



Bill of Materials for the STR-RSL10-MESH-NODE-GEVK Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1 C4 C11 C12 C15 C17 C19 C22	8	CAP CER 1UF 16V X5R 0402	1uF		0402	Murata	GRM155R61C105KA12	Yes	Yes
C2 C3 C5 C6 C7 C14 C20 C21	8	CAP CER 1UF 10V X7S 0402	1uF		0402	Murata	GCM155C71A105KE38	Yes	Yes
C8	1	CAP CER 0.22UF 16V X7R 0402	220nF		0402	Murata	GCM155R71C224KE02D	Yes	Yes
C9 C13	2	CAP CER 10UF 25V X5R 0603	10uF		0603	Murata	GRM188R61E106MA73	Yes	Yes
C10	1	CAP CER 1UF 25V X7R 0603	1uF		0603	Murata	GCM188R71E105KA64	Yes	Yes
C16 C18	2	Monolithic Ceramic SMD Capacitor	10nF		0402	Murata	GRM155R71C103KA01D	Yes	Yes
D1 D2	2	LED RGB CLEAR 6PLCC SMD	150352M173300		1411	Würth Elektronik	150352M173300	Yes	Yes
D3	1	Blue LED	150060BS75000		0603	Würth Elektronik	150060BS75000	Yes	Yes
D4	1	Red LED	150060RS75000		0603	Würth Elektronik	150060RS75000	Yes	Yes
FB1	1	Ferrite bead 220 Ohm 0805 1LN	220@100M		0805	Würth Elektronik	782853221	Yes	Yes
J1	1	Standard Arm Cortex Debug Connector	FTSH-105-01-F-DV-K		2x5pin 50mil Cortex Debug	Samtec	FTSH-105-01-F-DV-K	Yes	Yes
J2 J5	2	DNI	DNI		DNI	DNI	DNI	Yes	Yes
J3	1	2 Pos 2mm pitch with keyed shroud	S2B-PH-K-S		2pin 2mm	JST Sales America Inc	S2B-PH-K-S(LF)(SN)	Yes	Yes
J4	1	Standard 2x8pin 100mil Pitch Header	613 016 211 21		2x8pin 100mil	Würth Elektronik	613 016 211 21	Yes	Yes
J6	1	Mini USB1/2 Type-B Connector	65100516121		Mini USB1/2 B	Würth Elektronik	65100516121	Yes	Yes
J7	1	CONN HEADER VERT 4POS 2.54MM	61300411121		1x4pin 100mil	Würth Elektronik	61300411121	Yes	Yes
LS1	1	Audio Magnetic Indicator	AI-1223-TWT-3V-2-R		Radial Lead 7.6mm	PUI Audio	AI-1223-TWT-3V-2-R	Yes	Yes
Q1 Q2	2	Small Signal MOSFET 25 V, 0.75 A, Single, N-Channel, ESD Protection	NTS4409N		SOT-323	ON Semiconductor	NTS4409N	No	Yes
Q3 Q5 Q6 Q7	4	Small Signal MOSFET 60V 340mA 2.5 Ohm Single N-Channel SOT-323	2N7002W		SOT-323	ON Semiconductor	2N7002W	No	Yes
Q4	1	Small Signal MOSFET -50V -130mA 10 Ohm Single P-Channel SOT-23 Logic Level	BSS84L		SOT23-3	ON Semiconductor	BSS84L	No	Yes
R1 R3	2	RES SMD 2K OHM 1% 1/16W 0402	2K		0402	Vishay Dale	CRCW04022K00FK	Yes	Yes
R2 R7	2	RES SMD 1.1 OHM 1% 1/10W 0603	1.1		0603	Vishay Dale	CRCW06031R10FK	Yes	Yes
R4 R5 R6 R16 R19 R20 R21 R24 R26 R27 R30 R32 R33 R36	14	RES SMD 10K OHM 1% 1/16W 0402	10K		0402	Vishay Dale	CRCW040210K0FK	Yes	Yes
R8 R37	2	RES SMD 100K OHM 1% 1/16W 0402	100K		0402	Vishay Dale	CRCW0402100KFK	Yes	Yes
R9	1	RES SMD 0 OHM JUMPER 1/16W 0402	0		0402	Vishay Dale	CRCW04020000Z0ED	Yes	Yes
R10	1	RES SMD 47K OHM 1% 1/16W 0402	47K		0402	Vishay Dale	CRCW040247K0FK	Yes	Yes
R11	1	3362P 250mil Square Trimpot Trimming Potentiometer	20k		250mil	Bourns Inc.	3362P-1-203LF	Yes	Yes
R12	1	RES SMD 1.07KOHM 0.1% 1/16W 0402	1.07K		0402	Panasonic	ERA-2AEB1071X	Yes	Yes
R13	1	RES SMD 17.4KOHM 0.1% 1/16W 0402	17.4K		0402	Panasonic	ERA-2AEB1742X	Yes	Yes
R14	1	RES SMD 9.76K OHM 1% 1/16W 0402	9.76K		0402	Vishay	CRCW04029K76FK	Yes	Yes
R17	1	RES SMD 787 OHM 0.1% 1/16W 0402	787		0402	Panasonic	ERA-2AEB7870X	Yes	Yes
R18	1	RES SMD 4.02K OHM 1% 1/16W 0402	4.02K		0402	Vishay Dale	CRCW04024K02FK	Yes	Yes

R22 R29	2	DNI	DNI		DNI	DNI	DNI	Yes	Yes
R23 R25 R28 R31	4	RES SMD 130K OHM 1% 1/16W 0402	130K		0402	Yageo	RC0402FR-07130KL	Yes	Yes
R34	1	RES SMD 3K OHM 0.1% 1/16W 0402	3K		0402	Panasonic	ERA-2AEB302X	Yes	Yes
R35	1	RES SMD 1K OHM 0.1% 1/16W 0402	1K		0402	Panasonic	ERA-2AEB102X	Yes	Yes
R38	1	RES SMD 34.8K OHM 1% 1/16W 0402	34.8K		0402	Vishay Dale	CRCW040234K8FK	Yes	Yes
RT1	1	NTC Thermistor, 10k 1%, 3380K 1%, 0402	10k		0402	Murata	NCP15XH103F03RC	Yes	Yes
SW1 SW2	2	SWITCH TACTILE SPST-NO 0.05A 12V	434153017835		MOM1 SMD	Würth Elektronik	434153017835	Yes	Yes
U1	1	Bluetooth 5 System-in-Package SIP	RSL10SIP		SIP51	ON Semiconductor	NCH-RSL10-101S51	No	Yes
U2	1	Low Voltage Digital Temperature Sensor	N34TS108		BGA 2x3	ON Semiconductor	N34TS108	No	Yes
U3	1	IC LED DRIVER RGLTR 30MA 12LLGA	NCP5623B		LLGA12	ON Semiconductor	NCP5623BMUTBG	No	Yes
U4	1	500mA USB Compatible Single Cell Li-Ion Linear Charger with Power Back Capability	FAN54120MP420X		DFN6 2x2	ON Semiconductor	FAN54120MP420X	No	Yes
U5	1	Full-Function Load Switch with Adjustable Current Limit	FPF2194		WLCSP	ON Semiconductor	FPF2194	No	Yes
U6	1	IC AMB LIGHT SENSOR I2C 4-ODCSP	LV0104CS		ODCSP4 1x1mm	ON Semiconductor	LV0104CS-TLM-H	No	Yes
U7	1	Magnetic Hall Switch	MLX90248		SOT-23	Melexis	MLX90248ESE-EBA-000-RE	Yes	Yes
U8 U10	2	Low Power, Zero-Drift Operational Amplifier	NCS333		SOT23-5	ON Semiconductor	NCS333SN2T1G	No	Yes
U9	1	Magnetic Displacement Sensor	HMC1512		8-SOIC	Honeywell	HMC1512	Yes	Yes
U11	1	250 mA, Ultra-Low Noise and High PSRR LDO Regulator for RF and Analog Circuits	NCP163		XDFN4	ON Semiconductor	NCP163AMX280TBG	No	Yes
Machine screw	4	#4-40 Pan Head Machine Screw Phillips Drive Nylon	NSP-4-3-01			Essentra Components	NSP-4-3-01	Yes	Yes
Standoff	4	Hex Standoff Threaded #4-40 Nylon 0.250" (6.35mm) 1/4" Black	4842			Keystone Electronics	4842	Yes	Yes
Jumper	2	2 (1 x 2) Position Shunt Connector Black Closed Top 0.100" (2.54mm) Tin	STC02SYAN			Sullins Connector Solutions	STC02SYAN	Yes	Yes