

Bill of Materials

TI DESIGNS
TIDM-2PHILPFC

Item	Macro Name	Ref. Des	Type	Description	# needed per macro	# needed per board	Digikey Part #	Mouser Part #	Newark	Comments
MAIN BOARD										
1	PFC Main Board [Rev1]	H1	J	100 pin DIMM socket - Molex 0876301001	1	1		538-87630-1001		
2	PFC Main Board [Rev1]	M2	M	AuxSupply-400Vin-to-12V-5V	1	1				Custom Made 574-00074-A
3	PFC Main Board [Rev1]	LD1	LD	LED, red, 0805	1	1	404-1017-1			
4	PFC Main Board [Rev1]	LD2	LD	LED, red, 0805	1	1	404-1017-1			
5	PFC Main Board [Rev1]	U5,U10	U	SN74LVC2G17DBVR, IS BUFF DL SCHMIT TRIG SOT236	3	3	296-13012-1-ND			
6	PFC Main Board [Rev1]	R31,R32	R	Res. 10K, 5%, 0.1W, 0805						
7	PFC Main Board [Rev1]	R10,R12	R	Res. 2.2K, 5%, 0.1W, 0805	4	4	311-2.2KARCT-ND			
8	PFC Main Board [Rev1]	R29,R30	R	Res. 330R, 5%, 0.1W, 0805	2	2	311-330ARCT-ND			
9	PFC Main Board [Rev1]	C4	C	CAP FILM 0.047UF 760VDC RADIAL			495-3241-ND			
10	PFC Main Board [Rev1]	C15,C17	C	Cer. Cap - 4.7nF, 16V, X7R, 0805	4	6				
11	PFC Main Board [Rev1]	Cd3, Cd17	C	Cer. Cap - 100nF, 50V, X7R, 0805	9	9	478-1395-1-ND			
12	PFC Main Board [Rev1]	BS1,BS2,BS3,BS4	BC	Banana Connector and Screws	6	6	501-1115-ND			
13	PFC Main Board [Rev1]	J14	JP	Standard 0.1" SIL headers, cut to fit, total needed 1x4						
14	PFC Main Board [Rev1]	P1	TB	CONN AC RECEPT 7MM R/A RND PCB	1	1	Q218-ND			
15	PFC Main Board [Rev1]		M							

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PFC-2PhIL-1Shunt										
16	PFC-2PhIL-1Shunt[R1]	C2,C3	C	CAP CER 100PF 50V 5% NP0 0805	2	2	399-1122-1-ND			
17	PFC-2PhIL-1Shunt[R1]	C4	C	CAP FILM 0.047UF 630VDC RADIAL	1	1	338-3209-ND			
18	PFC-2PhIL-1Shunt[R1]	C5,C6, C16	C	Elec. Cap - 100uf, 450V, Alum, radial	3	3	565-1481-ND			
19	PFC-2PhIL-1Shunt[R1]	C9	C	CAP CER 10nF 50V 10% X7R 0805			478-1383-1-ND			
20	PFC-2PhIL-1Shunt[R1]	Cd1	C	Cer. Cap - 2u2, 25V, X7R, 0805	1	1	490-1701-1-ND			
21	PFC-2PhIL-1Shunt[R1]	Cd2	C	CAP CER 10UF 16V 10% X7R 1206	1	1	399-3525-1-ND			
22	PFC-2PhIL-1Shunt[R1]	Cd3	C	Cer. Cap- 330n, 16V, X5R, 0805	2	2	445-1356-1-ND			
23	PFC-2PhIL-1Shunt[R1]	Cd5	C	Cer. Cap - 22u, 16V, X5R, 1206	1	1	587-1433-1-ND			
24	PFC-2PhIL-1Shunt[R1]	R1,R2,R7,R11	R	Res. - 10K, 5%, 0.1W, 0805	4	4	311-10KARCT-ND			
25	PFC-2PhIL-1Shunt[R1]	R3,R4,R5,R9	R	Res. - 10R, 5%, 0.1W, 0805	4	4	311-10ARCT-ND			
26	PFC-2PhIL-1Shunt[R1]	R6,R8,R18	R	Res 0.050 OHM 1W 1% 2512	2	2	CRA2512-FZ-R050ELFCT-ND			
27	PFC-2PhIL-1Shunt[R1]	R10,R17	R	Res. - 20K, 1%, 1/8W, 0805	2	2	311-20.0KCRCT-ND			
28	PFC-2PhIL-1Shunt[R1]	R13,R14	R	Res. - 1M, 1%, 0.1W,	2	2	311-1.00MCRCT-ND			
29	PFC-2PhIL-1Shunt[R1]	R15	R	Res. - 13.0K, 1%, 0.1W, 0805	1	1	311-13.0KCRCT-ND			
30	PFC-2PhIL-1Shunt[R1]	R12,R16	R	Res. - 2K, 1%, 0.1W, 0805	4	4	311-2.00KCRCT-ND			
31	PFC-2PhIL-1Shunt[R1]	R19	R	Res. - 100R, 5%, 0.1W, 0805						
32	PFC-2PhIL-1Shunt[R1]	PR1	PR	DNP	0	0				
33	PFC-2PhIL-1Shunt[R1]	ZD1	ZD	DIODE ZENER 500MW 16V SOD123	1	1	568-6357-1-ND			

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34	PFC-2PhIL-1Shunt[R1]	ZD2	ZD	DIODE ZENER 500MW 5.1V SOD123	1	1	568-6370-1-ND			
35	PFC-2PhIL-1Shunt[R1]	U1	U	Dual Power Mosfet Driver HS, 4A, 8-SOIC, UCC27524DR,	1	1	296-30129-2-ND			
36	PFC-2PhIL-1Shunt[R1]	U2	U	Amplifier, OPA365, SOT-23-5	2	2	296-20645-2-ND	595-OPA365AIDBVT		
37	PFC-2PhIL-1Shunt[R1]	Q1,Q2	Q	MOSFET N-CH 650V 12A TO-220	2	2	IPP60R250CPIN-ND			
38	PFC-2PhIL-1Shunt[R1]	D1	DA	RECTIFIER 6A 600V P600 AXIAL	1	1	GI756-E3/54GICT-ND			
39	PFC-2PhIL-1Shunt[R1]	D2,D3	DA	DIODE SCHOTTKY 30V 0.5A SOD-123	2	2	MBR0530CT-ND			
40	PFC-2PhIL-1Shunt[R1]	D4,D5	DA	C3D10060G, DIODE SCHOTTKY 600V 10A TO263-2	2	2	C3D10060G-ND			
41	PFC-2PhIL-1Shunt[R1]	HS1,HS2	HS	Heat Sink, 2.0", Wakefield, Outline 34.92mm x 12.70mm, Height 2"	2	2	345-1030-ND			
42	PFC-2PhIL-1Shunt[R1]			Nylon Washers for Heatsink Stad offs , 0.120x0.375 Nylon	4	4	3118K			
43	PFC-2PhIL-1Shunt[R1]			Heat Pads Insulators	0	0	BER205-ND			
44	PFC-2PhIL-1Shunt[R1]	L1,L2	L	INDUCTOR CTX16-18702-R COOPER BUSSMAN	2	2			83R4526	avail. thru alliedelec.com
DC-PwrEntry										
45	DC-PwrEntry1Sw[R2]	C1	C	Cer. Cap - 22u, 16V, X5R, 1206	1	1	587-1433-1-ND			
46	DC-PwrEntry1Sw[R2]	C2	C	Cer. Cap - 10u, 25V, X5R, 1206	1	1	587-2259-1-ND			
47	DC-PwrEntry1Sw[R2]	C3	C	Cer. Cap - 4u7, 25V, X5R, 0805	2	2	490-3335-1-ND			
48	DC-PwrEntry1Sw[R2]	C4	C	Cer. Cap - 0.1uf, 25V, X5R, 0805	1	1	399-1168-1-ND			
49	DC-PwrEntry1Sw[R2]	C5,C6,C7	C	Elec. Cap - 330uf, 25V, Alum, radial	3	3	P5542-ND			
50	DC-PwrEntry1Sw[R2]	R1	R	Res. - 330R, 1%, 0.1W, 0805	1	1	311-330CRCT-ND			
51	DC-PwrEntry1Sw[R2]	R2	R	Res. - 470R, 5%, 0.1W, 0805	1	1	311-470CRCT-ND			
52	DC-PwrEntry1Sw[R2]	LD1	LD	LED, green, 0805	1	1	L61105CT-ND			

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53	DC-PwrEntry1Sw[R2]	SW1	SW	Toggle Switch - Miniature, SPDT	1	1		108-2AS1T1203-EVX		
54	DC-PwrEntry1Sw[R2]	M1	P	Power Module - PTH08080	1	1	296-20432-ND			
55	DC-PwrEntry1Sw[R2]	U1	U	LDO - 3.3V - TPS79533	1	1	296-13810-1-ND			
56	DC-PwrEntry1Sw[R2]		J	Standard 0.1" SIL headers, cut to fit, total needed 1x2	1	1				
57	DC-PwrEntry1Sw[R2]	JP1	JP	Power jack 2.1 x 5.5 mm	1	1	CP-002AH-ND			
AC-PwrEntry										
58	PFC_2Ph_IL_AC-PwrEntry[R0]	C1,C2	C	CAP FILM 4700PF 250VAC RADIAL	1	1	P4625-ND			
59	PFC_2Ph_IL_AC-PwrEntry[R0]	C3,C4,C5,C6	C	CAP CER 2200PF 250V 10% X7R 2220	1	1	490-3480-2-ND			
60	PFC_2Ph_IL_AC-PwrEntry[R0]	C7,C8	C	CAP CER 3900PF 50V 5% NP0 0805			490-3045-1-ND			
61	PFC_2Ph_IL_AC-PwrEntry[R0]	R1,R2,R4,R5	R	Res. - 432K, 1%, 1/4W, 1206	1	1				
62	PFC_2Ph_IL_AC-PwrEntry[R0]	R3,R6	R	Res. - 7.15K, 1%,1/8W, 0805	2	2	311-7.15KCRCT-ND			
63	PFC_2Ph_IL_AC-PwrEntry[R0]	R7,R8	R	Res - 2M, 1%,1/4W, 1206						
64	PFC_2Ph_IL_AC-PwrEntry[R0]	F1	F	Fuse Holder	1	1	486-1159-ND			
65	PFC_2Ph_IL_AC-PwrEntry[R0]	Fuse-Cap	F	Fuse Cap for 5x20mm fuses flush mount	1	1	WK6234-ND			
66	PFC_2Ph_IL_AC-PwrEntry[R0]	Fuse-F1	F	FUSE 250V IEC SLO 5X20MM 10A	1	1	F2425-ND			
67	PFC_2Ph_IL_AC-PwrEntry[R0]	RT1	RT	CURRENT LIMITR INRSH 10 OHM 15A	1	1	570-1058-ND			
68	PFC_2Ph_IL_AC-PwrEntry[R0]	VAR1	VAR	VARISTOR 275V RMS 10MM RADIAL	1	1	495-1433-ND			
69	PFC_2Ph_IL_AC-PwrEntry[R0]	D1,D2	DA	DIODE SCHOTTKY 30V 200MA SOT-23	2	2	BAT54SFSCT-ND			
70	PFC_2Ph_IL_AC-PwrEntry[R0]	DB1	DB	RECT BRIDGE 15A 600V	1	1	MB156W-BPMS-ND			
71	PFC_2Ph_IL_AC-PwrEntry[R0]	Lcm	L	8115-RC, CHOKE COMM MODE W/HDR 1.2mH 16A	1	1	M8910-ND			

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72	PFC_2Ph_IL_AC-PwrEntry[R0]	Spacers		Ceramic/nylon spacers for the rectifier DB1, 3mm inner dia, 1/4 inch or 1/8 inch height	4	4	876K-ND, 875K-ND			
73	PFC_2Ph_IL_AC-PwrEntry[R0]	HS1	HS	Heat Sink for the Diode bridge, Manufacturer - CoolInnovation	1	1				CoolInnovation P/N 3-121211P3M8815
74	PFC_2Ph_IL_AC-PwrEntry[R0]	L1, L2	L	INDUCT PWR 7.8UH TH, PA0431L			553-1503-ND			

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