



Bill of Materials for the STR-NCS36510-ZB-EH-1-GEVK Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
NCS36510-ZB-EH-SWITCH-GEVB_BOM									
C1	1	Tantalum capacitor 33µF 10V ± 20% Vishay	33 uF			Vishay	T55T336M010C0070	Yes	Yes
C2, C3	2	MLC capacitor 1µF 25V X7R 10% Murata	1 µF			Murata	GRM188R71E105KA12D	Yes	Yes
C4	1	MLC capacitor 220nF 16V X7R 10% Murata	220 nF			Murata	GRM155R71C224KA12D	Yes	Yes
CON1, CON3	2	Header 1x2 pins PTH 2.54mm pitch Gold Würth Elektronik	613 002 111 21			Würth Elektronik	61300211121	Yes	Yes
CON2	1	SMD vertical male header 2x5pins 1.27mm Samtec	FTSH-105-01-F-DV-K			Samtec	FTSH-105-01-F-DV-K	Yes	Yes
D1	1	Full bridge Schottky diode 30 V 1 Amp UDFN4 ON Semiconductor	NSR1030QMUTWG		UDFN4	ON Semiconductor	NSR1030QMUTWG	No	Yes
D2	1	Zener diode 6.2V 300 mW SOD323 ON Semiconductor	MM3Z6V2ST1G		SOD323	ON Semiconductor	MM3Z6V2ST1G	No	Yes
D3	1	1.6x0.8x0.95mm SMD red LED Kingbright	APTD1608LSECK/J3-PF		SOD323	Kingbright	APTD1608LSECK/J3-PF	Yes	Yes
PB1	1	Energy harvesting generator/switch 15V ZF Electronics	AFIG-0007			ZF Electronics	AFIG-0007	Yes	Yes
PB2	1	SMD pushbutton top actuated 6x6x3mm Würth Elektronik	430 773 034 825			Würth Elektronik	430773034825	Yes	Yes
R1	1	SMD thick film resistor 0R 0603 100 mW, AEC-Q200, Panasonic	0R		0603	Panasonic	ERJ-3GEY0R00V	Yes	Yes
R3	1	SMD thick film resistor 20k 0402 1% 100 mW Panasonic	20k		0402	Panasonic	ERJ2RKF2002X	Yes	Yes
R4, R6	2	SMD thick film resistor 100k 0402 1% 100 mW Panasonic	100k		0402	Panasonic	ERJ2RKF1003X	Yes	Yes
R5	1	SMD thick film resistor 1k 0402 1% 100 mW Panasonic	1k		0402	Panasonic	ERJ2RKF1001X	Yes	Yes
R7	1	SMD thick film resistor 100R 0402 1% 100 mW Panasonic	100		0402	Panasonic	ERJ2RKF1000X	Yes	Yes
U1	1	Ultra-Low Iq 3.3V/150mA CMOS LDO Regulator ON Semiconductor	NCP170BXV330T2G			ON Semiconductor	NCP170BXV330T2G	No	Yes
U2	1	Low Power System-on-Chip For 2.4 GHz IEEE 802.15.4-2006 Applications, module version (including SMD antenna)	NCS36510 Lakota module			ON Semiconductor	NCAT00LKT002G4	No	Yes
NCS36510-ZB-USB-GEVB_BOM									
C1	1	MLC capacitor 220nF 16V X7R 10% Murata	220 nF			Murata	GRM155R71C224KA12D	Yes	Yes
C2	1	MLC capacitor 0.1µF 16V X7R 10% Würth Electronics	100 nF			Würth Electronics	8.85012E+11	Yes	Yes
C3	1	MLC capacitor 100nF 6.3V X7R 10% Murata	100 nF			Murata	GRM188R70J104KA01D	Yes	Yes
C4	1	MLC capacitor 10µF 6.3V X5R 20% Murata	10 µF			Murata	GRM185R60J106ME15D	Yes	Yes
C5, C6	2	MLC capacitor 1µF 25V X7R 10% Murata	1 µF			Murata	GRM188R71E105KA12D	Yes	Yes
CON1	1	SMD vertical male header 2x5pins 1.27mm Samtec	FTSH-105-01-F-DV-K			Samtec	FTSH-105-01-F-DV-K	Yes	Yes
CON2	1	WR-PHD 1.27 mm Angled Dual Socket Header 2x3 pins	621 306 210 21			Würth Elektronik	62130621021	Yes	Yes
CON3	1	pads for USB A male	USB male pads			custom	USB male pads	Yes	Yes
D1	1	RGB Led WE 150141M173100	150141M173100			Würth Elektronik	150141M173100	Yes	Yes
D2	1	1.6x0.8x0.95mm SMD red LED Kingbright	APTD1608LSECK/J3-PF			Kingbright	APTD1608LSECK/J3-PF	Yes	Yes
D3	1	1.6x0.8x0.65mm SMD green LED Kingbright	APHD1608LCGCK			Kingbright	APHD1608LCGCK	Yes	Yes
F1	1	Resettable Fuses - PPTC 1206 PTC 6V 500MA	500mA			Littelfuse	1206L050YR	Yes	Yes

JP1, JP2	2	Würth Elektronik 1.27mm Jumper 1x2 WR-PHD	Würth Elektronik 1.27mm Jumper 1x2 WR-PHD					Yes	Yes
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PB	1	SMD pushbutton top actuated 2.6x1.6x0.53mm Panasonic	EVP-BB2A9B000			Panasonic	EVP-BB2A9B000	Yes	Yes
Q1	1	EMI Common Mode Filter with ESD Protection for High Speed Serial Digital Interfaces ON Semiconductor	EMI2121MTTAG			ON Semiconductor	EMI2121MTTAG	No	Yes
R1, R3	2	SMD thick film resistor 100k 0402 1% 100 mW Panasonic	100k		0402	Panasonic	ERJ2RKF1003X	Yes	Yes
R2, R5, R6, R7	4	SMD thick film resistor 1k 0402 1% 100 mW Panasonic	1k		0402	Panasonic	ERJ2RKF1001X	Yes	Yes
R4	1	SMD thick film resistor 100R 0402 1% 100 mW Panasonic	100		0402	Panasonic	ERJ2RKF1000X	Yes	Yes
R8, R9	2	SMD thick film resistor 330R 0603 1% 100 mW Panasonic	330R		0603	Panasonic	ERJ3EKF3300V	Yes	Yes
R10	1	SMD thick film resistor 0R 0603 100 mW, AEC-Q200, Panasonic	0R		0603	Panasonic	ERJ-3GEY0R00V	Yes	Yes
U1	1	Low Power System-on-Chip For 2.4 GHz IEEE 802.15.4-2006 Applications, module version (including SMD antenna)	NCS36510 Lakota module			ON Semiconductor	NCAT00LKT002G4	No	Yes
U2	1	USB to UART interface IC FTDI	FT232RQ			FTDI	FT232RQ-REEL	Yes	Yes
U3	1	Ultra-Low Iq 3.3V/150mA CMOS LDO Regulator ON Semiconductor	NCP170BXV330T2G			ON Semiconductor	NCP170BXV330T2G	No	Yes