

	A	B	C	D	E	F
1	ANALOG DEVICES			Report Created on Thursday Jun 07 13:24:47 2018		
2	DEMO BOARD BILL OF MATERIALS					
3	HIGH EFFICIENCY 6 PHASE STEP-DOWN CONVERTER					
4	SKU#(-A) = DC2631A-A					
5	IC NO.(-A) = LTC7852EBHE					
6						
7	Item Number	Quantity	Part Reference	Description	Manufacturer and Manufacturer PN	BOM Notes
8	1	17	C1,C2,C5,C6,C18,C19,C24,C25,C28,C29,C32,C33,C36,C37,C66,C68,C69	CAP.,2.2uF,X5R,16V,10%,0603	KEMET, C0603C225K4PAC7867	
9	2	18	C3,C4,C8-C17,C20-C23,C34,C35	CAP.,0.22uF,X5R,25V,10%,0603	AVX, 06033D224KAT2A	
10	3	1	C7	CAP.,1uF,X5R,25V,20%,0603	AVX, 06033D105MAT2A	
11	4	0	C26,C27,C38,C39,C44,C45,C52-C65,CFF1,CFF2	CAP., OPTION, 0603		
12	5	3	C30,C31,C41	CAP.,0.1uF,X7R,16V,10%,0603	AVX, 0603YC104JAT4A	
13	6	3	C40,C46,C47	CAP.,1uF,X7R,50V,10%,0805	AVX, 08055C105KAT2A	
14	7	1	C42	CAP.,22uF,X5R,6.3V,20%,0805	MURATA, GRM21BR60J226ME39L	
15	8	1	C43	CAP.,10uF,X5R,6.3V,10%,0805	AVX, 08056D106KAT2A	
16	9	2	C48,C50	RES.,AEC-Q200,100 OHMS,1%,1/8W ,0805	VISHAY, CRCW0805100RFKEA	
17	10	2	C49,C51	CAP.,47uF,X5R,6.3V,20%,0805	TAIYO YUDEN, JMK212BBJ476MG-T	
18	11	1	C67	CAP.,220pF,X7R,50V,5%,0603	AVX, 06035C221JAT2A	
19	12	12	CIN1-CIN12	CAP.,22uF,X5R,25V,10%,1210	MURATA, GRM32ER61E226KE15L	
20	13	2	CIN13,CIN14	CAP.,180uF,ALUM. POLYMER,16V,20%,SMD	PANASONIC, 16SVP180MX	
21	14	0	CIN15	CAP.,OPTION,ALUM. ELECT.,SMD		
22	15	0	CIN16-CIN27	CAP., OPTION, 1210		
23	16	1	CITH1	CAP.,3300pF,X7R,50V,10%,0603	AVX, 06035C332KAT2A	
24	17	1	CITH2	CAP.,2200pF,C0G,50V,5%,0603	MURATA, GCM1885C1H222JA16D	
25	18	2	CITHP1,CITHP2	CAP.,150pF,NP0,50V,5%,0603	AVX, 06035A151JAT2A	
26	19	6	COUT1,COUT3,COUT5,COUT7,COUT9,COUT11	CAP.,220uF,X5R,4V,20%,1206,NO SUBS. ALLOWED	MURATA, GRM31CR60G227ME11L	
27	20	0	COUT2,COUT4,COUT6,COUT8,COUT10,COUT12	CAP., OPTION, 1206		
28	21	18	COUT13-COUT30	CAP.,330uF,ALUM. ELECT.,2.5V,20%,7343,9mOhms, 6.3A	PANASONIC, EEF5X0E331ER	
29	22	0	COUT31-COUT48	CAP., OPTION, 7343		
30	23	1	D1	DIODE, SCHOTTKY BARRIER RECTIFIER, 40V 500mA, SOD-323	NXP, PMEG4005AEA,115	
31	24	29	E1-E29	TEST POINT,TURRET,0.094",MTG. HOLE	MILL-MAX, 2501-2-00-80-00-00-07-0	
32	25	6	J1-J6	STUD, FASTENER, #10-32	PENNENGINEERING, KFH-032-10ET	
33	26	2	J7,J8	CONN.,RF, BNC,RCPT JACK,5-PIN,STR, THT,50 Ohms	AMPHENOL RF, 112404	
34	27	6	JLRE1-JLRE6	RING, LUG, CRIMP,#10,NON-INSULATED,SOLDERLESS TERMINALS	KEYSTONE, 8205	
35	28	12	JNE1-JNE12	NUT,HEX,#10-32,BRASS	PENCOM, NU1132	
36	29	4	JP1-JP4	CONN.,HDR,MALE,1x3,2mm,THT, STR,NO SUBS. ALLOWED	Wurth Elektronik, 62000311121	
37	30	6	JWE1-JWE6	WASHER,#10,LOCK,EXT,TIN FINISH	PENCOM, WA4526	
38	31	6	L1-L6	INDUCTOR, 0.25uH	WURTH ELEKTRONIK, 744301025	
39	32	1	L7	IND,15uH,HIGH CURRENT LOW PROFILE SMD	Eaton, MP14020V2-150-R	
40	33	1	LB1	LABEL SPEC, DEMO BOARD SERIAL NUMBER	BRADY, THT-96-717-10	
41	34	4	MP1-MP4	STANDOFF,NYLON,SNAP-ON,0.625"	KEYSTONE, 8834	

	A	B	C	D	E	F
42	35	1	PCB1	PCB, DC2631A	PHASE 3 TECHNOLOGIES INC., 600-DC2631A	REV04
43	36	2	Q1,Q2	XSTR.,N-CH, LOGIC LEVEL PWR. TRENCH MOSFET, 30V,80A, TO-263AB	FAIRCHILD SEMI, FDB8832	
44	37	0	R1,R2	RES., OPTION, 2010		
45	38	25	R3,R5,R7,R8,R11,R12,R14,R16-R18,R27,R29,R39,R40,R46,R49,R67,R68,R89,R105,R110,R113,R116,R119,R122	RES.,AEC-Q200,0 OHM,1/10W,0603	VISHAY, CRCW06030000Z0EA	
46	39	8	R4,R6,R28,R30,R42,R47,R48,R125	RES.,AEC-Q200,1 OHM,5%,1/10W,0603	VISHAY, CRCW06031R00JNEA	
47	40	19	R9,R10,R31,R32,R51,R52,R74,R75,R85,R90,R92,R93,R96,R97,R101,R102,RB1,RB2,RT1	RES.,AEC-Q200,10k OHMS,1%,1/10W,0603	VISHAY, CRCW060310K0FKEA	
48	41	0	R13,R15,R35,R36,R43,R45,R53,R56-R63,R65,R70,R71,R106-R109,R111,R112,R114,R115,R117,R118,R120,R121,R123,R124	RES., OPTION, 0603		
49	42	6	R19,R23,R38,R41,R66,R69	RES.,715 OHMS,1%,1/10W,0603	NIC, NRC06F7150TRF	
50	43	6	R20-R22,R24-R26	RES SMD 2.32K OHM 1% 1/10W 0603	VISHAY, CRCW06032K32FKEA	
51	44	4	R33,R34,R54,R55	RES.,Metal Foil, 0 mOHM, SM SHUNT,2010	TEPRO OF FLORIDA, RN6083	
52	45	4	R37,R50,R64,R76	RES.,10 OHMS,1%,1/10W,0603	VISHAY, CRCW060310R0FKEA	
53	46	1	R44	RES.,37.4k OHMS,1%,1/10W,0603	VISHAY, CRCW060337K4FKEA	
54	47	2	R72,R73	RES.,AEC-Q200,39.2k OHMS,1%,1/10W,0603	VISHAY, CRCW060339K2FKEA	
55	48	3	R78,R79,R127	RES.,AEC-Q200,100k OHMS,1%,1/10W,0603	VISHAY, CRCW0603100KFKEA	
56	49	2	R84,R129	RES.,AEC-Q200,0 OHM,1/4W,1206	VISHAY, CRCW12060000Z0EA	
57	50	1	R86	RES.,105k OHMS,1%,1/10W,0603	VISHAY, CRCW0603105KFKEA	
58	51	2	R87,R91	RES.,SENSE,0.002 OHM,1%,1W,2512	VISHAY, WSL25122L000FEA	
59	52	2	R88,RT2	RES.,20k OHMS,1%,1/10W,0603	PANASONIC, ERJ3EKF2002V	
60	53	6	R94,R95,R99,R100,R103,R104	RES.,24.9k OHMS,1%,1/10W,0603	VISHAY, CRCW060324K9FKEA	
61	54	1	R126	RES.,AEC-Q200,1M OHM,1%,1/10W,0603	VISHAY, CRCW06031M00FKEA	
62	55	1	R128	RES.,AEC-Q200,162k OHMS,1%,1/10W,0603	VISHAY, CRCW0603162KFKEA	
63	56	1	R1TH1	RES.,4.99k OHMS,1%,1/10W,0603	VISHAY, CRCW06034K99FKEA	
64	57	1	R1TH2	RES.,AEC-Q200,7.5k OHMS,1%,1/10W,0603	VISHAY, CRCW06037K50FKEA	
65	58	2	STNCL1,STNCL2	TOOL, STENCIL, DC2631A	LINEAR TECH., 830-DC2631A	REV04
66	59	6	U1-U6	IC, SMAT POWER STAGE MODULE	FAIRCHILD, FDMF5820DC	
67	60	1	U7	IC,DUALOUTPUT 6-PHASE CONTROLLER,GQFN-48 (5x6)	ANALOG DEVICES, LTC7852EBHE#PBF	
68	61	1	U8	IC,1.1MHz/2.2MHz, 500mA STEP-DOWN REGULATOR	ANALOG DEVICES, LTC3502EDC#PBF	
69	62	1	U9	IC,LDO uPWR LINEAR REG.,MSOP-8	LINEAR TECH., LT3010EMS8E#PBF	
70	63	4	XJP1-XJP4	CONN.,SHUNT,FEMALE,2 POS,2mm	Würth Elektronik, 60800213421	