



Bill of Materials for the NCP1623PFC150WGEVB Evaluation Board

Item	Qty	Reference	Type	Part Name	Package	MFR	Value	Description
1	1	T1	PFC Inductor	EQ20	TH type	Custom	EQ20, 160uH	EQ20, 10Pin bobbin
2	1	C15	Ceramic Capacitor	/885012206095	603	Wurth	0.1uF	Capacitor, Ceramic, 50V, 10%
3	1	C37	Ceramic Capacitor	/885012206073	603	Wurth	0.22uF	Capacitor, Ceramic, 25V, 10%
4	2	C1 C5	Film Capcitor	ECWFD2W684Q	THT, 10mm, 13mmx6mmx12mm	Panasonic	0.68u,450v	Film capacitor
5	1	C59	Ceramic Capacitor	/885012206084	603	Wurth	1.5nF	Capacitor, Ceramic, 50V, 10%
6	1	C33	Ceramic Capacitor	/885012206077	603	Wurth	100pF	Capacitor, Ceramic, 50V, 10%
7	2	C31 C47	Ceramic Capcitor	C3216X7T2W104K	1206	TDK	104,450V	Capacitor, Ceramic, SMD, 5%
8	1	C21	Ceramic Capacitor	/885012206076	603	Wurth	1uF,25V	Capacitor, Ceramic, 25V, 10%
9	1	C36	Ceramic Capacitor	/885012106018	603	Wurth	2.2uF	Capacitor, Ceramic, 16V, 10%
10	1	C58	Ceramic Capcitor	C3216C0G2J221J	1206	TDK	220pF,630V	Capacitor, Ceramic, SMD, 5%
11	1	C25	X2 Capcitor	/890324024002	THT, 12.5mm, 15mmx7mmx12mm	Wurth	224,X2	X2 capacitor, Safety standard approved, 10%
12	1	C2	Ceramic Capacitor	C1608XR1E475K080AC	603	TDK	4.7uF,25V	Capacitor, Ceramic, 25V, 10%
13	1	C42	Ceramic Capacitor	Std	603	Wurth	nc	Capacitor, Ceramic, 50V, 10%
14	2	D2 D4	Bridge rectifier	Z4GP40MH	Z4PAK	ZOWIE	4A,1000V	Bridge Rectifier, 1000V, 4A
15	1	D9	Rectifier	S3J	SMC	ON	3A,600V	General Rectifier
16	1	DNR	Varistor	820573011	TH	Wurth	10D471K	Varistor, 10D471K
17	2	D12-13	Standard rectifier	na	SOD123FL	std	0.8A,600V	General Rectifier, 0.8A, 600V
18	1	D23	Switching diode	BAS21HT1G	SOD323	ON	0.2A,250V	Switching diode, SMD
19	1	FB2	Ferrite bead	742792511	1812	Wurth	120ohm@100M, 3A	120ohm@100MHz
20	1	L1	Common filter	Custom	TH	Custom	30uH	T type, 8*4*3 NiZn core
21	1	L2	Common filter	SQ1212	TH type	Std	10mH	CM Filter, SQ1212, 8*11 pin instance
22	1	F1	Fuse	std	Axial lead	std	3.15A, 250Vac	Micro Fuse, 3.15A/250V
23	1	D3	Ultrafast Rectifier	MURD550PFG	DPAK	ON	5A, 520V	Ultrafast Rectifier, 5A, 520V
24	1	U2	Driver GaN	NCP58920	QFN26	ON	650V	Driver GaN, 150mohm
25	1	U1	PFC Controller	NCP1623ADR2G	SO8	ON		PFC controller, SO8
26	1	L3	Toroidal Line Choke	T050125-100Uh-070-L	TH type	Yirusen	100uH	KoolMu Toroidal, Die13mm, DCR 30mohm
27	1	R47	Resistor	Std	603	Std	0	Resistor, Chip, 1/10W, 1%
28	2	R39 R56	Resistor	Std	603	Std	22K	Resistor, Chip, 1/10W, 1%
29	1	R16	Resistor	Std	603	Std	36k	Resistor, Chip, 1/10W, 1%
30	1	R52	Resistor	Std	603	Std	62K	Resistor, Chip, 1/10W, 1%
31	1	R64	Resistor	Std	603	Std	820K	Resistor, Chip, 1/10W, 1%
32	2	R50-51	Resistor	ERJ8BSFR18V	1206	Panasonic	0.18	Resistor, Chip, 1/2W, 1%
33	1	R40	Resistor	Std	1206	Std	1.6M	Resistor, Chip, 1/4W, 1%
34	3	R60 R62-63	Resistor	std	1206	std	2.2M	Resistor, Chip, 1/4W, 1%
35	1	R41	Resistor	Std	1206	Std	2M	Resistor, Chip, 1/4W, 1%
36	1	R42	Resistor	std	1206	std	2M	Resistor, Chip, 1/4W, 1%
37	2	R31-32	Resistor	std	1206	std	na	Resistor, Chip, 1/4W, 1%
38	1	C32	Electrolytic electrolytic capacitor	420BXW82MEFR18X25	18mmx25mm	Rubycon	82uF,420V	size:18mmx25mm
39	1	SW	Resistor	std	603	std	0	switching, replaced by 0 ohm