

Bill of materials
Table 1. STEVAL-VP319X1B bill of materials

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
1	1	IN	I. 11.36mm - w. 10.0mm - d. 8.1mm - p. 5.08 mm 300 Vac 14 A	Through hole input connector	Würth Elektronik	691213510002
2	1	OUT	I. 11.36mm - w. 10.0mm - d. 8.1mm - p. 5.08 mm 300 Vac 14 A	Through hole input connector	Würth Elektronik	691213510002
3	1	D1	MRA4007T3G DO-214AC 1000 V 1 A	General purpose diode	ON Semiconductor	MRA4007T3G
4	1	D2	MRA4007T3G DO-214AC 1000 V 1 A	General purpose diode	ON Semiconductor	MRA4007T3G
5	1	D3	BAT46ZFILM SOD-123 100 V 0.15 A	General purpose signal Schottky diode	ST	BAT46ZFILM
6	1	D4	STTH1L06A SMA 600 V 1 A	Low drop ultra-fast diode	ST	STTH1L06A
7	1	D5	STTH1L06A SMA 600 V 1 A	Low drop ultra-fast diode	ST	STTH1L06A
8	1	R1	10 ohm through hole 1 W $\pm 5\%$	Inrush resistor	TE Connectivity	ROX1SJ10R
9	1	R2	180 kohm 0603 0.1 W $\pm 1\%$	SMD resistor	Vishay	CRCW0603180KFKEA
10	1	R3	22 kohm 1206 0.25 W $\pm 1\%$	SMD resistor	Vishay	CRCW120622K0FKEA
11	1	R4	22 kohm 0603 0.1 W $\pm 1\%$	SMD resistor	Vishay	CRCW060322K0FKEA
12	1	R5	56 kohm 0603 0.1 W $\pm 1\%$	SMD resistor	Vishay	CRCW060356K0FKEA
13	1	R6	5.6 kohm 0805 0.125 W $\pm 1\%$	SMD resistor	Vishay	CRCW08055K60FKEA
14	1	C1	10 μ F through hole, d = 10 mm, p = 5 mm, h = 16 mm 400 Vcc $\pm 20\%$	Electrolytic capacitor	Würth Elektronik	860241375002
15	1	C2	10 μ F through hole, d = 10mm, p = 5mm, h = 16mm 400Vcc $\pm 20\%$	Electrolytic capacitor	Würth Elektronik	860241375002
16	1	C3	4.7 μ F 1206 50 Vcc $\pm 10\%$	Multi-layer ceramic capacitor	Kemet	C1206C475K5PACTU
17	1	C4	100 pF 0805 50 Vcc $\pm 10\%$	Multi-layer ceramic capacitor	Würth Elektronik	885012207080
18	1	C5	Not connected	Capacitor	-	-
19	1	C6	330 pF 0603 50 Vcc $\pm 10\%$	Multi-layer ceramic capacitor	Würth Elektronik	885012206080
20	1	C7	22 nF 0603 50 Vcc $\pm 10\%$	Multi-layer ceramic capacitor	Würth Elektronik	885012206091
21	1	C8	220 nF 1206 50 Vcc $\pm 10\%$	Multi-layer ceramic capacitor	Kemet	C1206C224K5RACTU
22	1	C9	680 μ F through hole, d = 8 mm, p. = 3.5 mm; hole: 0.7 mm 10 Vcc $\pm 20\%$	Electrolytic capacitor with ultra-low ESR	Rubycon	10ZLH680MEFC8X11.5
23	1	L1	1 mH through hole, $\varnothing 5.2$ m - lungh. 14.8 mm 0.2 A $\pm 5\%$	Small signal inductor	Epcos	B82144A2105J000
24	1	L2	270 μ H t. h., d = 11mm, p = 6 mm, h = 11.5 mm, hole: 0.8 mm 1.3 A $\pm 1\%$	Power inductor	Coilcraft	RFB1010-271L
25	1	IC1	VIPER319XDTR SO16N	Energy saving off-line high voltage converter	ST	VIPER319XDTR

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