

STEVAL-ISA181V1

BILL OF MATERIALS

Reference	Manufacturer	Part number	Description	Package
R1	Panasonic	ERJ-P08J224V	SMD resistor, 220 kΩ±5%, 0.33 W, 200 Vdc	1206
R2	Vishay	CRCW06030000Z0EB	SMD resistor, 0 Ω 1%, 0.1 W	0603
R3	Vishay	CRCW060310K0FKEA	SMD resistor, 10 kΩ ±1%, 0.1 W	0603
R4	Panasonic	ERJ3GEYJ102V	SMD resistor, 1 kΩ±5%, 0.1 W	0603
R5		Not connected		
R6	TE Connectivity	CRG0603F1M0	SMD resistor, 1 MΩ ±1%, 0.1 W	0603
R7	Panasonic	ERJP03F1203V	SMD resistor, 130 kΩ±1%, 0.2 W	0603
R8	Panasonic	ERJP03F1502V	SMD resistor, 15 kΩ±1%, 0.2 W	0603
R9	Panasonic	ERJ3GEYJ102V	SMD resistor, 1 kΩ±5%, 0.1 W	0603
R10	Panasonic	ERJ3GEYJ102V	SMD resistor, 1 kΩ±5%, 0.1 W	0603
R11	Vishay	CRCW060351K0FKEA	SMD resistor, 51 kΩ ±1%, 0.1 W	0603
R12	Vishay	CRCW060351K0FKEA	SMD resistor, 51 kΩ ±1%, 0.1 W	0603
R13	RS	RS	SMD resistor, 680 kΩ ±1%, 0.1 W	0603
R14	Vishay	CRCW060339K0FKEA	SMD resistor, 39 kΩ ±1%, 0.1 W	0603
R15	Vishay	CRCW060310M0FKEA	SMD resistor, 10 MΩ ±1%, 0.1 W	0603
R16	TE Connectivity	CRG0603F47K	SMD resistor, 47 kΩ ±1%, 0.1 W	0603
R17	Vishay	CRCW060310K0FKEA	SMD resistor, 10 kΩ ±1%, 0.1 W	0603
R18	TE Connectivity	CRG0603F100K	SMD resistor, 100 kΩ ±1%, 0.1 W	0603
R19	Vishay	CRCW06032M20FKEA	SMD resistor, 2.2 MΩ ±1%, 0.1 W	0603
R20	Vishay	CRCW06032M20FKEA	SMD resistor, 2.2 MΩ ±1%, 0.1 W	0603
R21	TE Connectivity	CRG0603F220R	SMD resistor, 220 Ω ±1%, 0.1 W	0603
R22	Vishay	CRCW060310M0FKEA	SMD resistor, 10 MΩ ±1%, 0.1 W	0603
R23	Vishay	CRCW06034M70FKEA	SMD resistor, 4.7 MΩ ±1%, 0.1 W	0603
R24		Not connected		
R25		Not connected		
R26	TE Connectivity	CRG0603F100K	SMD resistor, 100 kΩ ±1%, 0.1 W	0603
R27	Vishay	CRCW060310K0FKEA	SMD resistor, 10 kΩ ±1%, 0.1 W	0603
R28	Vishay	CRCW06034M70FKEA	SMD resistor, 4.7 MΩ ±1%, 0.1 W	0603
R29	Vishay	CRCW06030000Z0EB	SMD resistor, 0 Ω 1%, 0.1 W	0603
R30		Not connected		
C1	Murata	GRM188R71H471KA01D	SMD capacitor, 470 pF ±10%, 50 Vdc	0603
C2	Rubycon	400AX10MEFC10X12.5	TH capacitor, 10 μF ±20%, 400 Vdc, 105°C	10x12.5
C3	Rubycon	400AX10MEFC10X12.5	TH capacitor, 10 μF ±20%, 400 Vdc, 105°C	10x12.5
C4	TDK	C3216C0G2J102JT	SMD capacitor, 1 nF, 630 V	1206
C5	Murata	GRM188R71H221KA01D	SMD capacitor, 220 pF, 16 V	0603
C6	Murata	GRM32ER61E226ME15L	SMD capacitor, 22 μF ±20%, 25 V, X5R	1210
C7	Murata	GRM1885C1H681JA01D	SMD capacitor, 680 pF ±5%, 50 Vdc	0603
C8	Murata	GRM188R71H223KA01D	SMD capacitor, 22 nF ±10%, 50 Vdc	0603
C9	Rubycon	25ZLJ470M10X12.5	TH capacitor, 470 μF ±20%, 25 Vdc, 105 °C	10x12.5
C10	Rubycon	16YXF100M6.3X11	TH capacitor, 100 μF ±20%, 16 Vdc, 105 °C	6.3x11
C11	Murata	GRM188C81E105KAADD	SMD capacitor, 1 μF ±10% 25 Vdc - X6S	0603
C12	Murata	GRM188R71H223KA01D	SMD capacitor, 22 nF ±10%, 50 Vdc	0603
C13	Murata	DE2E3KY222MA2BM01	TH Ceramic X1/Y1 capacitor, 2.2 nF, 250 Vac	Ø8 mm - p5 mm
C14	Murata	GRM188C81E105KAADD	SMD capacitor, 1 μF ±10%, 25 Vdc, X6S	0603
C15	TDK	C2012X5R1E106K125AB	SMD capacitor, 10 μF ±10%, 25 Vdc, X5R	0805
C16	Kemet	C0805C226M9PACTU	SMD capacitor, 22 μF, ±20%, 6.3 Vdc	0805
C17	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1 μF ±10%, 16 Vdc, X7R	0603
C18	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1 μF ±10%, 16 Vdc, X7R	0603
C19	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1 μF ±10%, 16 Vdc, X7R	0603
C20	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1 μF ±10%, 16 Vdc - X7R	0603
C21	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1 μF ±10%, 16 Vdc - X7R	0603
C22	Kemet	C0603C101J5GACTU	SMD capacitor, 100 pF ±5%, 50 Vdc	0603
C23	Kemet	C0603C100J5GACTU	SMD capacitor, 10 pF ±5%, 50 Vdc	0603
C24	Kemet	C0603C563K5RACTU	SMD capacitor, 56 nF ±10%, 50 Vdc	0603
C25	Kemet	C0603C221J5GACTU	SMD capacitor, 220 pF ±5%, 50 Vdc	0603
C26	Kemet	C0603C221J5GACTU	SMD capacitor, 220 pF ±5%, 50 Vdc	0603
C27	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1 μF ±10%, 16 Vdc, X7R	0603
C28	Murata	GRM188C81E105KAADD	SMD capacitor, 1 μF ±10%, 25 Vdc, X6S	0603
C29	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1 μF ±10%, 16 Vdc, X7R	0603
C30		Not connected		
C31	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1 μF ±10%, 16 Vdc, X7R	0603
C32	TDK	C2012X5R1E106K125AB	SMD capacitor, 10 μF ±10%, 25 Vdc, X5R	0805
C33	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1 μF ±10%, 16 Vdc, X7R	0603
C34	Kemet	C0603C221J5GACTU	SMD capacitor, 220pF ±5%, 50 Vdc	0603
C35	Kemet	C0603C221J5GACTU	SMD capacitor, 220pF ±5%, 50 Vdc	0603
C36	Kemet	C0603C221J5GACTU	SMD capacitor, 220pF ±5%, 50 Vdc	0603
C37	Kemet	C0603C221J5GACTU	SMD capacitor, 220pF ±5%, 50 Vdc	0603
C38	Kemet	C0603C104K4RACTU	SMD capacitor, 0.1μF ±10%, 16 Vdc, X7R	0603
C39	Kemet	C0603C221J5GACTU	SMD capacitor, 220pF ±5%, 50 Vdc	0603
BR	Taiwan Semiconductor	RMB6S	Diode bridge	4.9x4
D1	ON Semiconductor	MRA4007T3G	SMD rectifier diode	SMA
D2	STMicroelectronics	BAT41ZFILM	Signal schottky diode, 0.15 A, 100 V	SOD-123
D3	STMicroelectronics	STPS3150U	Schottky diode	SMB
D4	Fairchild Semiconductor	FDLL4148X	Fast rectifier diode	SOD-123
D5	STMicroelectronics	BAT41ZFILM	Signal schottky diode, 0.15 A, 100 V	SOD-123
D6	STMicroelectronics	BAT41ZFILM	Signal schottky diode, 0.15 A, 100 V	SOD-123
D7	STMicroelectronics	BAT41ZFILM	Signal schottky diode, 0.15 A, 100 V	SOD-123
D8	Fairchild Semiconductor	FDLL4148X	Fast rectifier diode	SOD-123

D9		Not connected		
D10	STMicroelectronics	BAT41ZFILM	Signal schottky diode, 0.15 A, 100 V	SOD-123
DZ1	NXP Semiconductors	BZX384	Zener diode, 300 mW	SOD-323
IC1	STMicroelectronics	VIPerOPH	ST Offline Converter Driver	SO16
IC2	STMicroelectronics	STM32L151C6T6	ARM Cortex M3 32MHz 32kByte	LQFP 48 Pin
IC3	STMicroelectronics	LDK320M33	Low Drop Voltage Regulator	SOT3232-5L
IC4	MAXIM	MAX954ESA+	IC, OP-Amp comparator	SO8
TR1	ON Semi	BC817-40LT3G	Bypolar transistor	STO23-3L
TR2	ON Semi	BC817-40LT3G	Bypolar transistor	STO23-3L
REF	STMicroelectronics	TS432ILT	IC, Voltage Reference	SOT-23
OPTO	Vishay	SFH610A-2	Optocoupler	PDIP
DL1	Lite-On	LTST-C170GKT	SMD GREEN LED	0805
OPT_TR	Vishay	TEKT5400S-ASZ	Phototransistor	TH
IRM	sharp	GP1UX310QS	IR receiver module	th
NTC	Ametherm	SL08 20002	20 Ohm NTC	TH P5- 4X9
Tr	Yujingtech	11999-310V600510	TRANSFORMER_EEE-13V (9pin)	EEE13VP-11_1
L1	Würth Elektronik	7447462471	TH axial inductor, 470 uH	th
L3	Würth Elektronik	74404043033A	SMD axial inductor, 3.3 uH	smd
F1	Cooper Bussmann	SS-5H-2-5A-BK	Fuse	th 5x4
M1	TE Connectivity	282837-2	2 way connector	th
M2	TE Connectivity	282837-2	2 way connector	th
M3	TE Connectivity	338068-6	6 pole plug	TH

STEVAL-ISA181V1 IR TX

BILL OF MATERIALS

Reference	Manufacturer	Part Number	Description	Package
BT	RS	597-201	Batteria a bottone RS, CR2032 Litio diossido di manganese 3V, 210mAh	CR2032
BT1a	Keystone	3003	Contatto batteria CR2032, diametro 20mm, per 1 batteria (Coin Cell), montaggio PCB	TH
C1a	TDK	C2012X5R1E106K125AB	10µF ±10% 25 Vdc - X5R	0805
C2a	Kemet	C0603C104K4RACTU	0,1µF ±10% 16Vdc - X7R	0603
C3a	Kemet	C0603C104K4RACTU	0,1µF ±10% 16Vdc - X7R	0603
C4a	Kemet	C0603C104K4RACTU	0,1µF ±10% 16Vdc - X7R	0603
C5a	Kemet	C0603C104K4RACTU	0,1µF ±10% 16Vdc - X7R	0603
C6a	Murata	GRM188C81E105KAADD	1µF ±10% 25 Vdc - X6S	0603
C7a	Kemet	C0603C104K4RACTU	0,1µF ±10% 16Vdc - X7R	0603
DL1a	Lite-On	LTST-C170GKT	LED Lite-On serie CHIPLED 0805 Verde, 2,1 V, copertura 130°, SMD	2012 (0805)
DL2a	Vishay	TSHG5410	LED IR Vishay TSHG5410 foro passante, 2 pin, intensità 900mW/sr, 850nm, 5mm	TH 5MM
IC1a	STMicroelectronics	STM32L051K6	STM32L051K6_LQFP32	LQFP32
M1a	TE Connectivity	338068-6	Zoccolo circuito stampato 6 POLI	TH
P1a	Omron	B3S-1000	Interruttore tattile B3S-1000, SPST-NA, corrente nominale 0,05 A a 24 V cc	smd
Q1a	NXP	BC817,215	Transistor bipolare NXP BC817,215, TO-236AB, 3 pin	TO-236AB
R1a	Panasonic	ERJ3GEYJ102V	1kΩ±5% - 0.1W	0603
R2a	Vishay	CRCW060351R0FKEA	Resistore SMD a film spesso Vishay 51Ω ±1%, 0,1W, 0603, serie CRCW	0603
R3a	Panasonic	ERJ03F1203V	130kΩ±1% - 0.2W	0603
R4a	Bourns	CRL0603-JW-3R30ELF	Resistore SMD a film spesso Bourns 3,3Ω ±5%, 0,1W, 0603	0603
R5a	Vishay	CRCW060310K0FKEA	10kΩ ±1%, 0,1W	0603
R6a	TE Connectivity	CRG0603F100K	100kΩ ±1%	0603