kemet	C0805C120J5GAC	Yes	Yes
C77x, C87x	2	Capacitor SMD	4.7nF, 50V, X7R	10%	0805	Phycomp	2238 580 15632	Yes	Yes
CD1E, CD1F	2	Capacitor SMD	220nF, 25V, X7R	10%	0603	Epcos	B37931K0224K60	Yes	Yes
CD1T	1	Capacitor SMD	10uF, 16V	10%	SMC	AVX	TAJC106K016R	Yes	Yes
CD6A, CD6C	2	Capacitor SMD	4.7uF, 16V	10%	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	-	0603	Avago Technologies	HSMH-C191	Yes	Yes
D60, D101, D102, D103, D104, D105, D106, D107, D108	9	LED DIODE GREEN	HSMG-C191	-	0603	Avago Technologies	HSMG-C191	Yes	Yes
D77, D87	2	DUAL LINE FLEXRAY BUS PROTECTOR	NUP2115L	-	SOT23	ON Semiconductor	NUP2115LT1G	Yes	Yes
GND1	1	Ground Bar	-	-	-	Various	-	Yes	Yes
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	Various	2411 02	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
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 ohm, 1206, 0.063W	5%	CRA3A4E	Phycomp	235003510103	Yes	Yes
R113	1	Resistor SMD	10 ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 10R	Yes	Yes
R123	1	Resistor SMD	51K ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 51K	Yes	Yes
R124	1	Resistor SMD	3.9K ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 3K9	Yes	Yes
R143, R144	2	RESISTOR ARRAY SMD	470 ohm, 0.063W	5%	CRA3A4E	Phycomp	235003510471	Yes	Yes
R40, R63	2	Resistor SMD	120 ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 120R	Yes	Yes
R41, R62	2	Resistor SMD	220 ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 220R	Yes	Yes
R50, R51, R52	3	Resistor SMD	1.0K ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 1K	Yes	Yes
R60	1	Resistor SMD	820 ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 820R	Yes	Yes
R70, R71, R80, R81	4	Resistor SMD	24 ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 24R	Yes	Yes
R70x, R80x, R71x, R81x	4	Resistor SMD	47 ohm, 0.25W	1%	1206	Welwyn	WCR1206-47RFI	Yes	Yes
R72, R82	2	Resistor SMD	47 ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 47R	Yes	Yes

R77, R78, R79, R87, R88, R89, R90, R103, R108, R111, R112	11	Resistor SMD	10K ohm, 0.1W	1%	0805	Multicomp	MC 0.1W 0805 1% 10K	Yes	Yes
SW10, SW11	2	SWITCH SPNO SMD	SW-PB_SMD	-	PB300	Tyco Electronics	FSM2JSMA	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	Freescale 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