

Bill of materials
Table 1. STEVAL-SILKT01 bill of materials

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
1	1	Table 2. STEVAL-SILKTA01	-	Main board	ST	Not available for separate sale
2	2	Table 3. STEVAL-SILKTB01	-	Daughter board	ST	Not available for separate sale

Table 2. STEVAL-SILKTA01 bill of materials

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
1	10	C1 C2 C3 C4 C5 C6 C7 C8 C106 C107	100nF, 0402 (1005 Metric), 6.3V, +/-10%	CAP CER 0.1UF 6.3V X5R 0402+F8:F29F98 F8:F26F8:F8:F11 0	Murata Electronics	GRM155R60J104KA01D
2	22	C13 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 C31 C32 C33 C40 C41 C59 C60 C68 C81 C82 C97	0.1uF, 0402 (1005 Metric), 16V, +/-10%	CAP CER 0.1UF 16V X7R 0402	Würth Electronics Inc.	885012205037
3	3	C14 C85 C98	1uF, 0805 (2012 Metric), 16V, +/-10%	CAP CER 1UF 16V X7R 0805	KEMET	C0805C105K4RACTU
4	4	C15 C16 C38 C39	1uF, 0402 (1005 Metric), 6.3V, +/-10%	CAP CER 1UF 6.3V X5R 0402	Taiyo Yuden	JMK105BJ105KV-F
5	5	C17 C18 C19 C108 C109	10pF, 0402, (1005 Metric), 16V, +/-5%	CAPACITOR CERAMIC SMD 0402 (not mounted)	Yageo	CC0402KRNPO7BN100
6	1	C20	4.7uF, 0402 (1005 Metric), 10V, +/-20%	CAP CER 4.7UF 10V X5R 0402	Murata Electronics	GRM155R61A475MEAAD
7	2	C34 C35	18pF, 0402 (1005 Metric), 50V, +/-5%	CAP CER 18PF 50V C0G/NPO 0402	Yageo	CC0402JRNPO9BN180
8	3	C36 C37 C83	2.2uF, 0402 (1005 Metric), 10V, +/-20%	CAP CER 2.2UF 10V X5R 0402	Würth Electronics Inc.	885012105013
9	2	C42 C67	820pF, 0402 (1005 Metric), 50V, +/-5%	Condensatore ceramico multistrato MLCC, 0402 (1005M), 820pF, ±5%, 50V cc, SMD, C0G	TDK Corporation	CGA2B2C0G1H821J050BA
10	2	C43 C66	1uF, 0402 (1005 Metric), 25V, +/-10%	CAP CER 1UF 25V X5R 0402	Murata Electronics	GRM155R61E105KA12D
11	2	C44 C69	100pF, 0402 (1005 Metric), 10V, +/-5%	CAP CER 100PF 10V C0G/NP0 0402	Würth Electronics Inc.	885012005013

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
12	4	C45 C54 C70 C75	22nF, 0402 (1005 Metric), 25V, +/-10%	CAP CER 0.022UF 25V X7R 0402	Würth Electronics Inc.	885012205052
13	2	C46 C71	0.1uF, 0603 (1608 Metric), 16V, +/-10%	CAP CER 0.1UF 16V X7R 0603	Würth Electronics Inc.	885012206046
14	2	C47 C61	47uF, Radial, Can 100V, +/-20%	CAP 47 UF 20% 100 V	Würth Electronics Inc.	860040875002
15	2	C48 C72	4.7uF, 1210 (3225 Metric), 100V, +/-10%	CAP CER 4.7UF 100V X7R 1210	Samsung Electro-Mechanics	CL32B475KCVZW6E
16	6	C49 C51 C53 C63 C73 C74	1 uF, 0805 (2012 Metric), 100V, +/-10%	CAP CER 1UF 100V X7S 0805	TDK Corporation	C2012X7S2A105K125AB
17	2	C50 C62	0.1uF, 0805 (2012 Metric), 100V, +/-10%	CAP CER 0.1UF 100V X7R 0805	Würth Electronics Inc.	885012207128
18	2	C52 C64	33uF, Radial, 8x11.5mm, 100V, +/-20%	CAP ALUM 33UF 20% 100V RADIAL	Panasonic Electronic Components or Würth Electronics Inc.	ECA-2AHG330 or 870055975003
19	2	C55 C76	47uF, 1210 (3225 Metric), 16V, +/-10%	CAP CER 47UF 16V X5R 1210	Murata Electronics	GRM32ER61C476KE15K
20	2	C56 C78	10nF, 0402 (1005 Metric), 16V, +/-10%	CAP CER 10000PF 16V X7R 0402 (not mounted)	Würth Electronics Inc.	885012205031
21	2	C57 C79	1uF, 0603 (1608 Metric), 16V, +/-10%	CAPACITOR CERAMIC SMD 0603	Samsung Electro-Mechanics	CL10A105KO8NNNC
22	2	C58 C80	2.2uF, 0603 (1608 Metric), 25V, +/-10%	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0603 25VDC 2.2uF 10% B(JIS)	Murata Electronics	GRM188B31E225KA12D
23	2	C65 C77	10nF, 0402 (1005 Metric), 16V, +/-10%	CAP CER 10000PF 16V X7R 0402	Würth Electronics Inc.	885012205031
24	1	C84	10pF, 0402 (1005 Metric), 10V, +/-5%	CAP CER 10PF 10V C0G/NP0 0402	Würth Electronics Inc.	885012005007
25	2	C86 C89	47pF, 0603 (1608 Metric), 10V, +/-5%	CAPACITOR CERAMIC SMD 0603	Murata	GRM1885C1H470JA01D
26	1	C87	100nF, 0603 (1608 Metric), 10V, +/-10%	CAPACITOR CERAMIC SMD 0603	AVX	06033C104JAT2A
27	1	C88	10nF, 0603 (1608 Metric), 16V, +/-10%	CAPACITOR CERAMIC SMD 0603	AVX	06033C103KAT2A
28	11	C90 C91 C92 C93 C94 C95 C96 C102 C103 C104 C105	0.1uF, 0603 (1608 Metric), 100V, +/-10%	CAP CER 0.1UF 100V X7S 0603	TDK Corporation	CGA3E3X7S2A104K080AB

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
29	2	C99 C100	20pF, 0402 (1005 Metric), 16V, +/-1%	CAP CER 0402 20PF 16V ULTRA STAB	KEMET	C0402C200F4HACAUTO
30	1	C101	10uF, Radial, Can - SMD 16V, +/-20%	CAP ALUM 10UF 20% 16V SMD	Panasonic Electronic Components	EEE-FC1C100R
31	2	D2 D15	ESDA7P60-1U1M , 2-UDFN	TVS DIODE 5VWM 11.6VCL 1610	ST	ESDA7P60-1U1M
32	2	D3 D7	SMC30J36CA, DO-214AB, SMC, 3000W (3kW)	TVS DIODE 36VWM 58.1VC SMC	ST	SMC30J36CA
33	5	D4 D6 D8 D12 D13	LED GREEN, 0402 (1005 Metric), 20mA	LED GREEN CLEAR 0402 SMD	Würth Electronics Inc.	150040VS73240
34	2	D5 D10	STPS2H100A, DO-214AC, SMA, 2A	DIODE SCHOTTKY 100V 2A SMA	ST	STPS2H100A
35	2	D9 D11	3.3V, SOD-123, 900mV @ 10mA, 7.5uA @ 1.5V, 500mW	DIODE ZENER 3.3V 500MW SOD123	ON Semiconductor	MMSZ4684T1G
36	1	D14	ESDCAN24-2BLY , TO-236-3, SC-59, SOT-23-3	TVS DIODE 24VWM 40VC SOT23-3L	ST	ESDCAN24-2BLY
37	1	D16	LED AMBER 0402 SMD, 0402 (1005 Metric), 20mA	LED AMBER 0402 SMD	Würth Electronics Inc.	150040AS73240
38	2	D17 D18	LED GREEN RED, 4-PLCC, 20mA Green, 20mA Red	LED GREEN/RED CLEAR 4PLCC SMD	Würth Electronics Inc.	150141RV73100
39	4	FB1 FB2 FB3 FB4	600Ohm@100MH z, 0603 (1608 Metric)	FERRITE BEAD 600 OHM 0603 1LN	Würth Electronics Inc.	742863160
40	2	J1 J6	CON2	TERM BLOCK HDR 2POS 90DEG 5.08MM	Würth Electronics Inc.	691313510002
41	2	J3 J5	con12-2x6-strip-female	CONN HEADER FEMALE .100 DUAL STR 12POS	Adimpex	LF006212-R
42	2	J2 J4	con14-2x7-strip-female	CONN HEADER FEMALE .100 DUAL STR 14POS	Adimpex	LF006214-R
43	1	J7	Con2	TERM BLOCK PLUG 2POS 5.08MM	Würth Electronics Inc.	691351500002
44	1	J8	Con2	TERM BLOCK PLUG 2POS 5.08MM (not assembled)	Würth Electronics Inc.	691351500002
45	1	J9	Dev3 500mA (DC)	SWITCH SLIDE SPDT 500MA 12V	Würth Electronics Inc.	450301014042

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
46	1	J10	Jump Female		Sullins Connector Solutions	NPB02SVAN-RC
47	1	J11	CON2	CONN HEADER VERT 2POS 1.27MM	Harwin	M50-3530242
48	2	L2 L4	4.7uH, 1212 (3030 Metric), 1.9 A, +/-20%	FIXED IND 4.7UH 1.9A 158MOHM SMD	Würth Electronics Inc.	74438336047
49	2	L3 L5	10uH, Nonstandard, 4.3 A, +/-20%	FIXED IND 10UH 4.3A 27 MOHM SMD	Würth Electronics Inc.	7447714100
50	1	L6	8kOhms@10MHz , Horizontal, 4 PC Pad, 150mA	CMC 100UH 150MA 2LN 8 KOHM SMD	Würth Electronics Inc.	744235101
51	4	N1 N2 N3 N4	NUT M3	HEX NUT 0.217" NYLON M3	Adimpex	VA080390-R
52	1	P1	DB9 PLUG	CONN D-SUB PLUG 9POS R/A SLDR	Amphenol ICC (FCI)	D09P33E4GX00LF
53	1	P2	DB9 SOCKET	CONN D-SUB RCPT 9POS R/A SLDR	Parallax Inc. or Norcomp	452-00005 or 182-009-213R531
54	10	R3 R4 R5 R6 R7 R8 R9 R10 R11 R12	1k, 0402 (1005 Metric), 0.063W, 1/16W, +/-5%	RES SMD 1K OHM 5% 1/16W 0402	Yageo	RC0402JR-071KL
55	2	R22 R89	2.7k, 0402 (1005 Metric) 0.063W, 1/16W, +/- 5%	CHIP RESISTOR SMD 5% 1/16W 0402	Yageo	RC0402FR-072K7L
56	6	R23 R24 R25 R26 R32 R33	100, 0402 (1005 Metric), 0.063W, 1/16W, +/-5%	CHIP RESISTOR SMD 5% 1/16W 0402	Rohm	MCR01MZPJ101
57	4	R27 R104 R105 R118	10k, 0402 (1005 Metric), 0.063W, 1/16W, +/-5%	CHIP RESISTOR SMD 5% 1/16W 0402 (not mounted)	Yageo	RC0402JR-0710KL
58	4	R28 R106 R107 R119	10k, 0402 (1005 Metric), 0.063W, 1/16W, +/-5%	CHIP RESISTOR SMD 5% 1/16W 0402	Yageo	RC0402JR-0710KL
59	5	R29 R30 R31 R108 R109	2.7k, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	CHIP RESISTOR SMD 1% 1/16W 0402	Yageo	RC0402FR-072K7L
60	3	R34 R70 R71	0402 (1005 Metric), 0.063W, 1/16W Jumper	RES SMD 0 OHM JUMPER 1/16W 0402	Vishay	CRCW04020000Z0ED
61	2	R35 R49	0603 (1608 Metric), 0.1W, 1/10W Jumper	RES SMD 0 OHM JUMPER 1/10W 0603	Panasonic Electronic Components	ERJ-3GEY0R00V
62	2	R36 R50	680R, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	Resistenza SMD Vishay Film spesso, 680O, 0402 (1005M), ±1%, 0.063W, serie CRCW	Vishay	CRCW0402680RFKED

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
63	2	R37 R46	8.2k, 0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Vishay	CRCW06038K20FKEA
64	2	R38 R51	5.6k, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	Resistenza SMD Vishay Film spesso, 5.6k Ω , 0402 (1005M), \pm 1%, 0.2W, serie CRCW-HP	Vishay	CRCW04025K60FKEDHP
65	2	R39 R54	40.2k, 0402 (1005 Metric), 0.1W, 1/10W, +/-1%	RES SMD 40.2K OHM 1% 1/10W 0402	Panasonic Electronic Components	ERJ-2RKF4022X
66	2	R40 R55	33k, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	CHIP RESISTOR SMD 1% 1/16W 0402	TE Connectivity	CRG0402F33K
67	2	R41 R57	62k, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	CHIP RESISTOR SMD 1% 1/16W 0402	Yageo	RC0402FR-0762KL
68	2	R42 R58	18k, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	RES SMD 18K OHM 1% 1/16W 0402	Yageo	RC0402FR-0718KL
69	3	R43 R59 R62	499, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Vishay	CRCW0603499RFKEA
70	2	R44 R45	30k, 0603 (1608 Metric), 0.1W, 1/10W, +/- 1%	CHIP RESISTOR SMD 1% 1/10W 0603	Vishay	CRCW060330K0FKEA
71	2	R47 R53	39, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	CHIP RESISTOR SMD 1% 1/16W 0402	Vishay	CRCW040239R0FKED
72	1	R48	3.16k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603FR-073K16L
73	1	R52	10.2k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603FR-0710K2L
74	1	R56	19.1k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Bourns	CR0603-FX-1912ELF
75	1	R60	1.5k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	RES SMD 1.5K OHM 1% 1/10W 0603	Yageo	RC0603FR-071K5L
76	1	R61	0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Panasonic	ERJ-3GEY0R00V
77	1	R63	1k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Multicomp	MCHP03W8F1001T5E
78	1	R64	100k, 0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Yageo	RC0603JR-07100KL
79	1	R65	2.7k, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	RES SMD 2.7K OHM 1% 1/16W 0402	Yageo	RC0402FR-072K7L
80	1	R66	20kOhms - 50 V, 62.5 mW, (1/16 W), +/- 1%	Thick Film Resistors - SMD 20K OHM 1%	Yageo	RC0402FR-0720KL

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
81	2	R67 R74	60.4R, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	RES 60.4 OHM 1% 1/16W 0402	Stackpole Electronics Inc	RMCF0402FT60R4
82	1	R68	120, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603FR-07120RL
83	2	R69 R73	510R, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	CHIP RESISTOR SMD 1% 1/16W 0402	Walsin	WR04X5100FTL
84	2	R72 R75	10k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	RS Pro	3008048921
85	4	R76 R79 R80 R81	49.9, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	RES SMD 49.9 OHM 1% 1/10W 0603	Yageo	RC0603FR-0749R9L
86	10	R77 R78 R84 R85 R92 R93 R94 R98 R101 R103	2k2, 0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Yageo	RC0603JR-072K2L
87	1	R82	4.7k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Stackpole Electronics Inc	RMCF0603FT4K70
88	1	R83	1.5K, 0402 (1005 Metric), 0.063W, 1/16W, +/-5%	RES SMD 1.5K OHM 5% 1/16W 0402	Yageo	RC0402JR-071K5L
89	5	R86 R87 R88 R90 R91	2k2, 0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603 (not mounted)	Yageo	RC0603JR-072K2L
90	1	R95	4.87k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Multicomp	MCWR06X4871FTL
91	1	R96	0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603 (not mounted)	Panasonic	ERJ-3GEY0R00V
92	1	R97	0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Panasonic	ERJ-3GEY0R00V
93	3	R99 R100 R102	330, 0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Vishay	CRCW0603330RJNTA
94	4	R114 R115 R116 R117	330R, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	CHIP RESISTOR SMD 1% 1/16W 0402	Yageo	RC0402FR-07330R
95	4	S1 S2 S3 S4	SPACER M3x20	PLASTIC SPACER STUD METRIC THREA	Würth Electronics Inc.	971200365
96	2	SW1 SW2	1437566-3, 6.00mm x 3.50mm	SWITCH TACTILE SPST-NO 0.05A 24V	TE Connectivity ALCOSWITCH Switches	1437566-3 (FSMSMTR)
97	40	TP1 TP2 TP7 TP8 TP9 TP10 TP11 TP12 TP13 TP14 TP15 TP16 TP17 TP18 TP19 TP20 TP21	5001, 0.100" Dia x 0.180" L (2.54mm x 4.57mm)	TEST POINT PC MINI .040"D BLACK	Keystone Electronics	5001

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
		TP22 TP23 TP24 TP25 TP26 TP27 TP28 TP29 TP30 TP31 TP32 TP33 TP34 TP35 TP36 TP37 TP38 TP39 TP40 TP41 TP42 TP43 TP44				
98	1	U3	STM32H743ZGT 6, 144-LQFP	IC MCU 32BIT 1MB FLASH 144LQFP	ST	STM32H743ZGT6
99	1	U4	MCU Programmer	CONN HEADER SMD 14POS 1.27MM	Samtec Inc.	FTSH-107-01-L-DV-K
100	2	U5 U8	L7987LTR, 16- TSSOP (0.173", 4.40mm Width) Exposed Pad	IC REG BCK ADJ 2A ASYNC 16HTSSOP	ST	L7987LTR
101	2	U6 U10	LD39150DT33-R, TO-252-3, DPak, SC-63	IC REG LINEAR 3.3V 1.5A DPAK	ST	LD39150DT33-R
102	2	U7 U9	TSZ121ILT, SC-74A, SOT-753	IC OPAMP ZRO- DRFT 400KHZ SOT23-5	ST	TSZ121ILT
103	1	U11	STM802RM6F, 8- SOIC (0.154", 3.90mm Width)	IC SUPERVISOR 1 CHANNEL 8SOIC	ST	STM802RM6F
104	28	U12 U13 U14 U15 U16 U17 U18 U19 U20 U21 U22 U23 U24 U25 U26 U27 U28 U29 U30 U31 U32 U34 U35 U36 U37 U38 U45 U46	STISO621WTR, 8-SOIC (0.295", 7.50mm Width)	DUAL CHANNEL DIGITAL ISOLATOR	ST	STISO621WTR
105	1	U40	STTS751-ODP3F, 6-UDFN	SENSOR TEMPERATURE SMBUS 6UDFN	ST	STTS751-ODP3F
106	1	U41	MAX3051ESA+, 8-SOIC (0.154", 3.90mm Width)	IC TRANSCEIVER HALF 1/1 8SOIC	Maxim Integrated	MAX3051ESA+
107	1	U42	ST3485EI	3.3 V RS-485/ RS-422 Transceiver - SOIC-8	ST	ST3485EIDT
108	1	U43	DP83848MPHPE P, 48-PowerTQFP	IC TRANSCEIVER 1/1 48HTQFP	Texas Instruments	DP83848MPHPEP
109	1	U44	Ethernet Connector	CONN JACK 1PORT 100 BASE-T PCB	Würth Electronics Inc.	74990111211
110	1	U47	M24256- BRMN6TP, 8- SOIC (0.154", 3.90mm Width)	IC EEPROM 256KBIT I2C 1MHZ 8SO	ST	M24256-BRMN6TP
111	1	Y1	48MHz 4-SMD, No Lead	CRYSTAL 48.0000MHZ 18PF SMD	Abracon LLC	ABM8-48.000MHZ-B2-T

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112	1	Y2	25MHz 4-SMD, No Lead	XTAL OSC XO 25.0000MHZ CMOS SMD	ECS Inc.	ECS-2520MV-250-CN-TR
113	1	PCB not Reference	4-layer-TG140, 135.5 x 128.5x 1.55mm	4 Layer TG 150- Impedence controller zone, All copper Thickness 35 micron	Massive PCB Technologies LTD	USER INTERFACE AB0122.B.01

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1	17	C1 C2 C7 C11 C12 C14 C15 C16 C29 C32 C54 C59 C70 C71 C77 C79 C86	0.1uF, 0402 (1005 Metric), 16V, +/-10%	CAP CER 0.1UF 16V X7R 0402	Würth Electronics Inc.	885012205037
2	2	C3 C4	18pF, 0402 (1005 Metric), 50V, +/-5%	CAP CER 18PF 50V C0G/NPO 0402	Yageo	CC0402JRNPO9BN180
3	1	C5	1nF, 0402 (1005 Metric), 16V, +/-10%	CAP CER 1000PF 16V X7R 0402	Würth Electronics Inc.	885012205025
4	3	C6 C8 C9	1uF, 0402 (1005 Metric), 6.3V, +/-10%	CAP CER 1UF 6.3V X5R 0402	Taiyo Yuden	JMK105BJ105KV-F
5	1	C10	4.7uF, 0402 (1005 Metric), 10V, +/-20%	CAP CER 4.7UF 10V X5R 0402	Murata Electronics North America	GRM155R61A475MEAAD
6	2	C13 C88	1uF, 0805 (2012 Metric), 16V, +/-10%	CAP CER 1UF 16V X7R 0805	KEMET	C0805C105K4RACTU
7	3	C17 C18 C19	10pF, 0402 (1005 Metric), 16V, +/-5%	CAPACITOR CERAMIC SMD 0402 (not mounted)	Murata	GRM1555C1E100JA01D
8	4	C20 C22 C24 C26	10nF, 0603 (1608 Metric), 100V, +/-20%	CAP CER 10000PF 100V X7R 0603	TDK Corporation	C1608X7R2A103M080AA
9	4	C21 C25 C30 C33	1nF, 0603 (1608 Metric), 25V, +/-10%	CAP CER 1000PF 25V X7R 0603	Samsung Electro- Mechanics	CL10B102KA8NNNC
10	2	C23 C27	4.7uF, 0603 (1608 Metric), 10V, +/-20%	CAP CER 4.7UF 10V X5R 0603	Würth Electronics Inc.	885012106012
11	1	C28	0.47uF, 0402 (1005 Metric), 10V, +/-10%	CAP CER 0.47UF 10V X5R 0402	Murata Electronics North America	GRM155R61A474KE15D
12	4	C31 C34 C63 C75	10nF, 0402 (1005 Metric), 16V, +/-10%	CAP CER 10000PF 16V X7R 0402	Würth Electronics Inc.	885012205031
13	18	C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45 C46 C47 C48 C49 C50 C51 C52	0.1uF, 0603 (1608 Metric), 50V, +/- 10%	CAP CER 0.1UF 50V X7R 0603	KEMET	C0603C104K5RACTU

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
14	4	C53 C57 C64 C74	4700pF, +/-20%	Safety Capacitors 4700pF X760 Y500VAC 20% Y5U (not mounted)	Vishay / BC Components	VY1472M63Y5UQ63V0
15	2	C55 C72	0.1uF, 0805 (2012 Metric), 100V, +/-10%	CAP CER 0.1UF 100V X7R 0805	Würth Electronics Inc.	885012207128
16	2	C56 C73	2.2uF, 1210 (3225 Metric), 100V, +/-10%	CAP CER 2.2UF 100V X7R 1210	Würth Electronics Inc.	885382209002
17	2	C58 C78	4.7uF, 0603 (1608 Metric), 16V, +/-10%	CAP CER 4.7UF 16V X5R 0603	Murata Electronics	GRM188R61C475KAAJD
18	2	C60 C80	470nF, 0603 (1608 Metric), 25V, +/-10%	CAP CER 0.47UF 25V X7R 0603	Würth Electronics Inc.	885012206075
19	2	C61 C81	1 uF, 0805 (2012 Metric), 100V, +/-10%	CAP CER 1UF 100V X7S 0805	TDK Corporation	C2012X7S2A105K125AB
20	2	C62 C82	16pF, 0402 (1005 Metric), 50V, +/-5%	CAP CER 16PF 50V C0G/NP0 0402	Murata Electronics North America	GRM1555C1H160JA01D
21	2	C65 C66	47uF, Radial, Can 100V, +/-20%	CAP 47 UF 20% 100 V	Würth Electronics Inc.	860040875002
22	2	C67 C83	10nF, 0402 (1005 Metric), 16V, +/-10%	CAP CER 10000PF 16V X7R 0402 (not mounted)	Würth Electronics Inc.	885012205031
23	2	C68 C84	1uF, 0603 (1608 Metric), 16V, +/-10%	CAPACITOR CERAMIC SMD 0603	Samsung Electro- Mechanics	CL10A105KO8NUNC
24	2	C69 C85	2.2uF, 0603 (1608 Metric), 25V, +/-10%	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0603 25VDC 2.2uF 10% B(JIS)	Murata Electronics	GRM188B31E225KA12D
25	1	C76	2.2uF, 0402 (1005 Metric), 10V, +/-20%	CAP CER 2.2UF 10V X5R 0402	Würth Electronics Inc.	885012105013
26	1	C87	10pF, 0402 (1005 Metric), 10V, +/-5%	CAP CER 10PF 10V C0G/NP0 0402	Würth Electronics Inc.	885012005007
27	1	D1	ESDA7P60-1U1M , 2-UDFN	TVS DIODE 5VWM 11.6VCL 1610	ST	ESDA7P60-1U1M
28	3	D2 D13 D16	LED GREEN 0402, (1005 Metric), 20mA	LED GREEN CLEAR 0402 SMD	Würth Electronics Inc.	150040VS73240
29	2	D3 D9	STPS3H100AF, SOD-128, 760mV @ 3A, 3A	DIODE SCHOTTKY 100V 3A SOD128	ST	STPS3H100AF
30	1	D4	SMBJ48A-TR, DO-214AA, SMB, 600W	TVS DIODE 48V 100V SMB	ST	SMBJ48A-TR

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
31	4	D5 D11 D14 D17	3.3V, SOD-123, 900mV, @ 10mA, 7.5uA, @ 1.5V, 500mW	DIODE ZENER 3.3V 500MW SOD123	ON Semiconductor	MMSZ4684T1G
32	1	D6	LED RED, 0402 (1005 Metric), 20mA	LED RED CLEAR 0402 SMD	Würth Electronics Inc.	150040RS73240
33	1	D7	SMBJ36CA DO-214AA, SMB, 600W	TVS DIODE 36V 58.1V DO214AA	Littelfuse Inc.	SMBJ36CA
34	1	D8	SMC30J18CA, DO-214AB, SMC, 3000W (3kW)	TVS DIODE 18VWM 29.2VC SMC	ST	SMC30J18CA
35	2	D12 D15	SMC30J36CA, DO-214AB, SMC, 3000W (3kW)	TVS DIODE 36VWM 58.1VC SMC	ST	SMC30J36CA
36	1	FB1	600Ohm@100MH z, 0603 (1608 Metric)	FERRITE BEAD 600 OHM 0603 1LN	Würth Electronics Inc.	742863160
37	1	IC1	IPS4260L, 20-TSSOP (0.173", 4.40mm Width)	QUAD LOW-SIDE INTELLIGENT POWER	ST	IPS4260L
38	1	J1	IN1	TERM BLOCK HDR 2POS 90DEG 5.08MM	Würth Electronics Inc.	691313510002
39	1	J2	IN2	TERM BLOCK HDR 2POS 90DEG 5.08MM	Würth Electronics Inc.	691313510002
40	1	J3	OUT	TERM BLOCK HDR 2POS 90DEG 5.08MM	Würth Electronics Inc.	691313510002
41	1	J4	CON 7X2 pitch 2.54 90G	CONN HEADER R/A 14POS 2.54MM	Samtec Inc.	TSW-107-08-T-D-RA
42	1	J5	CON12	CONN HEADER R/A 12POS 2.54MM	Samtec Inc.	TSW-106-08-T-D-RA
43	1	J6	VCC_MCU	TERM BLOCK HDR 2POS 90DEG 5.08MM	Würth Electronics Inc.	691313510002
44	1	J7	VCC_DI/O	TERM BLOCK HDR 2POS 90DEG 5.08MM	Würth Electronics Inc.	691313510002
45	2	J8 J10	Con2	TERM BLOCK PLUG 2POS 5.08MM	Würth Electronics Inc.	691351500002
46	2	J9 J11	Con2	TERM BLOCK PLUG 2POS 5.08MM (not assembled)	Würth Electronics Inc.	691351500002
47	2	J12 SW2	Dev3 500mA (DC)	SWITCH SLIDE SPDT 500MA 12V	Würth Electronics Inc.	450301014042

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
48	2	L1 L2	47uH, Nonstandard, +/-20%	FIXED IND 47UH 1.03A 260MOHM SMD	Würth Electronics Inc.	7447779147
49	1	Q1	STL42P6LLF6, 8- PowerVDFN, 100W (Tc)	MOSFET P-CH 60V 42A 8POWERFLAT	ST	STL42P6LLF6
50	1	Q2	STS8N6LF6AG, 8-SOIC (0.154", 3.90mm Width), 3.2W (Ta)	MOSFET N- CHANNEL 60V 8A 8SO	ST	STS8N6LF6AG
51	1	R1	10k, 0402 (1005 Metric), 0.063W, 1/16W, +/-5%	CHIP RESISTOR SMD 5% 1/16W 0402 (not mounted)	Yageo	RC0402FR-0710KL
52	2	R2 R3	1k, 0402 (1005 Metric), 0.063W, 1/16W, +/- 5%	CHIP RESISTOR SMD 5% 1/16W 0402	Vishay	CRCW04021K00FKED
53	1	R4	10k, 0402 (1005 Metric), 0.063W, 1/16W, +/-5%	CHIP RESISTOR SMD 5% 1/16W 0402	Yageo	RC0402FR-0710KL
54	2	R5 R6	0402 (1005 Metric), 0.063W, 1/16W Jumper	RES SMD 0 OHM JUMPER 1/16W 0402	Yageo	RC0402JR-070RL
55	3	R7 R8 R9	2.7k, 0402 (1005 Metric), 0.063W, 1/16W, +/- 1%	CHIP RESISTOR SMD 1% 1/16W 0402	Yageo	RC0402FR-072K7L
56	1	R12	2.7k, 0402 (1005 Metric), 0.063W, 1/16W, +/-5%	CHIP RESISTOR SMD 5% 1/16W 0402	Yageo	RC0402FR-072K7L
57	2	R15 R16	1.1k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603FR-071K1L
58	4	R17 R19 R21 R22	8k2, 0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Panasonic Electronic Components	RMCF0603FT8K20
59	1	R18	68k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	RES SMD 68K OHM 1% 1/10W 0603	Yageo	RC0603FR-0768KL
60	1	R20	0603, 0.1W, 1/10W Jumper	0 OHM JUMPER 0603	Yageo	RC0603JR-070RL
61	7	R23 R26 R34 R35 R40 R42 R45	30k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Vishay	CRCW060330K0FKEA
62	4	R24 R30 R43 R50	8.2k, 0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Panasonic Electronic Components	RMCF0603FT8K20
63	1	R25	49.9k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Vishay	CRCW060349K9FKEA
64	2	R27 R36	100, 0402 (1005 Metric), 0.063W, 1/16W, +/-5%	CHIP RESISTOR SMD 5% 1/16W 0402	Vishay	RC0402FR-07100R
65	4	R28 R37 R47 R52	39, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	CHIP RESISTOR SMD 1% 1/16W 0402	Vishay	CRCW040239R0FKED

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
66	1	R29	4.7k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Stackpole	RMCF0603FT4K70
67	2	R32 R33	2.7k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	RES SMD 2.7K OHM 1% 1/10W 0603	Yageo	RC0603FR-072K7L
68	1	R38	220k, 0603 (1608 Metric), 0.1W, 1/10W, +/-0.1%	RES SMD 220K OHM 0.1% 1/10W 0603	Panasonic Electronic Components	ERA-3AEB224V
69	1	R39	100k, 0603 (1608 Metric), 0.1W, 1/10W, +/-0.1%	RES SMD 62K OHM 0.1% 1/10W 0603	Yageo	RT0603BRD07100KL
70	1	R41	10k, 0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Panasonic Electronic Components	ERJ3GEYJ103V
71	2	R44 R58	180k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603FR-07180KL
72	2	R46 R59	0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603JR-070RL
73	1	R48	3.16k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603FR-073K16L
74	2	R49 R60	57.6k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603FR-0757K6L
75	1	R51	10.2k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603FR-0710K2L
76	1	R53	19.1k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Bourns	CR0603-FX-1912ELF
77	1	R54	1.5k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	RES SMD 1.5K OHM 1% 1/10W 0603	Yageo	RC0603FR-071K5L
78	1	R55	0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Yageo	RC0603JR-070RL
79	1	R56	1k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	CHIP RESISTOR SMD 1% 1/10W 0603	Yageo	RC0603FR-071KL
80	1	R57	100k, 0603 (1608 Metric), 0.1W, 1/10W, +/-5%	CHIP RESISTOR SMD 5% 1/10W 0603	Yageo	RC0603JR-07100KL
81	1	R61	2.7k, 0402 (1005 Metric), 0.063W, 1/16W, +/-1%	RES SMD 2.7K OHM 1% 1/16W 0402	Yageo	RC0402FR-072K7L
82	1	R62	20kOhms, 50 V, 62.5 mW (1/16 W), +/-1%	Thick Film Resistors - SMD 20K OHM 1%	Yageo	RC0402FR-0720KL
83	1	SW1	1437566, 3 6.00mm x 3.50mm	SWITCH TACTILE SPST-NO 0.05A 24V	TE Connectivity ALCOSWITCH Switches	1437566-3 (FSMSMTR)

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
84	31	TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8 TP9 TP10 TP11 TP12 TP13 TP14 TP15 TP16 TP17 TP18 TP19 TP20 TP21 TP22 TP23 TP24 TP25 TP26 TP27 TP28 TP29 TP30 TP31	5001, 0.100" Dia x 0.180" L (2.54mm x 4.57mm)	TEST POINT PC MINI .040"D BLACK	Keystone Electronics	5001
85	1	U1	STM32G431RBT 3, 64-LQFP	IC MCU 32BIT 128KB FLASH 64LQFP	ST	STM32G431RBT3
86	1	U2	MCU Programmer	CONN HEADER SMD 14POS 1.27MM	Samtec Inc.	FTSH-107-01-L-DV-K
87	2	U3 U4	CLT03-1SC3, SOT-23-8	SINGLE LINE SELF POWERED DIGITAL	ST	CLT03-1SC3
88	1	U5	IPS1025H, PSSO24	High Side Switch with smart driving for capacitive loads	ST	IPS1025H
89	4	U6 U7 U33 U35	TSZ121ILT, SC-74A, SOT-753	IC OPAMP ZER- DRIFT 1CIRC SOT23-5	ST	TSZ121ILT
90	10	U8 U9 U10 U11 U12 U13 U14 U15 U16 U17	STISO621WTR, 8-SOIC (0.295", 7.50mm Width)	DUAL CHANNEL DIGITAL ISOLATOR	ST	STISO621WTR
91	14	U18 U19 U20 U21 U22 U23 U24 U25 U26 U27 U28 U29 U30 U31	SN74AUP1G08 SC-74A, SOT-753	IC GATE AND 1CH 2-INP SOT23-5	Texas Instruments	SN74AUP1G08DBVT
92	2	U32 U37	L7983PUR, 10- WDFDN Exposed Pad	60 V 300 MA SYNCHRONOUS STEP-DOW	ST	L7983PUR
93	2	U34 U38	LD39150DT33-R, TO-252-3, DPak, SC-63	IC REG LINEAR 3.3V 1.5A DPAK	ST	LD39150DT33-R
94	1	U36	STM802RM6F, 8- SOIC (0.154", 3.90mm Width)	IC SUPERVISOR 1 CHANNEL 8SOIC	ST	STM802RM6F
95	1	U39	STTS751-0DP3F, 6-UDFN	SENSOR TEMPERATURE SMBUS 6UDFN	ST	STTS751-0DP3F
96	1	Y1	48MHz 4-SMD, No Lead	CRYSTAL 48.000MHZ 18PF SMD	Abracon LLC	ABM8-48.000MHZ-B2-T
97	1	PCB not Reference	4-layer-TG140, 78.00 x 103.5 x 1.55mm	4 Layer TG 150- Impedence controller zone, All copper Thickness 35 micron	Massive PCB Technologies LTD	ACTUATION AB0123.B.01

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