

## X-NUCLEO-LED61A1

## BOM (1/1)

Item	Quantity	Reference	Part / Value	Voltage / Watt / Ampere	Type / TECHNOLOGY information	Tolerance	Package	Manufacturer	Manufacturer's ordering code / Orderable Part Number	Additional Notes
1	2	CN1,CN2	CON2	10A,300V			Through Hole	TE Connectivity	282836-2	or equivalent
2	1	CN3	CON2				Through Hole	FCI	77311-118-02LF	or equivalent
3	1	CN5	CON10				Through Hole	4UCONN	15286	First choice
								SAMTEC	SSQ-110-03-F-S	
4	2	CN6,CN9	CON8				Through Hole	4UCONN	15284	First choice
								SAMTEC	SSQ-108-03-F-S	
5	2	CN7,CN10	DNM	NOT-ASSEMBLY	NOT-ASSEMBLY		Through Hole	SAMTEC	SSQ-119-04-L-D	NOT-ASSEMBLY
6	1	CN8	CON6				Through Hole	4UCONN	15282	First choice
								SAMTEC	SSQ-106-03-G-S	
7	4	C1,C2,C3,C5	10u	50V	Ceramic X7R	±10%	SMD 1210	Murata	GRM32ER71H106KA12L	or equivalent
8	2	C4,C6	1u	50V	Ceramic X7R	±10%	SMD 0805	Murata	GRM21BR71H105KA12L	or equivalent
9	1	C7	2.2u	25V	Ceramic X5R	±10%	SMD 0603	Murata	GRM188R61E225ME84D	or equivalent
10	1	C9	1u	16V	Ceramic X7R	±10%	SMD 0603	Murata	GRM188R71C105KE15D	or equivalent
11	2	C10,C14	100n	16V	Ceramic X7R	±10%	SMD 0402	Murata	GRM155R71C104KA88D	or equivalent
12	1	C8	100p	50V	COG,NP0	±10%	SMD 0402	TDK Corporation	C1005C0G1H101K050BA	or equivalent
13	3	C12,C11,C13	2.2u	16V	Ceramic X5R	±10%	SMD 0402	TDK Corporation	C1005X5R1C225K050BC	or equivalent
14	1	D1	STPS2L60	2A,60V			SMA	ST	STPS2L60A	
15	2	D2,D4	BAS70K	70mA,70V			SOD-523	ST	BAS70KFILM	
16	1	D3	BZT52C4V3	4.3V	Zener		SOD-123	Diodes Incorporated	BZT52C4V3-7-F	
17	1	D5	LED_RED	5mA,2V			SMD 0603	any	any	
18	1	D6	ESDAULC5	140W	ESD		ST0201	ST	ESDAULC5-1BF4	
19	1	D7	SMM4F	2.4kW			Strmite Flat	ST	SMM4F33A-TR	
20	5	JP1,JP2,JP3,JP4,JP5	SIL3				Through Hole	FCI	68000-103HLF	or equivalent
21	1	L1	22uH in parallel	4A		±20%	SMD (coupled inductor)	BOURNS	SRF1280A-220M	
								Coilcraft	MSD1278-223	
22	1	Q1	STL8N10	7.8A,100V			PowerFlat 2x2	ST	STL8N10LF3	
23	1	Q2	STL3N10	4A,100V			PowerFlat 5x6	ST	STL3N10F7	
24	1	Q3	SFH3710		Phototransistor		SMD-Diode 0805	OSRAM	SFH 3710-3/4-Z	
25	1	R1	220k	1/16W	thick film	±1%	SMD 0402	Stackpole	RMCF0402FT220K	or equivalent
26	1	R2	6.8k	1/16W	thick film	±1%	SMD 0402	Stackpole	RMCF0402FT6K80	or equivalent
27	1	R3	1.5R	0.25W	thick film	±1%	SMD 1206	Stackpole	RMCF1206FT1R50	or equivalent
28	1	R4	2R	0.25W	thick film	±1%	SMD 1206	ROHM	MCR18ERTFL2R00	or equivalent
29	1	R5	2.2R	1/10W	thick film	±5%	SMD 0603	Panasonics	ERJ-3GEYJ2R2V	or equivalent
30	1	R6	0.1R	0.5W	thick film	±1%	SMD 2010	ROHM	MCR25JZHFLR100	or equivalent
31	1	R7	1.5k	1/16W	thick film	±1%	SMD 0402	ROHM	MCR01MRTF1501	or equivalent
32	1	R8	5.6R	1/16W	thick film	±5%	SMD 0402	Yageo	RC0402JR-075R6L	or equivalent
33	1	R9	82k	1/10W	thick film	±5%	SMD 0402	Panasonics	ERJ-2GEJ823X	or equivalent
34	1	R10	330R	1/16W	thick film	±5%	SMD 0402	Stackpole	RMCF0402JT330R	or equivalent
35	1	R11	22k	1/16W	thick film	±5%	SMD 0402	Panasonic	ERJ-2GEJ223X	or equivalent
36	1	R12	510k	1/16W	thick film	±5%	SMD 0402	Stackpole	RMCF0402JT510K	or equivalent
37	2	R13,R19	1M	1/16W	thick film	±5%	SMD 0402	Stackpole	RMCF0402JT1M00	or equivalent
38	1	R14	680R	1/16W	thick film	±5%	SMD 0402	Stackpole	RMCF0402JT680R	or equivalent
39	2	R15,R18	100k	1/16W	thick film	±5%	SMD 0402	yageo	RC0402JR-07100KL	or equivalent
40	1	R16	1k	1/10W	thick film	±5%	SMD 0402	panasonics	ERJ-2GEJ102X	or equivalent
41	1	R17	100R	1/8W	thick film	±5%	SMD 0805	Stackpole	RMCF0805JT100R	or equivalent
42	4	R20,R22,R23,R28	0R				SMD 0805-Nucleo CON			or equivalent
43	3	R21,R24,R29	DNM				SMD 0805-Nucleo CON			NOT-ASSEMBLY
44	1	R25	1k_DNM				SMD 0805-Nucleo CON			NOT-ASSEMBLY
45	1	R26	1k				SMD 0805-Nucleo CON			
46	1	R27	10k	1/16W	thick film	±5%	SMD 0402	yageo	RC0402FR-0710KP	or equivalent
47	7	TP1,TP2,TP3,TP4,TP5,TP6,TP7					Through Hole	Keystone	5002	or equivalent
48	1	U1	LED6001				HTSSOP16	ST	LED6001TR	
49	5	Female Jumper for board configuration	Jumper Female				Female Straight Black Handle	TE Connectivity Or equivalent	p.n. 881545-1	or equivalent