



Bill of Materials for the NCN51205GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
CON1	1	Bus Coupler	-	-	-	Wago	243-211	No	Yes
C1,C2	2	Capacitor	10pF, 6.3V	+/-5%	0402	TDK	C1005COG1H100D	Yes	Yes
C3,C4,C7	3	Capacitor	100nF, 6.3V	+/-20%	0402	TDK	C1005X5R0J104M	Yes	Yes
C5	1	Capacitor	47nF, 50V	+/-20%	0603	TDK	C1608X5R1H473M	Yes	Yes
C6	1	Capacitor	4.7nF, 50V	+/-10%	0402	TDK	C1005X5R1H472K	Yes	Yes
C8	1	Capacitor	100uF, 35V	+/-20%	8 x 10	Epcos	B41145A7107M000	Yes	Yes
C9	1	Capacitor	1uF, 35V	+/-10%	0603	TDK	C1608X5R1H105K	Yes	Yes
C10	1	Capacitor	10pF, 6.3V	+/-5%	0402	TDK	C1005COG1H100D	Yes	Yes
C11	1	Capacitor	10uF, 25V	+/-20%	0805	TDK	C2012X5R1E106M	Yes	Yes
C12	1	Capacitor	10uF, 6.3V	+/-20%	0603	TDK	C1608X5R0J106M	Yes	Yes
C13	4	Capacitor	1uF, 50V	+/-20%	0603	TDK	C1608X5R1H105M	Yes	Yes
C14	1	Capacitor	2.2nF, 6.3V	+/-10%	0402	TDK	C1005X5R1H222K	Yes	Yes
C15,C16	2	Capacitor	1uF, 6.3V	+/-20%	0402	TDK	C1005X5R0J105M	Yes	Yes
C17	1	Capacitor	12pF, 6.3V	+/-5%	0402	TDK	C1005COG1H120J	Yes	Yes
D1	1	Diode	1A, 60V	-	SMA	ON Semiconductor	SS16T3G	No	Yes
D2	1	Diode	-	-	SMA	ON Semiconductor	1SMA40AT3G	No	Yes
D3,D13	2	Diode	0.5A, 20V	-	SOD-523	ON Semiconductor	NSR0520V2T1G	No	Yes
D4,D9,D10,D11,D12	5	Diode	-	-	SOD-123FL	ON Semiconductor	SMF5.0AT1G	No	Yes
D5,D6,D7,D8	4	Diode	-	-	SOD-523	ON Semiconductor	ESD5Z3.3T1G	No	Yes
J1	1	Jumper	-	-	5.75mm pitch	JST	RT-01T-1.0B(LF)	Yes	Yes
J2	4	Jumper	-	-	2mm pitch	Würth Elektronik	620 008 211 21	Yes	Yes
J3	1	Jumper	-	-	2mm pitch	Würth Elektronik	620 016 211 21	Yes	Yes
J4	1	Jumper	-	-	2mm pitch	Würth Elektronik	620 008 211 21	Yes	Yes
J5,J6,J7,J8	4	Jumper	-	-	2mm pitch	Würth Elektronik	620 002 111 21	Yes	Yes
L1,L2	2	Inductor	220uH	+/-10%	5.8mm Diameter	Coils Electronic	DA54NP-221K	Yes	Yes
LED1,LED2,LED3	3	LED	-	-	1.6 x 0.8	Avago Technologies	HSMG-C190	Yes	Yes
Q1,Q2,Q3,Q4	4	Small Signal MOSFET	115mA, 60V	-	SOT-23	ON Semiconductor	2N7002L	No	Yes
R1	1	Resistor	-	-	10.16mm pitch	Harwin	D3082F05	Yes	Yes
R4	1	Resistor	22R, 1W	+/-10%	1218	Yageo	RC1218JK-xx22RL	Yes	Yes
R5	1	Resistor	0R, 0.0625W	NA	0402	Yageo	RC0402JR-xx0RL	Yes	Yes
R6	1	Resistor	33k, 0.0625W	+/-5%	0402	Yageo	RC0402JR-xx33KL	Yes	Yes
R7,R8	2	Resistor	1R, 0.0625W	+/-5%	0402	Yageo	RC0402JR-xx1RL	Yes	Yes
R9	1	Resistor	180k, 0.0625W	+/-5%	0402	Yageo	RC0402JR-xx180KL	Yes	Yes
R11	1	Resistor	47k, 0.0625W	+/-5%	0402	Yageo	RC0402JR-xx47KL	Yes	Yes
R12,R17,R22,R25	0	DNP	0R, 0.0625W	NA	0402	DNP	DNP	Yes	Yes
R13	1	Resistor	0R, 0.0625W	NA	0402	Yageo	RC0402JR-xx0RL	Yes	Yes
R15,R18,R23,R26	4	Resistor	1k, 0.0625W	+/-5%	0402	Yageo	RC0402JR-xx1KL	Yes	Yes
R16,R19,R24,R27	4	Resistor	1MEG, 0.0625W	+/-5%	0402	Yageo	RC0402JR-xx1ML	Yes	Yes
R20, R28, R29	3	Resistor	1k, 0.0625W	+/-5%	0402	Yageo	RC0402JR-xx1KL	Yes	Yes
R21	1	Resistor	100k, 0.0625W	+/-5%	0402	Yageo	RC0402JR-xx100KL	Yes	Yes
SW1	1	Switch	-	-	3.5mm x 4.0mm	Multicomp	MCIPTG33K-V	Yes	Yes
TP1 ... TP19	19	Test Point	-	-	1.02mm	Vero	20-2137	Yes	Yes
U1	1	Transceiver	-	-	QFN-40	ON Semiconductor	NCN5120	No	Yes
U2	1	-	-	-	VQFN-40	Texas Instruments	MSP430F2370IRHax	Yes	Yes
Y1	1	-	-	-	3.2 x 2.5	Epson Toyocom	FA-238, 16MHz, 50ppm, 10pF	Yes	Yes