

ROHM Semiconductor				LLC_DC_DC_2.5KW							
PDT001-EVK001A											
R2_0											
#	Description	Designator	Comment	PART Description	Package	Quantity	Pins	Total Pins	Manufacturer 1	Manufacturer Part Number 1	
1	CAP NP	C100, C101, C102, C105, C106, C107, C114, C115	100F	CAP NP,TH,Film,100F,1KV,±5%,18x4x10.1_15P,MPP	[18x4x10.1_15P]	8	2	16	KEMET	R76Q2100404J	
2	CAP NP	C103, C104, C116, C117	150pF	CAP NP,TH,Film,150pF,2KV,±10%,8.5x4.7_5P,Y5P	[8.5x4.7_5P]	4	2	8	Vishay / BC Components	S151K25Y5PPEKTR	
3	CAP NP	C109, C110, C111, C112	4.7uF	CAP NP,TH,Film,4.7uF,100V,±5%,13x32x25.27_5P,MPP	[13x32x25.27_5P]	4	2	8	KEMET	R75GR4470503J	
4	CAP NP	C113, C123, C124	10uF	CAP NP,SMD,Ceramic,10uF,100V,±20%,3750J,X7S	[3750]	3	2	6	KEMET	C5750X7S2A10M2C39B	
5	CAP NP	C118	4.7nF	CAP NP,TH,Film,4.7nF,630V,±5%,13x4x9_10P]	[13x4x9_10P]	1	2	2	KEMET	R75PF1470A0A1J	
6	CAP NP	C200, C201, C204, C205, C318	10uF	CAP NP,SMD,Ceramic,10uF,25V,±10%,1206J,X7R	[1206]	5	2	10	YAGEO	CC1206K0X7R88B106	
7	CAP NP	C202, C203, C206, C207, C208, C210, C400, C401, C402, C403, C404, C405	1uF	CAP NP,SMD,Ceramic,1uF,35V,±10%,1206J,X7R	[1206]	12	2	24	Murata	C1206C105KRACTU	
8	CAP NP	C209, C211, C317	10uF	CAP NP,SMD,Ceramic,10uF,35V,±10%,1206J,X5R	[1206]	3	2	6	Murata	GR7310C8YA106KE01L	
9	CAP NP	C300, C301, C302, C304, C315, C319, C320, C406	100nF	CAP NP,SMD,Ceramic,100nF,50V,±10%,0805J,X7R	[0805]	8	2	16	Murata	GC021BR71H104KA01L	
10	CAP NP	C303	1pF	CAP NP,SMD,Ceramic,1pF,50V,±10%,0805J,X7R	[0805]	1	2	2	YAGEO	CC0805CRNP09B1R10	
11	CAP POL	C108	470uF	CAP POL,TH,Electrolytic,470uF,100V,±20%,16X33_7P5,3.86A-135°C	[16x33_7P5]	1	2	2	Nichicon	UBV2A471MHL	
12	CAP POL	C119, C120, C121	470uF	CAP POL,TH,Electrolytic,470uF,450V,±20%,35x50_10P,1.85 A-105°C	[35x50_10P]	3	2	6	Nichicon	LGU2W471MELC	
13	CAP POL	C122	4.7uF	CAP POL,TH,Electrolytic,4.7uF,100V,±20%,5X12.5_5P,3.86A-105°C	[5x12.5_5P]	1	2	2	Nichicon	UPW2A47MDD1TA	
14	Connector	J104	CON_HDR_8u2	Connector,TH,8 position,CON_HDR_8u2,P2.54mm,	P2.54mm	1	16	16	Samtech	SSW-108-01-G-D	
15	Connector	J105, J106, J107, J108	CON_HDR_3u2	Connector,TH,3 position,CON_HDR_3u2,P2.54mm,	P2.54mm	4	6	24	Samtech	SSW-103-01-G-D	
16	Connector	J201	CON_HDR_8u2	Connector,TH,8 position,CON_HDR_8u2,P2.54mm,	P2.54mm	1	16	16	Samtech	TSW-108-22-G-D-RA	
17	Connector	J205, J206, J207, J208	CON_HDR_3u2	Connector,TH,3 position,CON_HDR_3u2,P2.54mm,	P2.54mm	4	6	24	Samtech	TSW-103-22-G-D-RA	
18	Connector	J401	CON_HDR_14u2	Connector,TH,14 position,CON_HDR_14u2,P2.54mm,	P2.54mm	1	28	28	Samtech	SSW-114-01-G-D	
19	Connector	J402	DIP 5.08x2N	Connector,TH,2 position,DIP 5.08x2N,P5.08mm,	P5.08mm	1	2	2	Molex	395316002	
20	Connector	J403, J406, J408	CON_HDR_4u2	Connector,TH,4 position,CON_HDR_4u2,P2.54mm,	P2.54mm	3	8	24	Samtech	SSW-104-01-G-D	
21	Connector	J404	CON_HDR_8u2	Connector,TH,6 position,CON_HDR_8u2,P2.54mm,	P2.54mm	1	12	12	Samtech	SSW-106-01-G-D	
22	Connector	J407	CON_HDR_5u2	Connector,TH,5 position,CON_HDR_5u2,P2.54mm,	P2.54mm	1	10	10	Samtech	SSW-105-01-G-D	
23	Diode	D100, D101, D300	RR2LAMISTR	Diode,SMD,Rectifier,RR2LAMISTR,600V,[SOD-128],2A,55°C - 150°C	[SOD-128]	3	2	6	ROHM	RR2LAMISTR	
24	Diode	D102, D103	APT100S20BG	Diode,TH,Schottky,APT100S20BG,200V,[TO-247],120A,55°C - 150°C	[TO-247]	2	2	4	Microsemi	APT100S20BG	
25	Diode	D104, D105, D106, D107, D204, D205	RS650VM-40	Diode,SMD,Schottky,RS650VM-40,40V,[SOD323],500mA,55°C - 150°C	[SOD323]	6	2	12	ROHM	RS650VM-40	
26	Diode	D200, D202	RFN2LAMIS	Diode,SMD,Fast Recovery,RFN2LAMIS,600V,[SOD-128],1.5A,55°C - 150°C	[SOD-128]	2	2	4	ROHM	RFN2LAMIS	
27	Diode	LED401, LED402, LED403, LED404, LED405	3mm	LED,TH,RED,3mm,2V,Radial,55°C - 85°C	Radial	5	2	10	Everlight	204-10SURD/S530-A3	
28	Diode	Z100	KDZVTF12B	Diode,SMD,ZENER,KDZVTF12B,12V,[SOD123],20mA,1W,55°C - 150°C	[SOD123]	1	2	2	ROHM	KDZVTF12B	
29	Diode	Z101, Z102, Z103, Z104, Z200, Z301	UFZVFH18B	Diode,SMD,ZENER,UFZVFH18B,18V,[SOD-323],10mA,500mW,55°C - 150°C	[SOD-323]	6	2	12	ROHM	UFZVFH18B	
30	Diode	Z300, Z301, Z303, Z400	RB160MM-40TR	Diode,SMD,Schottky,RB160MM-40TR,40V,[SOD123FL],1A,40°C - 150°C	[SOD123FL]	4	2	8	ROHM	RB160MM-40TR	
31	Diode	Z302	UDZVTE-173.3B	Diode,SMD,ZENER,UDZVTE-173.3B,3.3V,[SOD-323],20mA,200mW,55°C - 150°C	[SOD-323]	1	2	2	ROHM	YFZVFH3.3B	
32	FUSE	F100	60A	FUSE,TH,Slow Blow,60A,58V,[29.21 x 8.85x21.59_30P],	[29.21 x 8.85x21.59_30P]	1	2	2	Little fuse	099000_Z2N	
33	GATE DRIVER	U200, U201, U202, U203	BM61M41RFV	GATE DRIVER,SMD,JC,BM61M41RFV,SSOP-B10W,4A	SSOP-B10W	4	10	40	ROHM	BM61M41RFV	
34	GATE DRIVER	U204, U205	BD2310G	GATE DRIVER,SMD,JC,BD2310G,SOIC-8,4A,40°C - 125°C	SOIC-8	2	5	10	ROHM	BD2310G	
35	Inductor	L100	3.3uH	Inductor,TH,3.3uH,20%,36x21.5x35,75A-40°C - 125°C	[36x21.5x35]	1	2	2	Wurth Electronics	7.44376E-12	
36	Isolator	U300	S8821BC-B-IS	Isolator,SMD,JC,S8821BC-B-IS,SOIC-8,40°C - 125°C	SOIC-8	1	8	8	Silicon Labs	S8821BC-B-IS	
37	LDO	U306	BA17805FP-E2	LDO,SMD,BA17805FP-E2,5V,[DPAK],1A,1W,40°C - 85°C	[DPAK]	1	3	3	ROHM	BA17805FP-E2	
38	MosFET	Q100, Q101, Q102, Q103	R6042JNZ	MosFET,TH,NCH,R6042JNZ,600V,[TO-247G],42A,465W,55°C - 150°C	TO-247G	4	3	12	ROHM	R6042JNZ4C13	
39	MosFET	Q107, Q108	Custom	MosFET,SMD,NCH,Custom,100V,TOLL,250A,40°C - 175°C	TOLL	2	3	6	ROHM	100V_250A	
40	MosFET	Q300, Q400	RQ5E95A/UTCL	MosFET,SMD,NCH,RQ5E95A/UTCL,30V,SOT346,6.5A,1W,55°C - 150°C	SOT346	2	3	6	ROHM	RQ5E95A/UTCL	
41	OPAMP	U302	LM2903BDR	Comparator,SMD,JC,LM2903BDR,36V,SO-8	SO-8	1	8	8	TI	LM2903BDR	
42	OPAMP	U304	TLV271SN2T1G	OPAMP,SMD,JC,TLV271SN2T1G,16V,[SSOP-5]	[SSOP-5]	1	5	5	Onsemi	TLV271SN2T1G	
43	Optoisolator	ISO300	PC817	Optoisolator,SMD,JC,PC817,80V,4-SMD, Gull Wing,50mA,30°C - 100°C	4-SMD, Gull Wing	1	4	4	Sharp	PC81710NP18	
44	Resistor	R100	10K	Resistor,TH,10K,5%,7W		1	2	2	Ohmite	TWM710KE	
45	Resistor	R101, R102, R105, R106	50R	Resistor,TH,50R,5%,13x4.8,3W	[13x4.8]	4	2	8	Vishay	AC0300000500BAC00	
46	Resistor	R103, R104, R134, R226, R227, R303, R304, R327, R328, R406, R407, R408, R411, R412	10K	Resistor,SMD,10K,1%,0805J,1/8W	[0805]	14	2	28	ROHM	SFR10E2PF1002	
47	Resistor	R107, R133, R135, R139	200mR ± 3	Resistor,SMD,200mR ± 3,1%,2512J,1W	[2512]	4	2	8	ROHM	MCR100J2HFLR200	
48	Resistor	R108, R109, R112, R113	33mR	Resistor,SMD,33mR,1%,2512J,7W	[2512]	4	2	8	ROHM	GMR100H7BFRM303	
49	Resistor	R110, R204, R205, R212, R213, R301, R302, R305, R311, R326, R402, R403, R404, R405, R409, R410	1K	Resistor,SMD,1K,1%,0805J,1/8W	[0805]	16	2	32	ROHM	SFR10E2PF1001	
50	Resistor	R111, R130, R131, R132, R200, R201, R208, R209, R216, R217, R228, R234, R235	0R	Resistor,SMD,0R,1%,0805J,1/8W	[0805]	13	2	26	ROHM	SFR10E2PFJ000	
51	Resistor	R114, R115, R118, R119, R122, R123, R126, R127	10R	Resistor,SMD,10R,1%,1206J,1/8W	[1206]	8	2	16	ROHM	ESR10E2PF10R0	
52	Resistor	R120, R121, R128, R129, R224, R225	10K	Resistor,SMD,10K,1%,1206J,1/8W	[1206]	6	2	12	ROHM	SFR10E2PF1002	
53	Resistor	R136, R137, R138	220K	Resistor,SMD,220K,200V,1%,1206J,2/5W	[1206]	3	2	6	ROHM Semiconductor	ESR18E2PF2203	
54	Resistor	R206, R207, R214, R215	4.7K	Resistor,SMD,4.7K,1%,0805J,1/8W	[0805]	4	2	8	ROHM	SFR10E2PF4702	
55	Resistor	R218, R219	47R	Resistor,SMD,47R,1%,1206J,1/8W	[1206]	2	2	4	ROHM	MCR10E2PF47R0	
56	Resistor	R220, R221	100R	Resistor,SMD,100R,1%,0805J,1/8W	[0805]	2	2	4	ROHM	SFR10E2PF1000	
57	Resistor	R222, R223	12R	Resistor,SMD,12R,1%,1206J,1/8W	[1206]	2	2	4	ROHM	MCR10E2PF12R0	
58	Resistor	R300	383K	Resistor,SMD,383K,1%,0805J,1/8W	[0805]	1	2	2	YAGEO	RC0805FR-07383KL	
59	Resistor	R307, R308	100K	Resistor,SMD,100K,1%,0805J,1/8W	[0805]	2	2	4	ROHM	SFR10E2PF1003	
60	Resistor	R310, R330	20K	Resistor,SMD,20K,1%,0805J,1/8W	[0805]	2	2	4	ROHM	SFR10E2PF2002	
61	Resistor	R401	10R	Resistor,TH,10R,1%,11x4.5,2W	[11x4.5]	1	2	2	Stackpole Electronics Inc	RSMFJ2J10R0	
62	Transistor	Q401, Q402, Q403, Q404, Q405	2SD1484KT146	Transistor,SMD,NPN,2SD1484KT146,50V,SOT346,500mA,200mW,55°C - 150°C	SOT346	5	3	15	Rohm	2SD1484KT146	

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