

## Bill of materials

**Table 1. X-NUCLEO-OUT07A1 bill of materials**

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
1	10	C1 C2 C3 C4 C5 C14 C15 C16 C17 C18	100nF, 0603 (1608 Metric), 16V, +/-10%	CAPACITOR CERAMIC SMD 0603	Würth Electronics Inc.	885012206046
2	4	C6 C7 C8 C9	1pF, 0603 (1608 Metric), 50V	CAPACITOR CERAMIC SMD 0603	Würth Electronics Inc.	885012006045
3	0	C19	47uF (N.M.), Radial, Can, 100V, +/-20%	CAP 47 UF 20% 100 V (not mounted)	Würth Electronics Inc.	860040875002
4	1	C10	2.2uF, 1210 (3225 Metric), 100V, +/-10%	CAP CER 2.2UF 100V X7R 1210	Würth Electronics Inc.	885012209071
5	0	C11 C12	4700pF, 1825 (4564 Metric), 3000V (3kV), +/-10%	CAP CER 4700PF 3KV X7R 1825 (not mounted)	Vishay Vitramon	HV1825Y472KXHATHV
6	1	C13	0.1uF, 0805 (2012 Metric), 100V, +/-10%	CAP CER 0.1UF 100V X7R 0805	Würth Electronics Inc.	885012207128
7	3	C20, C21, C22	4.7u, F 0805 (2012 Metric), 10V, +/-10%	CAP CER 4.7UF 10V X7R 0805	Würth Electronics Inc.	885012207025
8	1	L1	6.8uH, 0.18A, +/-10%	INDUCTOR, 6.8UH, 10%, 0.18A, 43MHZ	Würth Electronics Inc.	74476406
9	1	DC1	PES1-S5-D5-M, 10-SMD Module, 6 Leads, 1W	DC DC CONVERTER +/-5V 1W	CUI Inc.	PES1-S5-D5-M-TR
10	3	CN1 CN2 CN3	691214110002, 7.4X7 pitch 3.5	TERM BLK 2POS SIDE ENT 3.5MM PCB	Würth Electronics Inc.	691214110002
11	0	CN4	691214110002, 7.4X7 pitch 3.5	TERM BLK 2POS SIDE ENT 3.5MM PCB (not mounted)	Würth Electronics Inc.	691214110002
12	1	CN5	SSQ-110-04-F-S	CONN RCPT 10POS 0.1 GOLD PCB	Samtec Inc.	SSQ-110-04-F-S
13	2	CN6 CN9	SSQ-108-04-F-S	CONN RCPT 8POS 0.1 GOLD PCB	Samtec Inc.	SSQ-108-04-F-S
14	0	CN7 CN10	SSQ-119-04-L-D	CONN RCPT 38POS 0.1 GOLD PCB (not mounted)	Samtec Inc.	SSQ-119-04-L-D
15	1	CN8	SSQ-106-04-F-S	CONN RCPT 6POS 0.1 GOLD PCB	Samtec Inc.	SSQ-106-04-F-S

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16	1	D5	STPS1H100A, DO-214AC, SMA, 1A	DIODE SCHOTTKY 100V 1A SMA	ST	STPS1H100A
17	0	D6	BAT48JFILM, SC-76, SOD-323, 750mV @ 200mA 350mA (DC)	DIODE SCHOTTKY 40V 350MA SOD323 (not mounted)	ST	BAT48JFILM
18	4	D1 D2 D3 D4	150060VS75000, 0603 (1608 Metric), 20mA	LED GREEN CLEAR 0603 SMD	Würth Electronics Inc.	150060VS75000
19	2	D7 D8	150060RS75000, 0603 (1608 Metric), 20mA	LED RED CLEAR 0603 SMD	Würth Electronics Inc.	150060RS75000
20	4	J1 J2 J3 J4	JUMPER-con2- strip-male	JUMPER-CONN HEADER .100 STR 2POS	Würth Electronics Inc.	61300211121
21	0	J5	JUMPER-con2- strip-male	JUMPER-CONN HEADER .100 STR 2POS (not mounted)	Würth Electronics Inc.	61300211121
22	3	J6 J7 J8	con8-2x4-strip- male	CONN HEADER .100 DUAL STR 8POS	Würth Electronics Inc.	61300821121
23	2	J9 J10	con6-2x3-strip- male	CONN HEADER .100 DUAL STR 6POS	Würth Electronics Inc.	61300621121
24	2	R1 R2	4.7k, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	RES SMD 4.7K OHM 1% 1/10W 0603	ANY	ANY
25	5	R4 R20 R21 R22 R23	220k 0603 (1608 Metric) 0.1W, 1/10W 1%	CHIP RESISTOR SMD 1% 1/10W 0603	ANY	ANY
26	4	R5 R6 R7 R8	5.1k 0603 (1608 Metric) 0.1W, 1/10W 1%	RES SMD 5.1K OHM 1% 1/10W 0603	ANY	ANY
27	4	R9 R10 R11 R12	12k 0603 (1608 Metric) 0.1W, 1/10W 1%	RES SMD 12K OHM 1% 1/10W 0603	ANY	ANY
28	4	R13 R14 R15 R16	22k 0603 (1608 Metric) 0.1W, 1/10W 1%	RES SMD 22K OHM 1% 1/10W 0603	ANY	ANY
29	1	R17	120k 0603 (1608 Metric) 0.1W, 1/10W 1%	RES SMD 120K OHM 1% 1/10W 0603	ANY	ANY
30	1	R18	60k 0603 (1608 Metric) 0.1W, 1/10W 1%	RES SMD 60K OHM 1% 1/10W 0603	ANY	ANY
31	1	R19	33k 0603 (1608 Metric) 0.1W, 1/10W 1%	RES SMD 33K OHM 1% 1/10W 0603	ANY	ANY
32	15	R101 R102 R103 R104 R106 R107 R108 R110 R111 R112 R113 R114 R115 R116 R120	100, 0603 (1608 Metric), 0.1W, 1/10W, +/-1%	RES SMD 100 OHM 1% 1/10W 0603	ANY	ANY

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
33	0	R105 R109 R117 R118 R119	100 0603 (1608 Metric) 0.1W, 1/10W 1%	RES SMD 100 OHM 1% 1/10W 0603 (not mounted)	ANY	ANY
34	8	SW1 SW2 SW3 SW4 SW5 SW6 SW7 SW8	con3-strip-male	CONN HEADER VERT 3POS 2.54MM MALE	Würth Elektronik	61300311121
35	1	TP1	5001 0.100" Dia x 0.180" L (2.54mm x 4.57mm)	TEST POINT PC MINI .040"D BLACK	Keystone Electronics	5001
36	1	U1	IPS4260LM IPS4260L, 20- TSSOP (0.173", 4.40mm Width)	QUAD LOW-SIDE INTELLIGENT POWER	ST	IPS4260LM, IPS4260L
37	1	U2	SMC30J30CA, SMC, 3kW	TVS DIODE 33.3V 48.4V SMC	ST	SMC30J30CA
38	4	U3 U4 U5 U6	STISO621, 8- SOIC (0.268", 6.81mm Width)	Dual Channel Digital Isolator	ST	STISO621
39	1	U8	STISO620, 8- SOIC (0.268", 6.81mm Width)	Dual Channel Digital Isolator	ST	STISO620
40	0	U7	ESDA15P60-1U1 M, 2-UDFN	TVS DIODE 13.2V 22.7V 1610 (not mounted)	ST	ESDA15P60-1U1M
41	1	D9	SMAJ33CA, SMA (Jedec DO214- AC)	TVS DIODE 36.7V 53.3V	ST	SMAJ33CA
42	1	D10	SMAJ18CA, SMA (Jedec DO214- AC)	TVS DIODE 20.0V 29.2V	ST	SMAJ18CA
43	27	N/A	Shunt, 2.54mm	Close jumper	Würth Electronics Inc.	60900213421

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