

Bill of materials
Table 1. X-NUCLEO-53L9A1 bill of materials

Item	Quantity	Reference	Part/value	Description	Manufacturer	Order code
1	1	R17	1k	RES, 1k, 1%, 1/16W, 0402	Stackpole Electronics	RMCF0402FT1K00
2	5	C1, C2, C7, C8, C22	1uF	CAP, CER, 1uF, 35V, X5R, 0402	Murata	GRM155R6YA105KE11D
3	4	J2, J3, J4, J5	2x1 2.54mm T/H	CONN, HEADER, 2POS, 2.54MM, T/H, VERT	Harwin	M20-9990245
4	1	CN8	2.54mm, T/H, Vert	CONN, HEADER, 06 POS, 6x1, 2.54mm, T/H, VERT	Harwin	M20-9990645
5	2	CN6, CN9	2.54mm, T/H, Vert	CONN, HEADER, 08 POS, 8x1, 2.54mm, T/H, VERT	Harwin	M20-9990845
6	1	CN5	2.54mm, T/H, Vert	CONN, HEADER, 10POS, 10x1, 2.54mm, T/H, VERT	Harwin	M20-9991045
7	2	J1, J6	3x1_2.54mm	CONN HEADER VERT 3POS 2.54MM GOLD	Samtec	TSW-103-07-G-S
8	2	C19, C20	4.7uF	CAP, CER, 4.7uF, 10V, X5R, 0603	Taiyo Yuden	LMK107BJ475KA-T
9	2	R5, R8	10k	RES, 10k, 1%, 1/16W, 0402	Yageo	RC0402FR-0710KL
10	4	C6, C11, C12, C23	10nF	CAP, CER, 10nF, 50V, X7R, 0402	Murata	GCM155R71H103KA55D
11	4	C3, C4, C9, C10	10uF	CAP, CER, 10uF, 6.3V, X5R, 0603	Kemet	C0603C106M9PACTU
12	2	C17, C18	10uF	CAP, CER, 10uF, 10%, 10V, X7R, 0805	Kemet	C0805C106K8RACTU
13	1	Y1	12MHz 50ppm	XTAL OSC XO 12MHZ CMOS SMD	ECS Inc.	ECS-2520MVL-120-CN-TR
14	4	R1, R2, R3, R4	47k	RES, 47k, 1%, 1/10W, 0402	Panasonic	ERJ2RKF4702X
15	5	C13, C14, C15, C16, C21	100nF	CAP, CER, 100nF, 10%, 50V, X7R, 0402	TDK	CGA2B3X7R1H104K050BB
16	1	R16	180k	RES, 180k, 1%, 1/16W, 0402	Yageo	RC0402FR-07180KL
17	6	JP1[1-2], JP2[1-2], JP3[1-2], JP4[1-2], JP5[1-2], JP6[1-2]	Black	Jumper, Pitch 2.54, black, holder, opened top, Grip	Sullins Connector Solutions	NPC02SXON-RC
18	2	TP1, TP2	Clip	TESTPOINT, CLIP, TIN, SMD	Harwin	S1751-46R
19	1	SW2	EVP-AA402W	tactile SMD switch SPST-NO, Compatible footprint with SW0016	Panasonic	EVP-AA402W
20	1	MP2	LASER SAFETY LABEL	PCB1574 LASER SAFETY STICKER, 25mm x 12mm, FONT: ARIAL, 7pt	-	-
21	1	U1	LD39100PU33R, DFN6 (3x3mm)	IC, LDO Voltage Regulator, Fix 3V3 1A, DFN6	ST	LD39100PU33R

Item	Quantity	Reference	Part/value	Description	Manufacturer	Order code
22	1	U4	LDK130M12R, SOT23-5	IC, REG, LDO, 1.2V, 0.3A, SOT23-5	ST	LDK130M12R
23	1	U3	LDK130M18R, SOT23-5	IC, REG, LDO, 1.8V, 0.3A, SOT23-5	ST	LDK130M18R
24	1	U2	LDK130M28R, SOT23-5	IC, REG, LDO, 2.8V, 0.3A, SOT23-5	ST	LDK130M28R
25	2	U5, U6	PI4ULS3V204	4-Bit Bi-directional Level Shifter for open-drain and Push-Pull	Diodes Incorporated	PI4ULS3V204LE
26	1	SW1	SPDT	SWITCH, SLIDE, SPDT, 100mA, 6V	Nidec Copal Electronics	CAS-120TB
27	1	U7	VL53L9CXV0VE/1, OPTICAL LGA	VL53L9 ToF Module	ST	VL53L9CXV0VE/1
28	0	R6, R7, R9, R10, R11, R12, R15	0R	RES, 0R, 1/16W, 0402	Yageo	RC0402JR-070RL
29	0	R13, R14	2.2k	RES, 2.2k, 1%, 1/16W, 0402	Stackpole Electronics	RMCF0402FT2K20
30	0	JP1[2-3], JP6[2-3]	Black	Jumper, Pitch 2.54, black, holder, opened top, Grip	Sullins Connector Solutions	NPC02SXON-RC

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