



Bill of Materials for the NB3X611XG8DFNEVK Evaluation Board

Main Board									
Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C2,C3	2	RES SMD 0.0 OHM JUMPER 1/10W	0 OHM 1/16 W	-	R0402	Vishay Dale	CRCW0402000020ED	Yes	Yes
C8,C11,C41,C55	4	CAP CER 22UF 4V 20% X5R 0603	22 uF	20%	C0603	Taiyo Yuden	AMK107B226MA-T	Yes	Yes
C9,C20,C24,C29,C30,C32,C56,C50	8	CAP CER 0.1UF 10V 10% X5R 0402	0.1 uF	10%	C0402	Taiyo Yuden	LMK105B104KV-F	Yes	Yes
C10,C21,C33,C28,C31,C34,C54	7	CAP CER 1000PF 20V 10% X7R 0402	0.01 uF	10%	C0402	Murata	GRM155R71103KA010	Yes	Yes
C11,C15,C19,C26,C27,C37,C44,C45,C46,C48,C49,C50,C52,C57	14	CAP CER 0.1UF 10V 10% X5R 0402	0.1 uF	10%	AVX	Murata	040203047A	Yes	Yes
C12,C16,C18,C58	4	CAP CER 1UF 10V 20% X5R 0402	1 uF	20%	C0402	Murata	GRM155R61A105ME1SD	Yes	Yes
C13,C14,C17,C59	4	CAP CER 4.7UF 6.3V 20% X5R 0402	4.7 uF	20%	C0402	Murata	GRM155R60475ME87D	Yes	Yes
C22,C26,C27	3	CAP CER 2.2UF 4V 20% X5R 0402	2.2 uF	20%	C0402	Murata	GRM155R62225ME1SD	Yes	Yes
C35,C38	2	CAP CER 1000PF 10V 10% X7R 0402	10 uF	10%	C0402	AVX	0402Y103KAT2A	Yes	Yes
C39,C42,C47	3	CAP CER 4.7UF 6.3V 20% X5R 0402	4.7 uF	20%	C0402	Murata	GRM155R60475ME87D	Yes	Yes
D1	1	LED AMBER HIGH BRIGHT 1SS 0603	LED_amber	-	LED_0603	Panasonic	LM4148Z8A	Yes	Yes
D2,D4,D5,D6,D7,D8	6	LED SMART LED 570NM GREEN 0603	LED_green	-	LED_0603	OSRAM Opto Semiconductors Inc	LG L29K-F12-24-2	Yes	Yes
D3	1			-	SOT-143	ON Semiconductor	PACDN04SR	No	Yes
D9	1	LED CHIP LED BLUE 470NM 0603 SMD	LED_Blue	-	LED_0603	OSRAM Opto Semiconductors Inc	LB Q39G-L292-35-1	Yes	Yes
FB1,FB2,FB4,FB12	4	FERRITE CHIP 600 OHM 500MA 0402	600 OHM	-	L0402	Murata	BUM154G050N10	Yes	Yes
FB3,FB5,FB6,FB7,FB8,FB10,FB11,FB13	8	FERRITE HEAD 25 OHM 0605	25 OHM	-	L0605	Taiyo Yuden	FBM2125H550NT	Yes	Yes
GND1,GND2,GND3,GND4,GND5,GND6	6	NA	NA	-	TP_30_30	NA	NA	Yes	Yes
H1,H2,H3,H4,H5	5	NA	NA	-	MH_240_128	NA	NA	Yes	Yes
J2,J17,J19,J24,J25,J26,J27,J28,J29,J30,J32	11	CONN HEADER VERT SGL 1POS GOLD	129 Hole in 240 Round Pad	-	berg_1x3_2p54	Sullins Connector Solutions	961103-6404-AR	Yes	Yes
J7,J9,J13,J14	4	CONN SMA JACK 50 OHM EDGE MNT	50 OHM	-	con_sma_edge	Samtec Inc	SMAA-P-H-ST-EM1	Yes	Yes
RJ12,J13,J21	4	Connector Header 4 Position 0.100" (2.54mm) Gold Through Hole	-	-	berg_1x4_2p54	Sullins Connector Solutions	PPPC041F8N-RC	Yes	Yes
J16,J13,J14,J15	4	CONN JPOS 2MM HEADER BL STR SMD	-	-	berg_1x2_2p54	3M	35120W-2320-RB	Yes	Yes
J22	1	Connector Plug USB Type-A 2.0 4 Position Through Hole, Right Angle, Horizontal	-	-	USB_A_PLUG_RA	Molex	480970001	Yes	Yes
LED_RED1	1	LED RED TSSOP TYPE 0603	LED_Green	-	LED_0603	Panasonic	LM4128R2BA	Yes	Yes
LED2	1	LED RED LED DUAL 570NM RED 1010	LED_White	-	LED_SMD_20X20	Rohm Semiconductor	SML5122AM1W786	Yes	Yes
L1	1	FERRITE CHIP 600 OHM 1300MA 0603	600 OHM	-	L0402	Murata	BUM18K600S1N10	Yes	Yes
M1,M2,M3	3	MOSFET P-CH 8V 1.4A SOT-232	8V 1.4A	-	sot-232	ON Semiconductor	NT52103PT1G	No	Yes
Q1	1	TRANS NPN 40V 15A SOT-23	40V 0.6A	-	sot_23	ON Semiconductor	MM612607AL1G	No	Yes
Q6,Q7	2	TRANS NPN 40V 15A SOT-23	40V 0.5A	-	sot-23	ON Semiconductor	5C0020H1-E	No	Yes
Q9	1	MOSFET P-CH 20V 2.3A 6-WDFN	20V 2.3A	-	6-WDFN(2X2)	ON Semiconductor	NTUD3151PT1G	No	Yes
Q11,Q12,Q13,Q14,Q15,Q16,Q17,Q18	8	MOSFET N-CH 20V 914MA SOT-416	20V 915mA	-	sot-416	ON Semiconductor	NT44153NT1G	No	Yes
R1,R3,R20,R21,R35,R40,R49,R62	8	RES SMD 80 OHM 1% 1/10W 0402	80 OHM	1%	R0402	Panasonic	ERJ-29K489RX	Yes	Yes
R3,R25	2	RES SMD 124 OHM 1% 1/10W 0402	124 OHM	1%	R0402	Panasonic	ERJ-29K1240X	Yes	Yes
R,R10	2	RES SMD 85 OHM 1% 1/10W 0402	84.3 OHM	1%	R0402	Panasonic	ERJ-29K8485X	Yes	Yes
R5,R10,R11,R14,R15,R16,R24,R25,R26,R27,R34,R35,R36,R37,R38,R39,R40,R41,R42,R43,R44,R45,R46,R47,R48,R49,R50,R51,R52,R53,R54,R55,R56,R57,R58,R59,R60,R61,R62,R63,R64,R65,R66,R67,R68,R69,R70,R71,R72,R74,R76,R78,R79,R80,R81,R89,R136,R150	47	RES SMD 0 OHM JUMPER 1/10W	-	-	R0402	Vishay Dale	CRCW0402000020ED	Yes	Yes
R2,R8,R53	3	RES SMD 0 OHM JUMPER 1/10W	-	-	R0402	Vishay Dale	CRCW0402000020ED	Yes	Yes
R16,R17,R19	3	RES SMD 0 OHM JUMPER 1/10W	-	-	R0402	Vishay Dale	CRCW0402000020ED	Yes	Yes
R22,R41,R54,R55,R56,R58,R61,R65,R67,R68,R69,R70,R71,R72,R74,R76,R78,R79,R80,R81,R89,R136,R150	23	RES SMD 10K OHM 5% 1/10W 0402	10K OHM	5%	R0402	Panasonic	ERJ-2GE103X	Yes	Yes
R23,R62	2	RES SMD 2.2K OHM 5% 1/10W 0402	2.2K OHM	5%	R0402	Panasonic	ERJ-2GE122X	Yes	Yes
R31,R77	2	RES SMD 8K OHM 1% 1/10W 0603	82 OHM	1%	R0603	Vishay Dale	CRCW06038280FKEA	Yes	Yes
R37,R50	2	RES SMD 10K OHM 5% 1/10W 0402	50K OHM	5%	R0402	Panasonic	ERJ-2GE103X	Yes	Yes
R38	1	RES SMD 10K OHM 5% 1/10W 0402	12K OHM	5%	R0402	Panasonic	ERJ-29K120X	Yes	Yes
R56,R59,R60,R63,R105,R127,R128,R129,R130,R131,R132,R133,R134,R135	13	RES SMD 10K OHM 5% 1/10W 0402	10K OHM	5%	R0402	Panasonic	ERJ-2GE102X	Yes	Yes
R73	1	RES SMD 1.5K OHM 5% 1/10W 0402	1.5K OHM	5%	R0402	Panasonic	ERJ-2GE152X	Yes	Yes
R17,R138	2	RES SMD 22K OHM 5% 1/10W 0402	22K OHM	5%	R0402	Panasonic	ERJ-2GE122X	Yes	Yes
R148	1	RES SMD 33K OHM 5% 1/10W 0402	3.2K OHM	5%	R0402	Panasonic	ERJ-2GE822X	Yes	Yes
R139	1	RES SMD 47K OHM 5% 1/10W 0402	47K OHM	5%	R0402	Panasonic	ERJ-2GE473X	Yes	Yes
R144,R145	2	RES SMD 33K OHM 5% 1/10W 0402	33K OHM	5%	R0402	Panasonic	ERJ-2GE133X	Yes	Yes
R146	1	RES SMD 3.3K OHM 5% 1/10W 0402	3.3K OHM	5%	R0402	Panasonic	ERJ-2GE133X	Yes	Yes
SW1,SW2	2	SWITCH DIP TAPER SEALED 1POS 2AV	2AV	-	-	CAK Components	SD0401H18SD	Yes	Yes
TP1,TP2,TP5,TP6,TP7,TP8,TP9,TP20,TP28	9	NA	Test Pad 50 x 100 mil	-	NA	NA	NA	Yes	Yes
TP3,TP4,TP11,TP14,TP17,TP18,TP21,TP22,TP23,TP24,TP25,TP26,TP27	14	CONN HEADER 1 POS 2.54	Test Pad 30 x 60 mil	-	TP_30_36	Würth Electronics Inc	61300111121	Yes	Yes
U1,U2	2	IC MUX QUAD 3.3V HS 16-OSQP	Standoff, 30 x 60 mil	-	OSQP_16P_25ML	Analog Devices	ADG3257BRQZ	Yes	Yes
U3	1	DNP	DNP	-	DNP	DNP	DNP	Yes	Yes
U4	1	IC 16B HD DUAL UART FIFO 14-08N	DNP	-	DNP	DNP	DNP	Yes	Yes
U5	1	IC EEPROM 2KBIT 2MHZ 8SSOP	-	-	-	Micron	49164-0945	Yes	Yes
U6,U9	2	IC REG LDO 3.3V 0.15A SOT23-5	3.3V	-	tsop_8_4p4w_0p65	ON Semiconductor	CAT93C59H-GT3	No	Yes
U7	1	IC REG LDO 1.8V 0.15A SOT23-5	1.8V	-	sot23-5	ON Semiconductor	MCP6888SN18T1G	No	Yes
U11,U12,U13,U14	4	SW ROTARY DIP SPST SIDE KNOB 5V	2.5V	-	sot23-5	ON Semiconductor	MCP6888SN20T1G	No	Yes
U15,U16	2	SWITCH ROTARY DIP SPST POP 5V	-	-	-	Copal Electronics	S-2151	Yes	Yes
U17	1	IC COMPARETOR DUAL LV 4W5N	-	-	-	Copal Electronics	SS-10-155P-LE	Yes	Yes
VTT1,VDD0,EXT1,VDD,EXT	3	CONN HEADER 1 POS 2.54	T POINT R	-	8_u08n_0p84	ON Semiconductor	NCS222AM01T1G	No	Yes
Y1	0	DNP	DNP	-	TP_70_36	Würth Electronics Inc	61300111121	Yes	Yes
Y3	1	Crystal 12.000MHz 30ppm 10pF 120 Ohm -10C - 60C Surface Mount 6SMD, No Lead (DIPN, LCC)	12 MHz	-	CRY-ABMG	Abracon Corp	ABMG-12.000MHZ-4V-T3	Yes	Yes
H1,H2,H3,H4,H5(Mechanical)	5	HEX STANDOFF 4-40 ALUMINUM 5x8"	Standoff, 4-40 1/4 x 5/8	-	Standoff, 4-40 1/4 x 5/8	Keystone	1808	Yes	Yes
To be used with these connectors J24,J25,J26,J27,J28,J19 and as a spare.	11	SHUNT JUMPER J-BLACK GOLD	Shunt	-	Shunt	3M	969102-0000-DA	Yes	Yes
H1,H2,H3,H4,H5(Mechanical)	5	MACHINE SCREW PAN PHILIPS 4-40	Screw, 4-40 x 0.25, PHP	-	Screw, 4-40 x 0.25, PHP	Building Fasteners	PMS 440-0225 PH	Yes	Yes
VTT1,VDD0,EXT1,VDD,EXT	3	CONN HEADER 1 POS 2.54	TP_70_36	-	TP_70_36	Würth Electronics Inc	61300111121	Yes	Yes
To be used with these switches U11,U12,U13,U14,U15,U16	6	SWTCH KNOB BLACK	-	-	-	Copal Electronics	K1	Yes	Yes

Daughter Card									
Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C9,C11,C13	3	CAP CER 4.7UF 20V X5R 0605	4.7 uF	5%	C0605	Taiyo Yuden	TMK2128475AG-T	Yes	Yes
C23,C25	2	RES SMD 0 OHM JUMPER 1/10W 0603	0 OHM 1/10 W	-	R0603	Vishay Dale	CRCW0603000020EA	Yes	Yes
C10,C12,C14	3	CAP CER 10UF 6.3V 20% X5R 0603	10 uF	20%	C0603	Taiyo Yuden	JMK107AB106MAH-T	Yes	Yes
VDD0,VDD,GND	3	CONN HEADER 1 POS 2.54	Test Pad 30 x 60 mil	-	TP_30_36	Würth Electronics Inc	61300111121	Yes	Yes
J8,J9,J10,J11	4	CONN HEADER 10P SMT 5POS	CONN RCPT 4	-	CONN RCPT 4	Sullins Connector Solutions	BERG_1X4_2P54	Yes	Yes
J12,J13,J14,J26,J27,J29,J19	7	CONN HEADER VERT SGL 1POS GOLD	Header 3pin	-	BERG_1X3_2P54	Sullins Connector Solutions	BERG_1X3_2P54	Yes	Yes
J18	1	CONN SMA JACK 50 OHM EDGE MNT	CONSMAD01-SMD-G-ND	-	con_sma_edge	Samtec Inc	SMAA-P-H-ST-EM1	Yes	Yes
J15,J16,J17	3	CONN SMA JACK STR 50OHM SMD	50OHM SMD	-	Con_SMA_SMD	Linx Technologies Inc	CONSMAD01-SMD-G	Yes	Yes
L6	1	FERRITE HEAD 25 OHM 0605	25 OHM	-	L0605	Taiyo Yuden	FBM2125H550NT	Yes	Yes
R56,R61,R62,R65,R68,R67	6	RES SMD 0 OHM JUMPER 1/10W	0 OHM 1/16 W	-	R0402	Panasonic	CRCW0402000020ED	Yes	Yes
TP2	1	SWITCH	TEST POINT	-	TEST POINT	CAK Components	SD0401H18SD	Yes	Yes
TP3	1	CONN HEADER 1 POS 2.54	Socket	-	TP_70_36	Würth Electronics Inc	61300111121	Yes	Yes
Y2	1	SW44	SOCK BL DFN	-	SOCK BL DFN	Loranger	03722 091 6218A	Yes	Yes
Y3	1	SMT XTRL 25MHz	SMT XTRL 25MHz	-	SOCK BL DFN	ECUITEK	ECK-6150-25.000M	Yes	Yes
Y3 (to be used for through hole crystal)	2	ED1290-ND	SMT CONTACT	-	SMT CONTACT	Mouser	8273C-15-15-21-27-1840	Yes	Yes