

**National Semiconductor Corporation**  
**7/6/2010**  
**ADC12D1800 Reference Board**  
**Assembly Part Number : 980600479-328**  
**Revision : C**

## Bill of Materials

[illegible]



45	L2	FILTER CHIP 120 OHM 3A 0603	Murata	BLM18SG121TN1D		1	Y	490-3996-1-ND	
46	L3, L11, L12, L13	FILTER CHIP 330 OHM 1.5A 0603	Murata	BLM18SG331TN1D		4	Y	490-3997-1-ND	
47	L4, L8, L14	FILTER CHIP 26 OHM 6A 0603	Murata	BLM18SG260TN1D		3	Y	490-3995-1-ND	
48	L5, L6, L7, L10	10uH 3.4A EIA_481	Coilcraft	MSS1246-103ML	10uH	4	Y	N/A	Coilcraft
49	L9	CHOKe COMMON MODE 170OHMS 10A PCB	Steward	CM2545X171B-10		1	Y	240-2485-ND	
	LD1, LD2, LD3, LD4, LD5, LD6, LD7, LD8, LD9, LD11								
50	LD10	LED 565NM WTR CLR GREEN 1206 SMD	Lumex	SML-LX1206GC-TR		10	Y	67-1357-1-ND	
51	LD10	LED 635NM RED WTR CLR 1206 SMD	Lumex	SML-LX1206IC-TR		1	Y	67-1356-1-ND	
				BC817-25LT1			N	BC817-25LT1OSCT-ND	
52	Q1	TRANS NPN GP 500MA 45V SOT23	ON Semiconductor	BC817-25LT1G	45V, 0.5A	1	Y	BC817-25LT1GOSCT-ND	
	R2, R3, R4, R5, R6, R8, R9, R13, R14, R16, R17, R25, R69, R127, R128								
53	R127, R128	RES 49.9 OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF49R9V	49.9	15	Y	P49.9HTR-ND	
54	R7, R12	RES 3.3K OHM 1/10W .1% 0603 SMD	Panasonic	ERA-3YEB332V	3.3K	2	Y	P3.3KYTR-ND	
55	R10, R11	RES 20.0 OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF20R0V	20.0	2	Y	P20.0HTR-ND	
56	R15, R34	RES 4.7K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ472V	4.7K	2	Y	P4.7KGTR-ND	
57	R18	RES 47K OHM 1/4W 5% 1206 SMD	Panasonic	ERJ-8GEYJ473V	47K	1	Y	P47KETR-ND	
58	R19, R21	RES 2.2K OHM 1/4W 5% 1206 SMD	Panasonic	ERJ-8GEYJ222V	2.2K	2	Y	P2.2KETR-ND	
		RES ZERO OHM 1/10W 5% 0603 SMD							
	R20, R22, R31, R38, R43, R65, R126	Assembly for R20: mount on 2 pads closest to J20 Assembly for R38: mount on 2 pads closest to U1	Panasonic	ERJ-3GEY0R00V	0	2	Y	P0.0GTR-ND	
59	R24	RES 1.0M OHM 1/4W 5% 1206 SMD	Panasonic	ERJ-8GEYJ105V	1.0M	1	Y	P1.0METR-ND	
	R23, R32, R33, R35, R36, R37, R80, R107, R26, R27, R28, R44, R45, R46, R113, R114, R86, R87, R104								
61	R104	RES 10K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ103V	10K	19	Y	P10KGCT-ND	
62	R56, R57	RES 49.9 OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF49R9X	49.9	2	Y	P49.9LCT-ND	
	R29, R47, R48, R49, R50, R51, R52, R54, R55, R115, R142								
63	R30, R39, R41, R42	RES 330 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ331V	330	11	Y	P330GTR-ND	
64		RES 100 OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF1000V	100	4	Y	P100HTR-ND	
65	R40	NO LOAD	NO LOAD	NO LOAD		0		NO LOAD	Panasonic ERJ-3GEYJ103V (P10KHTR-ND)
	R53, R66, R129, R131, R134, R136								
66	R67, R68	RES 33 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ330V	33	6	Y	P33GTR-ND	
67	R67, R68	RES 150 OHM 1/10W 1% 0603 SMD	Rohm	MCR03EZPFX1500	150	2	Y	RHM150HTR-ND	
68	R70, R71	RESISTOR .22 OHM 1/10W 1% 0603	Panasonic	ERJ-3RQFR22V	0.22	2	Y	P.22AJTR-ND	
69	R72	RES 560 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ561V	560	1	Y	P560GCT-ND	
70	R73	NO LOAD	NO LOAD	NO LOAD		0			
71	R74	RES 100 OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GEJ101X	100	1	Y	P100JTR-ND	
72	R75	RES ZERO OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GE0R00X	0	1	Y	P0.0JTR-ND	
73	R76, R77	NO LOAD	NO LOAD	NO LOAD		2		NO LOAD	Panasonic ERJ-2GE0R00X (P0.0JTR-ND)
74	R78	RESISTOR 3.3 OHM 1/10W 5% 0603	Panasonic	ERJ-3RQJ3R3V	3.3	1	Y	P3.3AHTR-ND	
75	R79	RES 4.3K OHM 1/10W 5% 0603 SMD Not 1%!	Panasonic	ERJ-3GEYJ432V	4.3K	1	Y	P4.3KGCT-ND	
76	R81, R84, R133	NO LOAD 0.1W 5% r0603	Panasonic	ERJ-3GEY0R00V	0	3		P0.0GTR-ND	
77	R82	RES 10 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ100V		1	Y	P10GTR-ND	
78	R83	NO LOAD	NO LOAD	NO LOAD		1		NO LOAD	Panasonic ERJ-3GEY0R00V (P0.0GTR-ND)
79	R85	RES 3.3K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ332V	3.3K	1	Y	P3.3KGTR-ND	
80	R88	RES 26.7K OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF2672V	26.7K	1	Y	P26.7KHTR-ND	
81	R89, R90	RES 5.9K OHM 1/10W .5% 0603 SMD	Yageo	RT0603DRD075K9L	5.9K	2	Y	311-5.9KDTR-ND	
82	R91	RES 18.7K OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF1872V	18.7K	1	Y	P18.7KHTR-ND	
83	R92	RES 205K OHM 1/10W 1% 0603 SMD	Rohm	MCR03EZPFX2053	205K	1	Y	RHM205KHCT-ND	
	R93, R101, R124, R111, R117								
84	R111, R117	RES 1.0K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ102V	1.0K	5	Y	P1.0KGTR-ND	
85	R94	RES 15K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ153V	15K	1	Y	P15KGTR-ND	
86	R95	RES 30K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ303V	30K	1	Y	P30KGTR-ND	
87	R96, R110	RES 5.1K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ512V	5.1K	2	Y	P5.1KGTR-ND	
88	R97	RES 2.2K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ222V	2.2K	1	Y	P2.2KGTR-ND	
89	R98	RES 1.8K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ182V	1.8K	1	Y	P1.8KGTR-ND	
90	R99	RES 680 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ681V	680	1	Y	P680GTR-ND	
91	R102	RES 2.80K OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF2801V	2.80K	1	Y	P2.80KHCT-ND	

92	R103	RES 47.5K OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF4752V	47.5K	1	Y	P47.5KHCT-ND		
93	R105, R140, R141	NO LOAD	NO LOAD	NO LOAD		3		NO LOAD	Panasonic	ERJ-3GEYJ103V (P10KHTR-ND)
94	R106	RES 7.87K OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF7871V	7.87K	1	Y	P7.87KHTR-ND		
95	R108	RES 20.0K OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF2002V	20.0K	1	Y	P20.0KHTR-ND		
96	R109	RES 1.3K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ132V	1.3K	1	Y	P1.3KGCT-ND		
97	R112, R118	RES 2.4K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ242V	2.4K	2	Y	P2.4KGCT-ND		
98	R116	RES 360 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ361V	360	1	Y	P360GCT-ND		
99	R120, R121, R122	RES 22K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ223V	22K	3	Y	P22KGCT-ND		
100	R125	RES 2.0K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ202V	2.0K	1	Y	P2.0KGCT-ND		
101	R130, R132, R135, R137	RES 95.3 OHM 1/10W 1% 0603 SMD	Panasonic	ERJ-3EKF95R3V	95.3	4	Y	P95.3HCT-ND		
102	R138, R139	NO LOAD	NO LOAD	NO LOAD		2		NO LOAD	Panasonic	ERJ-3GEYJ103V (P100HTR-ND)
103	SW1	SWITCH TACT MOM 130GF H=5MM	ITT Industries/C&K Div	PTS635SL50		1	Y	CKN9017-ND		
104	SW2	SWITCH ROCKER SPDT HORZ ACT RA	ITT Industries/C&K Div	7101J1AQE2		1	Y	CKN2005-ND		
105	T1	FO-3 soic6_026_wg049_L079	Anaren	B0430J50100A00		1	Y	N/A	Anaren	B0430J50100A00
106	Y1	CRYSTAL 24.00 MHZ 12PF HC-49/US	ECS Inc.	ECS-240-12-4X		1	Y	XC1005-ND		
107	Y2	OSC 100MHz osc_100m_5x7	Pletronics	SM7745DV-100.0M	100MHz	1		N/A	Pletronics	SM7745DSV-100.00M
108	Y3	OSC 60MHz SOGP200_4_WGP280	Pletronics	SM7744HV-60.0M	60MHz	1		N/A	Pletronics	SM7744HV-60.0M
109	J1, J3	CONN HEADER .100 SINGL STR 36POS	Sullins	PTC36SAAN		2	N	S1012-36-ND		
110	J2	CONN RECEPT USB TYPE B PCB	Mill-Max	897-43-004-90-000000		1	Y	ED90064-ND		
111	J4	HEADER 10x3 blkcon_10x3				1		N/A		
	J4_SHa, J4_SHb, J4_SHc, J4_SHd, J15_SH, J21_SH,									
112	J22_SH	Jumper Shunt, 15uin gold plated, 0.100" pitch	Tyco/AMP	382811-6		7	Y	A26227-ND		
113	J5	HEADER 6 blkcon_6x1	Sullins	PTC36SAAN		1	N	S1012-36-ND		
114	J6	CONN 6 PIN SING. ROW SHDR6X1	Sullins	PTC36SAAN		1	N	S1012-36-ND		
	J7, J8, J9, J10, J11,									
115	J19, J26	CONN JACK END LAUNCH PC GOLD SMA	Emerson/Johnson	142-0701-851		7	Y	J658-ND		
116	J12	CONN PWR JACK 2.1X5.5MM HIGH CUR	CUI Inc	PJ-102AH		1	Y	CP-102AH-ND		
117	J13	HEADER 3 blkcon_3x1	Sullins	PTC36SAAN		1	N	S1012-36-ND		
118	J14	JUMPER3 blkcon_3x2	Sullins	PTC36DAAN		1	N	S2012-36-ND		
119	J15, J17, J18	CONN HEADER .100 DUAL STR 72POS	Sullins	PTC36DAAN		3	N	S2012-36-ND		
120	J16, J24	CONN RCPT 38POS VERT .64MM	Tyco Electronics	5767054-1		2	Y	5767054-1-ND	Arrow	5767054-1
121	J20	JUMPER 2X1 th_2_hdr1x2_m_str_100	Sullins	PTC36SAAN		1	N	S1012-36-ND		
122	J21, J22	JUMPER1 blkcon_2x1	Sullins	PTC36SAAN		2	N	S1012-36-ND		
123	J23	JUMPER5 blkcon_5x2	Sullins	PTC36DAAN		1	N	S2012-36-ND		
124	J25	HEADER 3X2 blkcon_3x2	Sullins	PTC36DAAN		1	N	S2012-36-ND		
	J27, J28, J29, J30,									
125	J31, J32	NO LOAD	NO LOAD	NO LOAD		0		NO LOAD	Johnson Components	142-0701-851 (J658-ND)
126	J33	NO LOAD	NO LOAD	NO LOAD		0		NO LOAD		
127	TP1, TP2, TP3, TP4	NO LOAD [Pad on board only]	NO LOAD	NO LOAD		4		NO LOAD		
	TP5, TP6, TP7, TP8,									
128	TP9, TP10, TP11	HDR 1X1 .100 Singl Str 36 Pos.	SULLINS ELECT	PBC36SAAN		7	Y	S1011E-36-ND		