

Bill of Materials for the STR-NCV8170-NCP170-EVK Evaluation Board



Item Number	Quantity	Part Reference	MFR	MFRPN	Package	Value	Voltage	Description
1	4	C1 C2 C3 C13	Murata	GCM155C71A105KE38	0402	1uF	10V	CAP CER 1UF 10V X7S 0402
2	2	C4 C5			0402-0805	DNI	?V	Generic 0402-0805 SMD Capacitor
3	6	C6 C11 C22 C25 C27 C29	Murata	GRM155R	0402	1uF	16V	CAP CER 1UF 16V X5R 0402
4	2	C7 C10	Murata	GCM21BC	0805	4.7uF	35V	CAP CER 4.7UF 35V X7S 0805
5	2	C8 C9	Murata	GCM188R	0603	10nF	100V	Generic 0603 SMD Capacitor
6	1	C12	Murata	GCM155R	0402	1nF	50V	Generic 0402-0603 SMD Capacitor
7	6	C14 C17 C19 C21 C23 C24	Murata	GRM155R	0402	4.7uF	6.3V	Generic 0402 SMD Capacitor
8	2	C15 C16	Murata	GRM155S	0402	12.5pF	25V	Generic 0402 SMD Capacitor
9	2	C18 C20	Murata	GJM155S	0402	7.5pF	50V	CAP CER 7.5PF 50V C0G/NP0 0402
10	2	C26 C30	Murata	GCM155R	0402	0.1uF	50V	CAP CER 0.1UF 50V X7R 0402
11	1	C28	Murata	GRM188R	0603	10uF	25V	CAP CER 10UF 25V X5R 0603
12	2	D1 D4	Würth Elektronik	150060RS	0603	150060RS75000	5V	Red LED
13	2	D2 D3			SOD-923	DNI	3.3V	Generic SOD-923 Zener Diode
14	1	D5	Würth Elektronik	150060GS	0603	150060GS75000	5V	Green LED
15	1	D6	Würth Elektronik	150060BS	0603	150060BS75000	5V	Blue LED
16	1	D7	Würth Elektronik	150060YS	0603	150060YS75000	5V	Yellow LED
17	2	D8 D9	ON Semiconductor	NSR20F20NX	DSN2 0603	NSR20F20NX	20V	Schottky Barrier Diode, 2.0 A, 20 V
18	1	D10	ON Semiconductor	SESD7L5	SOT-723	SESD7L	5.5V	Auto ESD Protection Diodes
19	1	FB1	Murata	BLM21AG	0805	220@100M		Ferrite bead/Impedance type filter
20	4	J1 J5 J13 J14	Würth	70994030	M3 Nut	709940300		PLASTIC HEXAGON NUT M3
21	3	J2 J3 J4			200x300mil	DNI		Rectangle power pad 200x300 mils
22	2	J6 J7	Würth Elektronik	613 002 111 21	1x2pin 100mil	613 002 111 21		Standard 1x2pin 100mil Pitch Header
23	2	J8 J9	Deltron	571-0500	Red Banana	571-0500		Red Insulated 4mm socket for banana
24	1	J10	Samtec	IPBS-104-01-T-D-GP	2x4pin 165mil	IPBS-104-01-T-D-GP		DLT 8 pin connector
25	2	J11 J12	Deltron	571-0100	Black Banana	571-0100		Black Insulated 4mm socket for banana
26	4	J15 J16 J19 J20	Würth	971100365	M3 10MM	971100365		PLASTIC SPACER STUD METRIC THREAD M3 10MM
27	1	J17	Samtec	FTSH-105-01-F-DV-K	2x5pin 50mil Cortex Debug	FTSH-105-01-F-DV-K		Standard Arm Cortex Debug Connector
28	1	J18	Würth Elektronik	65100516121	Mini USB1/2 B	65100516121		Mini USB1/2 Type-B Connector
29	2	JP1 JP2	Stackpole Electronics	HCJ0603ZT0R00	0603	DNI		Surface Mount High Current Jumper Chip Resistor
30	1	JP3	Stackpole Electronics	HCJ0402ZT0R00	0402	DNI		Surface Mount High Current Jumper Chip Resistor
31	1	Q1	ON Semiconductor	2V7002W	SOT-323	2V7002W	60V	Automotive Small Signal MOSFET 60V 340mA 2.5 Ohm Single N-Channel SOT-323
32	3	Q2 Q3 Q4	ON Semiconductor	2N7002W	SOT-323	2N7002W	60V	Small Signal MOSFET 60V 340mA 2.5 Ohm Single N-Channel SOT-323
33	7	R1 R3 R12 R15 R16 R21 R27	Vishay	CRCW040210K0FK	0402	10K		RES SMD 10K OHM 1% 1/16W 0402
34	2	R2 R8	Vishay	WSL1206R0600FEA	1206	60mOhm		RES 0.06 OHM 1% 1/4W 1206
35	2	R4 R10	Vishay	CRCW06031K00FK	0603	1K		RES SMD 1K OHM 1% 1/10W 0603
36	4	R5 R6 R7 R9	Vishay	CRCW06034R75FK	0603	4.75		RES SMD 4.75 OHM 1% 1/10W 0603
37	1	R11	Vishay	CRCW04021K00FK	0402	1K		RES SMD 1K OHM 1% 1/16W 0402
38	1	R13	Vishay	CRCW06035K11FK	0603	5.11K		RES SMD 5.11K OHM 1% 1/10W 0603
39	1	R14	Vishay	CRCW04024K53FK	0402	4.53K		RES SMD 4.53K OHM 1% 1/16W 0402
40	2	R17 R20	Vishay	CRCW060310K0FK	0603	10K		RES SMD 10K OHM 1% 1/10W 0603

41	2	R18 R19	Vishay	CRCW060 38K45FK	0603	8.45K		RES SMD 8.45K OHM 1% 1/10W 0603
42	1	R22	Vishay	CRCW040 25K11FK	0402	5.11K		RES SMD 5.11K OHM 1% 1/16W 0402
43	1	R23	Vishay	CRCW040 28K87FK	0402	8.87K		RES SMD 8.87K OHM 1% 1/16W 0402
44	1	R24	Vishay	CRCW040 29K76FK	0402	9.76K		RES SMD 9.76K OHM 1% 1/16W 0402
45	1	R25	Vishay	CRCW040 2665RFB	0402	665		RES SMD 665 OHM 1% 1/16W 0402
46	2	R26 R30	Vishay	CRCW040 2100RFB	0402	100		RES SMD 100 OHM 1% 1/16W 0402
47	1	R28	Vishay	CRCW060 3100RFB	0603	100		RES SMD 100 OHM 1% 1/10W 0603
48	1	R29	Vishay	CRCW040 22K32FK	0402	2.32K		RES SMD 2.32K OHM 1% 1/16W 0402
49	1	SW1	Würth Elektronik	43415301 7835	MOM1 SMD	434153017835	12V	SWITCH TACTILE SPST-NO 0.05A 12V
50	9	TP1 TP3 TP4 TP5 TP6 TP8 TP10 TP12 TP14			0.75mm	DNI		Passive Probe Tip Tektronix P5050 (Tan) Tip
51	1	TP2			0.6mm	DNI		Passive Probe Tip Old
52	5	TP7 TP9 TP11 TP13 TP15			1mm Circle	DNI		Surface Mount 1mm Circle Test Point
53	1	U1	ON Semiconductor	NCT375M NR2G	DFN8 2x2mm	NCT375		Digital Temperature Sensor with 2-wire Interface
54	1	U2	ON Semiconductor	NCV8170 AMX180T CG	XDFN4	NCV8170	1.8	150 mA, Low Iq CMOS LDO
55	2	U3 U4	ON Semiconductor	NCS214R SQT2G	SC-70-6	NCS214R		Current-Shunt Monitor, Voltage Output, Bi-Directional Zero-Drift, Gain = 100V/V
56	1	U5	ON Semiconductor	NCP308M TADJTBG	WDFN6 2x2mm	NCP308MTADJTBG		Low Quiescent Current, Programmable Delay Time, Supervisory Circuit
57	1	U6	Silicon Labs	EFM32GG 380F1024- QFP100	QFP100 14x14	EFM32GG380F1024		EFM32 Giant Gecko 32-bit Microcontroller
58	1	U7	ON Semiconductor	NCP705M T33TCG	WDFN6	NCP705		3.3V Voltage Regulator, LDO, Ultra Low Noise, Ultra Low Iq, 500 mA
59	1	U8	FTDI	FT230XQ- R	QFN16 4x4	FT230X		USB to BASIC UART IC
60	1	Y1	Micro Crystal	MS3V- T1R- 32.768kHz 12.5pF- 20PPM- TA-QC-Au	2 pin w/ shell	32.768 kHz		Crystals 32.768 kHz 12.5 pF +/-20 PPM -40/+85C
61	1	Y2	NDK	NX5032G A- 48.000000 MHZ-LN- CD-1	5x3.2mm	48MHz		CRYSTAL 48.0000MHZ 8PF SMD