

**STEVAL-ISA125V1 Bill of materials**

Reference	Part	Description	Manufacturer
BR1	DF06M	600 V 1 A diodes bridge	VISHAY
C1, C13		100 nF X2 capacitor	EVOX RIFA
C3		47 $\mu$ F 450 V electrolytic capacitor	PANASONIC
C4		22 $\mu$ F 35 V electrolytic capacitor	PANASONIC
C5, C9		Not mounted	
C6		3.3 nF 25 V ceramic capacitor	EPCOS
C7		33 nF 50 V ceramic capacitor	EPCOS
C8		2.2 nF Y1 capacitor	CERAMITE
C14, C15	MCZ series	1000 $\mu$ F 10 V ultra-low ESR electrolytic capacitor	RUBYCON
C10		100 $\mu$ F 10 V electrolytic capacitor	PANASONIC
C11		4.7 nF 100 V ceramic capacitor	EPCOS
C12		2.2 $\mu$ F 50 V electrolytic capacitor	PANASONIC
C16		2.2 nF 100 V ceramic capacitor	AVX
D1	BAT46	Diode	STMicroelectronics
D2	1N4148	Small-signal, high-speed diode	NXP
D3	STTH1L06	Ultra-fast, high-voltage diode	STMicroelectronics
D4	STPS5L40	5 A - 40 V power Schottky rectifier	STMicroelectronics
D5	1.5KE300	Transil	STMicroelectronics
Dz	BZX79-C18	18 V Zener diode	NXP
F1	TR5 250 V 500 mA	Fuse	SCHURTER
L1	RFB0807-2R2L	2.2 $\mu$ H	COILCRAFT
NTC1		2.2 $\Omega$ thermistor	EPCOS
OPTO1	PC817D	Opto coupler	SHARP
R1		4.7 $\Omega$ 1/4 W axial resistor	
R3		68 k $\Omega$ 1/4 W axial resistor	
R6		15 k $\Omega$ 1/4 W axial resistor	
R8		82 k $\Omega$ 1/4 W axial resistor 1% tolerance	
R9		27 k $\Omega$ 1/4 W axial resistor 1% tolerance	
R10		560 k $\Omega$ 1/4 W axial resistor	
R12		10 k $\Omega$ 1/4 W axial resistor	
R13		3.3 k $\Omega$ 1/4 W axial resistor	
R14		330 k $\Omega$ 1/4 W axial resistor	
R15		2 M $\Omega$ 1/4 W axial resistor	
Rz		68 $\Omega$ 1/4 W axial resistor	

**Bill of materials (continued)**

<b>Reference</b>	<b>Part</b>	<b>Description</b>	<b>Manufacturer</b>
T2	BU16-4530R5BL	Common mode choke	COILCRAFT
VR1	TS431	Voltage reference	STMicroelectronics
U1	VIPER28LN	Offline high voltage controller	STMicroelectronics
T1	1338.0019	Switch mode power transformer	MAGNETICA