

STEVAL-IDI001V1

BILL OF MATERIALS

Item	Quantity	Reference	Part / Value	Voltage / Watt / Ampere	Type / TECHNOLOGY informations	Tolerance	Package	Manufacturer	Manufacturer's ordering code / Orderable Part Number
1	1	CN1	Not Mount						
2	3	C1,C2,C68	22uF	6,3V	Ceramic XR5		0805	Kemet or equivalent	C0805C226M9PAC7800
3	2	C11,C81	10pF		Ceramic C0G		0402		
4	2	C13,C15	4.7pF		Ceramic C0G		0402		
5	31	C17,C24,C26,C27,C28,C33,C34,C35,C37,C38,C41,C42,C43,C45,C47,C49,C54,C55,C56,C57,C59,C60,C61,C63,C64,C76,C77,C79,C82,C83,C84	100nF		Ceramic X7R		0402		
6	3	C21,C46,C48	2.2uF	6,3V	Ceramic XR5		0402		
7	2	C22,C29	1uF	6,3V	Ceramic XR5		0402		
8	3	C30,C31,C52	10nF		Ceramic X7R		0402		
9	1	C32	4.7uF	6,3V	Ceramic XR5	10%	0603		
10	5	C36,C40,C47,C76,C80	4.7uF	6,3V	Ceramic XR5	20%	0402		
11	1	C39	15pF		Ceramic C0G		0805		
12	1	C40	10uF		Ceramic XR5		0805		
13	1	C58	10uF	6,3V	Tantal		2012-12		
14	1	C69	10uF	25V	Ceramic XR5		1206		
15	1	C70	10uF	6,3V	Ceramic XR5		0603		
16	1	D1	SMM4F18A		Transil		DO-222AA	STMicroelectronics	SMM4F18A
17	1	LED1	LED_R				0603	ROHM or equivalent	
18	2	LED2,D3	LED_G				0603	ROHM or equivalent	SML-D12M8WT86
19	2	D4,D6	STPS140Z		Power Schottky rectifier		SOD123	STMicroelectronics	STPS140Z
20	1	J1	PCB Header 4 pin		PCB Header p2,54				
21	2	J2,J3	GPIO Expansion		PCB Header 1,27x2,54			Harwin	M52-040023W1045
22	3	J4,J5,J14	Not Mount						
23	1	J8	SPI + I2C Bus Expansion		PCB Header 1,27x2,54			Harwin	M52-040023W1045
24	1	J9	Mic Connector		PCB Header 1,27x2,54			Harwin	M52-040023W1045
25	1	L1	3.6uH				3x3mm	Panasonic	ELL6RH3R3M
26	2	L2,L3	3.3uH/870mA				2.8x2.6mm	TDK	VLF3012AT-3R3MR87
27	4	M1,M2,M3,M4	MP34DT01		MEMS audio sensor		3x4mm	STMicroelectronics	MP34DT01
28	12	R1,R4,R8,R13,R16,R21,R26,R33,R36,R37,R58,R68	10K				0402		
29	6	R3,R12,R14,R31,R32,R65	Not Mount				0402		
30	6	R5,R6,R28,R29,R41,R64	0R				0402		
31	1	R10	47K 1%			1%	0402		
32	1	R11	15K 1%			1%	0402		
33	3	R19,R20,R54	470R				0402		
34	7	R22,R23,R24,R25,R27,R66,R67	4K7				0402		

35	1	R30	51K 1%			1%	0402		
36	1	R38	270K 1%			1%	0402		
37	1	R39	41K 1%			1%	0402		
38	1	R40	33K 1%			1%	0402		
39	1	R48	12K 1%			1%	0402		
40	1	R49	30K 1%			1%	0402		
41	1	SW1	RESET					E-SWITCH	TL1015AF160QG
42	1	SW2	SYS_MODE					E-SWITCH	TL1015AF160QG
43	1	U1	IS66WVE4M16BLL		SRAM		VFPGA48	ISSI	IS66WVE4M16BLL
44	1	U2	LDK120xx		200mA very low noise LDO		DFN6	STMicroelectronics	LDK120PU-R
45	1	U3	ST2S08B		Dual power switching regulator		QFN12L	STMicroelectronics	ST2S06BPQR
46	1	U4	USBLC6-2P6		Very low capacitance ESD protection		SOT666	STMicroelectronics	USBLC6-2P6
47	1	U6	USB-MICRO					HIROSE	ZX62-B-5PA
48	1	U7	STM32F439IIH6		STM32F4 Microcontroller		uFPGA176	STMicroelectronics	STM32F439IIH6
49	1	U8	LSM9DS1TR		9 DoF IMU		LGA-24 (4x4x1.0 mm)	STMicroelectronics	LSM9DS1TR
50	1	U11	ST1S03PU		Power switching regulator		DFN6	STMicroelectronics	ST1S03PU
51	1	U12	LPS25HTR		Pressure Sensor		(2.5 x 2.5 x 1.0 mm)	STMicroelectronics	LPS25HTR
52	1	U13	HTS221		Humidity, Temperature		HLGA-6L(2 x 2 x 0.9 mm)	STMicroelectronics	HTS221
53	2	U14,U15	VL6180		Proximity, ALS Sensor		12-pin optical QFN	STMicroelectronics	VL6180V0NR/1
54	1	U16	Micro-SD		Micro-SD			Hirose	DM3D-SF
55	1	U17	STG3820BJR		Quad DPDT analog switch		Flip Chip 30	STMicroelectronics	STG3820
56	1	U18	STG3693		Quad DPDT analog switch		QFN16L	STMicroelectronics	STG3693
57	1	U19	UVIS25		UV Sensor		(2.5 x 2.5 x 1.0 mm)	STMicroelectronics	UVIS25
58	1	X1	16MHz				2.5x2 mm	Epson Toyocom	FA-20H, 16.00MHZ, 10ppm, 9pf
59	1	X2	32.768KHz				3.2x1.5 mm	Epson	FC-13F, 32.768KHZ, 20ppm, 7pF
60	1	X3	Not Mount				2.5x3.2mm	EPSON TOYOCOM	SG-8003CE 12.288MHz PE B

**STEVAL-IDI001V1-exp**

Item	Quantity	Reference	Part / Value	Voltage / Watt / Ampere	Type / TECHNOLOGY informations	Tolerance	Package	Manufacturer	Manufacturer's ordering code / Orderable Part Number
1	1	CN5	HEADER 10					Harwin or equivalent	M20-7821046
2	2	CN6,CN9	HEADER 8					Harwin or equivalent	M20-7820846
3	2	CN7,CN10	HEADER 19x2						
4	1	CN8	HEADER 6					Harwin or equivalent	M20-7820646
5	1	C1	10uF	10V	Ceramic	10%	C_1210		
6	1	C2	220pF				C_0603	Murata or Equivalent	
7	1	C3	330uF	10V	Tantal	10%	7343-43		
8	1	C4	22nF				C_0603	Murata or Equivalent	
9	2	D1,D2	STPS160A				SMA	STMicroelectronics	STPS160A
10	1	D3	LED_G				L_0603	ROHM or equivalent	SML-D12M8WT86
11	1	J1	SensiTron Pow Supply					Harwin or equivalent	M20-9773646

12	1	J2	CAMERA Expansion					Winslow Adaptics	W53482120SA
13	1	J3	GPIO Expansion					Winslow Adaptics	W53482120SA
14	1	J4	Not Mount						
15	1	J5	5V Selector					Harwin or equivalent	M20-9773646
16	1	J6	3V3 Selector					Harwin or equivalent	M20-9773646
17	1	J7	5V --> Vin					Harwin or equivalent	M20-9773646
18	1	J8	SPI + I2C Bus Expansion					Winslow Adaptics	W53482110SA
19	1	J9	Mic Connector					Winslow Adaptics	W53482112SA
20	3	J10,J11,J12	PCB Hole						
21	1	L1	15uH				7x7mm	Panasonic	ELL6SH150M
22	2	R1,R2	4K7				R_0603		
23	1	R3	10K			1%	R_0603		
24	1	R4	3K3			1%	R_0603		
25	1	R5	4K7				R_0603		
26	1	R6	1K				R_0603		
27	6	SB2,SB3,SB10,SB14,SB15,SB33,SB34,SB36,SB37,SB40	Default:Close				R_0603		
28	38	SB1,SB4,SB5,SB6,SB7,SB8,SB9,SB11,SB12,SB13,SB16,SB17,SB18,SB19,SB20,SB21,SB22,SB23,SB24,SB25,SB26,SB27,SB28,SB29,SB30,SB31,SB32,SB35,SB38,SB39,SB41,SB42,SB43,SB44	Default:Open				R_0603		
29	1	U1	L5973D				HSOP8	STMicroelectronics	L5973D