



Bill of Materials for the STR-SENSORS-GEVK Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1 C2 C3 C5 C8 C25	6	CAP CER 10UF 25V X5R 0603	10uF	25V	0603	Murata	GRM188R61E106MA73	Yes	Yes
C4	1	CAP CER 1000PF 50V X7R 0402	1000pF	50V	0402	Murata	GCM155R71H102KA37D	Yes	Yes
C6 C10 C26	3	CAP CER 0.1UF 50V X7R 0402	0.1uF	50V	0402	Murata	GCM155R71H104ME02	Yes	Yes
C7 C9 C11 C14	4	CAP CER 1UF 16V X5R 0402	1uF	16V	0402	Murata	GRM155R61C105KA12	Yes	Yes
C12 C13 C15 C17 C19 C22	6	Generic 0402 SMD Capacitor	4.7uF	6.3V	0402	Murata	GRM155R60J475ME47	Yes	Yes
C16 C18	2	CAP CER 7.5PF 50V C0G/NP0 0402	7.5pF	50V	0402	Murata	GJM1555C1H7R5CB01D	Yes	Yes
C20 C21	2	CAP CER 12PF 50V C0G/NP0 0402	12pF	25V	0402	Murata	GJM1555C1H120JB01D	Yes	Yes
C23 C24	2	CAP CER 4.7PF 50V C0G/NP0 0402	4.7pF	50V	0402	Murata	GJM1555C1H4R7CB01D	Yes	Yes
D1 D2 D4 D5 D7 D8 D10 D11 D22	9	Green LED	150060GS75000	5V	0603	Würth Elektronik	150060GS75000	Yes	Yes
D3 D6 D9 D12 D20	5	Yellow LED	150060YS75000	5V	0603	Würth Elektronik	150060YS75000	Yes	Yes
D13 D14 D15 D16 D21	5	Blue LED	150060BS75000	5V	0603	Würth Elektronik	150060BS75000	Yes	Yes
D17	1	ESD Protection Diodes	ESD7L	5.5V	SOT-723	ON Semiconductor	ESD7L5.0	No	Yes
D18 D19	2	Schottky Barrier Diode, 2.0 A, 20 V	NSR20F20NX	20V	DSN2 0603	ON Semiconductor	NSR20F20NX	No	Yes
D23	1	Red LED	150060RS75000	5V	0603	Würth Elektronik	150060RS75000	Yes	Yes
FB1	1	Ferrite bead/Impedance type filter	220@100M		0805	Murata	BLM21AG221SN1	Yes	Yes
J1 J3	2	Standard 1x2pin 100mil Pitch Header	613 002 111 21		1x2pin 100mil	Würth Elektronik	613 002 111 21	Yes	Yes
J2	1	Standard 1x3pin 100mil Pitch Header (I2C Specific)	613 003 111 21		1x3pin 100mil	Würth Elektronik	613 003 111 21	Yes	Yes
J4 J5 J6 J7	4	PLASTIC HEXAGON NUT M3	709940300		M3 Nut	Würth	709940300	Yes	Yes
J8 J9 J12 J13	4	PLASTIC SPACER STUD METRIC THREAD M3 10MM	971100365		M3 10MM	Würth	971100365	Yes	Yes
J10	1	Mini USB1/2 Type-B Connector	65100516121		Mini USB1/2 B	Würth Elektronik	65100516121	Yes	Yes
J11	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
JP1	1	Surface Mount High Current Jumper Chip Resistor	DNI		0402	Stackpole Electronics	HCJ0402ZT0R00	Yes	Yes
Q1 Q4	2	MOSFET P-CH 60V 1.8A CPH3	CPH3351	60V	SOT23-3	ON Semiconductor	CPH3351-TL-W	No	Yes
Q2 Q5	2	Power MOSFET 60V 340mA 1.6 Ohm Single N-Channel SC-70	2N7002W	60V	SC-70	ON Semiconductor	2N7002W	No	Yes
Q3	1	General Purpose BJT PNP	MMBT3906W		SC-70	ON Semiconductor	MMBT3906WT1G	No	Yes
Q6 Q7 Q8 Q9	4	Small Signal MOSFET 60V 340mA 2.5 Ohm Single N-Channel SOT-323	2N7002W	60V	SOT-323	ON Semiconductor	2N7002W	No	Yes
R1 R2 R4 R5 R10 R11 R13 R14 R34	9	RES SMD 8.87K OHM 1% 1/16W 0402	8.87K		0402	Vishay	CRCW04028K87FK	Yes	Yes
R3 R6 R12 R15 R32	5	RES SMD 665 OHM 1% 1/16W 0402	665		0402	Vishay	CRCW0402665RFB	Yes	Yes
R7 R16	2	Generic 2512 SMD Resistor	24.9		2512	Vishay	CRCW251224R9FKEG	Yes	Yes
R8 R9 R17 R21 R42	5	RES SMD 1K OHM 1% 1/16W 0402	1K		0402	Vishay	CRCW04021K00FK	Yes	Yes
R18 R19 R37 R38	4	RES SMD 4.99K OHM 1% 1/16W 0402	4.99K		0402	Vishay	CRCW04024K99FK	Yes	Yes
R20 R22 R27 R31	4	RES SMD 100 OHM 1% 1/16W 0402	100		0402	Vishay	CRCW0402100RFB	Yes	Yes

R23 R24 R25 R26	4	RES SMD 3.32K OHM 1% 1/16W 0402	3.32K		0402	Vishay	CRCW04023K32FK	Yes	Yes
R28	1	RES SMD 2.32K OHM 1% 1/16W 0402	2.32K		0402	Vishay	CRCW04022K32FK	Yes	Yes
R29	1	RES SMD 100 OHM 1% 1/10W 0603	100		0603	Vishay	CRCW0603100RFK	Yes	Yes
R30 R36	2	RES SMD 10K OHM 1% 1/16W 0402	10K		0402	Vishay	CRCW040210K0FK	Yes	Yes
R33	1	RES SMD 9.76K OHM 1% 1/16W 0402	9.76K		0402	Vishay	CRCW04029K76FK	Yes	Yes
R35	1	RES SMD 5.11K OHM 1% 1/16W 0402	5.11K		0402	Vishay	CRCW04025K11FK	Yes	Yes
R39 R40 R41	3	RES SMD 0 OHM 1% 1/16W 0402	0		0402	Vishay	CRCW04020000Z0	Yes	Yes
SW1 SW2 SW3 SW4 SW5 SW6 SW7 SW8 SW9 SW10 SW11 SW12 SW13 SW14 SW15 SW16	16	LC717A00AR, A=2mm, B=3mm, C=1mm	DNI		10x10mm			Yes	Yes
SW17	1	SWITCH TACTILE SPST-NO 0.05A 12V	434153017835	12V	MOM1 SMD	Wurth Elektronik	434153017835	Yes	Yes
TP1 TP2 TP3 TP4 TP15 TP16	6	Passive Probe Tip Tektronix P5050B (Black) Tip	DNI		0.9mm			Yes	Yes
TP5 TP7 TP9 TP11 TP13	5	Surface Mount 1mm Circle Test Point	DNI		1mm Circle			Yes	Yes
TP6 TP8 TP10 TP12 TP14	5	Passive Probe Tip Tektronix P5050 (Tan) Tip	DNI		0.75mm			Yes	Yes
U1	1	IC AMB LIGHT SENSOR I2C 4-ODCSP	LV0104CS		ODCSP4 1x1mm	ON Semiconductor	LV0104CS-TLM-H	No	Yes
U2	1	SENSOR DIGITAL -40C-125C 8WDFN	NCT72		8WDFN 2x2	ON Semiconductor	NCT72CMTR2G	No	Yes
U3	1	USB to BASIC UART IC	FT230X		QFN16 4x4	FTDI	FT230XQ-R	Yes	Yes
U4	1	3.3V Voltage Regulator, LDO, Ultra Low Noise, Ultra Low Iq, 500 mA	NCP705		WDFN6	ON Semiconductor	NCP705MT33TCG	No	Yes
U5	1	EFM32 Giant Gecko 32-bit Microcontroller	EFM32GG380F1024		QFP100 14x14	Silicon Labs	EFM32GG380F1024-QFP100	Yes	Yes
U6	1	Capacitance-Digital-Converter LSI for Touch Sensors	LC717A10AR		VCT28	ON Semiconductor	LC717A10AR-NH	No	Yes
Y1	1	CRYSTAL 48.0000MHZ 8PF SMD	48MHz		5x3.2mm	NDK	NX5032GA-48.000000MHZ-LN-CD-1	Yes	Yes
Y2	1	Crystals 32.768 kHz 12.5 pF +/-20 PPM -40/+85C	32.768 kHz		2 pin w/ shell	Micro Crystal	MS3V-T1R-32.768kHz-12.5pF-20PPM-TA-QC-Au	Yes	Yes