

STEVAL-ISA142V1 Bill of material

Des.	Part type/part value	Case/package	Description	Supplier
BR1	GBU 4K	Style GBU	Bridge rect. 4 A 800 V	Vishay
Conn .1	V _{AC} -IN	MKDS 1.5/2-5.08-PS.5.08	Conn.MKDS 1.5/2-5.08-PS.5.08	Phoenix
Conn .2	V _{DC} -OUT	MKDS 1/2-3.81-PS.3.81	Conn.MKDS 1/2-3.81 - PS.3.81	Phoenix
C1	220 nF	DWG	X2 filmcap-R46-560 V _{DC} PS15	Arcotronics
C3	220 nF	DWG	X2 filmcap R46-560 V _{DC} PS15	Arcotronics
C5	220 nF	DWG	X2 filmcap R46-560 V _{DC} PS15	Arcotronics
C2	3300 uF	DWG	Aluminium Elcap 105 °C	Panasonic
C4	3300 uF	DWG	Aluminium Elcap 105 °C	Panasonic
C6	33 uF	DWG	Aluminium Elcap 105 °C	Rubycon
C7	2.2 nF	DWG	CERCAP.X1/Y1 +- 20% B-PS10	Vishay
C10	2.2 nF	DWG	CERCAP.X1/Y1 +- 20% B-PS10	Vishay
C11	2.2 nF	DWG	CERCAP.X1/Y1 +- 20% B-PS10	Vishay
C8	68 uF	DWG	Aluminium Elcap 105 °C	Panasonic
C9	100 uF	DWG	Aluminium Elcap 105 °C	Rubycon
C12	470 pF	1206	Aluminium Elcap 105 °C-X7R 10% 1206-SMD	AVX
C13	47 pF	1206	CAP.HV-COG-NP0-10% EIA1206-SMD	AVX
C14	10 nF	0805	CERCAP-X7R 10%-EIA0805-SMD	Murata
C26	470 nF	0805	CERCAP-X7R 10%-EIA0805-SMD	Murata
C16	1 uF	0805	CERCAP-X7R 10%-EIA0805-SMD	Murata
C17	2.2 uF	1206	CERCAP-X7R 10%-EIA1206-SMD	Murata
C18	0.22 uF	1206	CERCAP.X7R 10% EIA1206-SMD	Kemet
C20	3.3 nF	0805	CAP.X7R 10% EIA0805-SMD	Kemet
C21	2.2 nF	0805	CAP.X7R 10% EIA0805-SMD	Kemet
C22	10 uF	1206	CERCAP-X5R 10%-EIA1206-SMD	Murata
C23	1 uF	1206	CERCAP-X7R 10%-EIA1206-SMD	Murata
C28	150 nF	1206	CERCAP-X7R 10%-EIA1206-SMD	Murata
DZ1	1.5KE300A	DO201	TVS.-UNID.1500 Wp	ST
DZ2	BZV55-B18	SMD	Diode-Zener-2%-Sz 14.4 mV/K-SMD	NXP
DZ4	BZV55-B18	SMD	Diode-Zener-2%-Sz 14.4 mV/K-SMD	NXP
DZ3	BZV55-B27	SMD	Diode-Zener-2%-Sz 22.7 mV/K-SMD	NXP
DZ6	BZV55-B5V1	SMD	Diode-Zener-2%-Sz 6.4 mV/K-SMD	NXP
D1	STPS20H100CFP	TO220	Diode-Schottky-Vf 0,77 V@25 °C 10 A	ST
D2	MRA4007	SMD	Diode-Rect.SMD-MKR17	ON-MRA4007T3

Bill of material (continued)

Des.	Part type/part value	Case/package	Description	Supplier
D3	STTH108A	SMD	Diode-ultrafast-75nS-SMD-MK H08	ST
D5	BAT46J	SMD	Diode-Schottky-SMD-MK 46	ST
D6	BAT46J	SMD	Diode-Schottky-SMD-MK 46	ST
D7	LL4148	SMD	Diode-fast-4nS-COL. B/G-SMD	Fairchild
D8	LL4148	SMD	Diode-fast-4nS-COL. B/G-SMD	Fairchild
D9	NM	Not mounted		
F1	Fuse	DWG	Fuse A 250 V 8.5x4-392/TE05-time-lag	Littelfuse
HS1	Heatsink	DWG	Heatsink for BR1&Q1	Magnetica
HS2	Heatsink	DWG	Heatsink for D1	Magnetica
J1	PS20mm	Jumper 0 Ω	Jumper 0 Ω	
J2	PS12mm	Jumper 0 Ω	Jumper 0 Ω	
J3	PS5mm	Jumper 0 Ω	Jumper 0 Ω	
J6	PS5mm	Jumper 0 Ω	Jumper 0 Ω	
J9	PS5mm	Jumper 0 Ω	Jumper 0 Ω	
J4	PS10mm	Bridge 0 Ω	Bridge 0 Ω	
J5	PS21mm	Jumper 0 Ω	Jumper 0 Ω	
J7	PS7.5mm	Jumper 0 Ω	Jumper 0 Ω	
J8	PS7.5mm	Jumper 0 Ω	Jumper 0 Ω	
L1	19mH-1942.0003	DWG	Com.mode chokes-270 V _{AC} max.	Magnetica
L2	3uH-1071.0080	DWG	Diff.chokes-drum core-10 mO hm	Magnetica
L3	320uH-1228.0024	DWG	Differential chokes	Magnetica
PTC1	680	0805	PTC-680 Ω 90 °C SMD	Epcos
Q1	STF11NM80	TO220FP	MOSF-N-0.4 Ω - tr/ff 17/15ns-Ins.2500 V _{DC}	ST
Q2	STN1HNK60	TO92	MOSF-N-8 Ω - MK-N1HNK60	ST
Q3	BC847C	SMD	BJT.NPN SMD-MK1G	NXP
R1	2.2 M	PTH	Res.1%	Vishay
R2	100 K	PTH	Res.1%	Vishay
R3	4.7 M	1206	Res.1%-200 V _{AC/DC} -EIA1206-SMD	Vishay
R4	4.7 M	1206	RES.1%-200 V _{AC/DC} -EIA1206-SMD	Vishay
R5	2.2 M	1206	Res.1%-200 V _{AC/DC} -EIA1206-SMD	Vishay
R8	2.2 M	1206	Res.1%-200 V _{AC/DC} -EIA1206-SMD	Vishay
R7	1.2 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R10	0.33	1210	Res.1% EIA1210-SMD	Panasonic
R11	100	1206	Res.1%-200 V _{AC/DC} -EIA1206-SMD	Vishay
R12	56 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay

Bill of material (continued)

Des.	Part type/part value	Case/package	Description	Supplier
R13	51 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R14	1 M	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R15	1.5 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R16	1 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R17	10	1206	Res.1%-200 V _{AC/DC} -EIA1206-SMD	Vishay
R19	22	1206	Res.1%-200 V _{AC/DC} -EIA1206-SMD	Vishay
R20	0	1206	Res.1%-200 V _{AC/DC} -EIA1206-SMD	Vishay
R21	100 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R22	10	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R23	10	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R25	0	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R26	470	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R28	33 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R29	6.2 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R30	2.2 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R31	4.7 K	1206	Res.1%-200 V _{AC/DC} -EIA1206-SMD	Vishay
R32	470 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R33	56 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R34	Not mounted	Not mounted		
R35	22 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R39	4.7 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R42	3.9 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
R43	10 K	0805	Res.1%-150 V _{AC/DC} -EIA0805-SMD	Vishay
T1	1972.0008	Power transformer	Transf. flyback 24 V/2.1 A-50 Khz-450 uH	Magnetica
U1	ISP817XD	OPTOIS.35V CTR300-	OPTOIS.35 V CTR300-600% PS.300 mls	Isocom
U2	L6564	SSOP-10	Transition-mode PFC controller	ST
U4	TS2431A	SOT23	PROG. Shunt voltage reference	ST
VR1	275 V	DWG	VDR-275 V _{AC} -350 V _{DC} -40 J(10/1000usec)D7 mm	Panasonic

Note: C28 and R43 have been added as a new reworking position.