

Bill of Materials for the NCV7471B5V1GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
Cin_Cmid	2	Capacitor SMD	1uF, 50V, X7R	10%	1206	KEMET	C1206C105K5RAC	Yes	Yes
Cmid'	1	not assembled	-	-	-	-	-	-	-
Cin_buff	1	Aluminum Capacitor SMD	100uF, 50V	20%	8x6MM	PANASONIC	EEEF1H101AP	Yes	Yes
Cmid_buff	1	Aluminum Capacitor SMD	10uF, 50V	20%	6x6MM	NICHICON	UUD1H100MCL1GS	Yes	Yes
Cout	1	Capacitor SMD	10uF, 10V, X7R	10%	1206	KEMET	C1206C106K8RAC	Yes	Yes
Cin2	1	Capacitor SMD	100nF, 50V, X7R	10%	0603	KEMET	C0603C104K5RAC	Yes	Yes
Cout2	1	Capacitor SMD	2.2uF, 50V, X7R	10%	1206	KEMET	C1206C225K5RAC	Yes	Yes
Rmid'	1	Resistor SMD	0.0R	-	0805	WELVYN	WCR0805-R005JI	Yes	Yes
Lboost	1	Wirewound Inductor	22uH, 2.13A	20%	7.6x7.6MM	COILTRONICS	DR74-220-R	Yes	Yes
Lbuck	1	Wirewound Inductor	10uH, 500mA	10%	1210	EPCOS	B82422H1103K	Yes	Yes
Dboost, Dbuck, Drev	3	Schottky Power Rectifier 2A/40V	MBRS2040L	-	SMB	ON Semiconductor	MBRS2040LT3G	Yes	Yes
C_WU	1	Capacitor SMD	10nF, 50V, X7R	10%	0603	EPCOS	B37931K5103K60	Yes	Yes
R_WU	1	Resistor SMD	33k	5%	0603	PHYCOMP	232270260333	Yes	Yes
SW_WU	1	SWITCH SPNO 4.5x4.5mm	SW-PB_SMD_4.5X4.5MM	-	4.5X4.5MM	BOURNS	7914J-001-000	Yes	Yes
R_CFG, R_SWDM, R_Wupu	3	Resistor SMD	10k	5%	0603	PHYCOMP	232270260103	Yes	Yes
C_CAN	1	Capacitor SMD	4.7nF, 50V, X7R	10%	0603	EPCOS	B37931K5472K60	Yes	Yes
L_CAN	1	CAN bus common-mode choke	100uH	30%	1812	EPCOS	B82789C104N2	Yes	Yes
R_CANH, R_CANL	2	Resistor SMD	62R	2%	1206	WELWYN	WCR1206-62RFI	Yes	Yes
C_LIN1, C_LIN2	2	Capacitor SMD	1.0nF, 50V, X7R	10%	0603	EPCOS	B37931K5102K60	Yes	Yes
D_LIN1, D_LIN2	2	Standard Recovery Power Rectifier 1A/300V	MRA4003T3	-	SMA	ON Semiconductor	MRA4003T3G	Yes	Yes
R_LIN1, R_LIN2	2	Resistor SMD	1.0k	2%	1206	WELWYN	WCR1206-1K0FI	Yes	Yes
R_INTN, R_RSTN, R_UVN	3	Resistor SMD	470R	2%	0603	YAGEO	RC0603JR-07470RL	Yes	Yes
R_FSO	1	Resistor SMD	4.7k	1%	0805	MULTICOMP	MC01W080514K7	Yes	Yes
LED_FSO, LED_INTN, LED_RSTN, LED_UVN	4	LED DIODE RED 25mA	HSMH-C191	-	0603	AVAGO TECHNOLOGIES	HSMH-C191	Yes	Yes
U1	1	System Basic Chip with a HS CAN, 2x LINs and Boost-Buck Converter	NCV7471B	-	SSOP36_EP	ON Semiconductor	NCV7471BDQ5R2G	No	Yes
H1	1	SIL HEADER 24 pins, Right Angle	HEADER 1X24 ANGLE	-	X24APH	MOLEX	90121-0784	Yes	Yes
GND	1	Wire bridge	SCOPEGND	-	SCOPEGND	HARWIN	D3082F05	Yes	Yes
CFG, SWDM, VS_VOUT2	3	Soldering Strap	JUMPER3_STRAP_S HORT	-	STRAP3	-	-	-	-
BOOST, BUCK	2	Testpin 200 SER. HOLE 1.0	TP S200 H1.0 BLACK	-	TESTPIN2	VERO	20-2137	Yes	Yes
CANH, CANL, CSN, FSO, INTN, LIN1, LIN2, RSTN, RDC, RxDL1, RxDL2, SCK, SDI, SDO, TXDC, TxDL1, TxDL2, UVN, VOUT, VOUT2, Vbat, VMID, WU	23	Testpin 200 SER. HOLE 1.0	TP S200 H1.0 BLACK	-	TESTPIN2	VERO	20-2137	Yes	Yes