



Bill of Materials for the NCV7535VMFD5C466GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C41, C42, Cbat, Cd2a, Cd3, Cd4a, Cd4b, Cd4f, Cd4g, Cp1, Cp2, Cpot1, Cs, Cs2, Cvccc	14	Ceramic Capacitor SMD	100NF, 50V, X7R	10%	CAP0603	KEMET	C0603C104K5RAC	Yes	Yes
C44, C45	2	Ceramic Capacitor SMD	12PF, 50V, NP0	5%	CAP0603	KEMET	C0603C120J5GAC	Yes	Yes
Cd2b	1	Ceramic Capacitor SMD	10UF, 16V, X7R	10%	CAP1206	AVX	1206YC106KAT2A	Yes	Yes
Cd4c, Cd4d, Cd4e, Cusb, Cusb2	5	Ceramic Capacitor SMD	2.2UF, 10V, X7R	10%	CAP0603	MURATA	GRM188R71A225KE15D	Yes	Yes
Cbuf1, Cbuf2	2	Aluminum Capacitor SMD	220UF, 50V	-	10x10mm	PANASONIC	EEEFK1H221P	Yes	Yes
Rbleed	1	Resistor SMD	100K	5%	R0603	PHYCOMP	232270260104	Yes	Yes
R41, Rvhd	2	Resistor SMD	10R	1%	R0603	YAGEO	RC0603FR-0710RL	Yes	Yes
R35, R51, R52, Rd3	4	Resistor SMD	39K	1%	R0603	YAGEO (PHYCOMP)	RC0603FR-0739KL	Yes	Yes
R42, R44, R45, R53, Rcp, Rfd, Rpot1	7	Resistor SMD	10K	5%	R0603	PHYCOMP	232270260103	Yes	Yes
Rgh1, Rgh2, Rgl1, Rgl2, Rs	5	Resistor SMD	0.0R	-	R0603	YAGEO	RC0603JR-070RL	Yes	Yes
Rsen	1	Power Resistor SMD	0.002R, 2W	1%	R2512	WELWYN	LRMAT2512-R002FT4	Yes	Yes
Rd1, Rd2	2	Resistor Array SMD	100R	5%	CRA3A4E	PHYCOMP	235003510101	Yes	Yes
R43	1	Resistor Array SMD	1K	5%	CRA3A4E	YAGEO	YC164-JR-071KL	Yes	Yes
Pot1	1	Potentiometer + Knob	10K	-	3310Y	BOURNS + ELMA	3310Y-001-103L + 021-1220	Yes	Yes
Lusb	1	Ferrite bead	0.25R, 500mA	-	0805	TAIYO YUDEN	BK2125HM601-T	Yes	Yes
U1	1	SPI controlled H-bridge and Dual-Half Bridge pre-driver	NCV7535	-	TSSOP20	ON SEMICONDUCTOR	NCV7535DBR2G	No	Yes
U2	1	Low-Drop Voltage Regulator	5.0 V, 100 mA Low Iq	2%	TSOP5	ON SEMICONDUCTOR	NCV4264-2ST50T3G	No	Yes
U3	1	Current Sense Amplifier, gain 50	NCS199A1SQ	-	SC70-6	ON SEMICONDUCTOR	NCS199A1SOT2G	No	Yes
U4	1	MCU, 32bit, AVR32, 66MHz	AT32UC3C2512C	-	QFN64	ATMEL	AT32UC3C2512C-Z2URCT-ND	No	Yes

Dfd	1	Switching Diode SMD	200mA/100V	-	SOD123	ON SEMICONDUCTOR	MMSD4148T1G	Yes	Yes
ZD	1	Zener Diode	15V, 300mW, 20mA	-	SOD323	ON SEMICONDUCTOR	MM3Z15VT1G	Yes	Yes
ESD_USB	1	ESD protection	USB Bus Protection Array	-	SC70-6	ON SEMICONDUCTOR	NUP2114UCMR6T1G	No	Yes
Qrev	1	Power MOSFET	60V, 71A, 6.1mR, Single N-Channel	-	S08-FL	ON SEMICONDUCTOR	NVMF55C670NLT3G	No	Yes
QH, QL	4	Power MOSFET	40V, 46A, 8.1mR, Dual N-Channel	-	Dual S08-FL	ON SEMICONDUCTOR	NVMFD5C466NT1G	No	Yes
Qfd	1	Transistor NPN	45V, 100mA	-	SOT23-5	ON SEMICONDUCTOR	BC847BLT1G	Yes	Yes
LED1, LED2	2	LED SMD	Green	-	0603	AVAGO TECHNOLOGIES	HSMG-C191	Yes	Yes
LED3, LED4	2	LED SMD	Red	-	0603	AVAGO TECHNOLOGIES	HSMS-C191	Yes	Yes
Xtal	1	CRYSTAL SMD	20.000MHZ/12PF	30 ppm	3.2X2.5MM	QUANTEK	QC3220.0000F12B12M	Yes	Yes
FT1, FT2, FT3, FT4	4	Rubber feet	SUPPORT FEET	-	12x12mm	3M	SJ5018BLACK	Yes	Yes
SW_RST	1	Switch	SPNO 4.5x4.5mm	-	SW-PB_SMD_4.5X4.5MM	BOURNS	7914G-001-000	Yes	Yes
SW1, SW2, SW3, SW4	4	Slide Switch	SPDT VERT	-	X3APH-SLIDER	EAO	09-03290-01	Yes	Yes
GND1, GND2	2	SCOPEGND	LINK, SHORTING, 0.4"	-	SCOPEGND	HARWIN	D3082F05	Yes	Yes
SC_GND, SC_OUT1, SC_OUT2, SC_Vbat	4	Power connector	BUSHING M4, 2ROW, 8PIN	-	WURTH_7460307	WURTH ELEKTRONIK	7460307	Yes	Yes
IO	1	SIL Header	12 pins, 2.54mm pitch, right angle	-	X12APH ANGLE	Molex	90121-0772	Yes	Yes
JTAG	1	DIL Header	10 pins, 1.27mm pitch	-	SHF-105-01-L-D-TH	SHF-105-01-L-D-TH	SAMTEC	Yes	Yes
USB	1	Micro USB Type B	Surface Mount Right Angle, Receptacle	-	Micro_USB_SMD	MOLEX	47346-0001	Yes	Yes
TP_CHP, TP_GH1, TP_GH2, TP_GL1, TP_GL2, TP_OUT1, TP_OUT2, TP_Rsen, TP_Vbat, TP_VS	10	Testpin 200 SER. HOLE 1.0	TP S200 H1.0 BLACK	-	TESTPIN2	20-2137	VERO	Yes	Yes