

		B2800 BOM for Bestproto						
		Fukun Tang						
		<a href="mailto:ftang@uchicago.edu">ftang@uchicago.edu</a>						
		<a href="tel:773-834-4286">773-834-4286</a>						
		updated on 6/17/2014						
Item#	Part name	Part #	Geometry	Unit/BD	Ref. Designators	Modification Note	Inventory for 10 Boards	Shipped
1	Schottky 30V 5A Diode	RB085B-30TL	DPAK	4	ZD1, ZD2, ZD3, ZD4		40	
2	16-bit ADC	MAX1169BEUD+	TSSOP14	12	UA20, UA21, UA22, UA23, UA24, UA25, UB20, UB21, UB22, UB23, UB24, UB25		120	
3	Oct 12-bit DAC	LTC2656IUF-D-L12#PBF	QFN20_4x5mm	8	UA3, UA4, UA8, UA9, UB3, UB4, UB8, UB9		80	
4	40Mbps 12-bit ADC	LTC2264CUJ-12#PBF	QFN40_6x6mm	12	UA0, UA1, UA2, UA5, UA6, UA7, UB0, UB1, UB2, UB5, UB6, UB7		120	
5	Op Amplifier	LTC2051CS8#PBF	soic8	6	U5, U6, U7, U11, U12, U13		60	
6	Dual 4A DC/DC	LTM4619EV#PBF	uModule_144	4	U105, U110, U372, U373		40	
7	Negative DC/DC Controller	LT3759EMSE#PBF	MSOP12_TPAD	2	U1, U2		20	
8	Clock Buffer	SY89832UMGTR	MLF16_3x3mm_TPAD	12	U200, U201, U202, U210, U211, U212, U220, U221, U222, U230, U231, U232		120	
9	Serial EPROM	EPCS4SI8N	soic8	4	U100, U101, U102, U103		40	
10	FPGA	EP4CE10F17C7N	FBGA256_17x17mm	4	FPGA_A0, FPGA_A1, FPGA_B0, FPGA_B1		40	
11	3A FUSE BLOK	01543.15DRL	smf_fuse_blok	2	F1, F2		20	
12	40MHz Clock Generator	ASVMB-40.000MHZ-XY-T	ck7mmx5mm	4	QZ1, QZ2, QZ3, QZ4		40	
13	MOSFET	SI7848BDP-T1-GE3	soic8_ppak	2	M1, M2		20	
14	leave it blank						0	
15	leave it blank						0	
16	leave it blank						0	
17	leave it blank						0	
18	leave it blank						0	
19	leave it blank						0	
20	400-pin Array Male Conn	45970-4715	400-pin Male Conn.	1	JP0		10	
21	5-pin signal connector	berg_conn5	berg_conn5	12	JA0, JA1, JA2, JA3, JA4, JA5, JA6, JA7, JA8, JA9, JA10, JA11		120	
22	10-pin RA JTAG Connector	103310-1	jtag_connst	2	J100, J101		20	
23	40-pin ribbon connector	ca40nfhlr_ra	ca40nfhlr	12	J0, J1, J2, J3, J4, J5, J6, J7, J8, J9, J10, J11		120	
24	3-pin 100mil power conn	1725669	pconn3x2	4	PS1, PS2, PS3, PS4		40	
25	6-pin 3.5mm power conn	1776275-6	pconn3mm5-p6	2	POA, POB		20	
26	leave it blank						0	
27	leave it blank						0	
28	leave it blank						0	
29	leave it blank						0	
30	RES 0.0 OHM 1/10W JUMP 0402 SMD	ERJ-2GE0R00X	R0402	38	R00, R01, R02, R03, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R33, R34, R106, R110, R111, R112, R126, R130, R131, R132, RGA0, RGA1, RGA2, RGA3, RGA4, RGA5, RGB0, RGB1, RGB2, RGB3, RGB4, RGB5		380	
31	RES 0.005 OHM 0.5W 1% 0805	PMR10EZPFU5L00	R0805	2	R23, R24		20	
32	RES 22.0 OHM 1/10W 1% 0402 SMD	ERJ-2RKf22R0X	R0402	20	R105, R113, R125, R133, RP0, RP1, RP2, RP3, RP4, RP5, RP7, RP8, RP9, RP10, RP11, RP12, RT100, RT120, RT140, RT160		200	
33	RES 51.0 OHM 1/10W 1% 0402 SMD	ERJ-2RKf51R0X	R0402	48	RA0, RA1, RA2, RA3, RB0, RB1, RB2, RB3, RC0, RC1, RC2, RC3, RD0, RD1, RD2, RD3, RE0, RE1, RE2, RE3, RF0, RF1, RF2, RF3, RG0, RG1, RG2, RG3, RH0, RH1, RH2, RH3, RJ0, RJ1, RJ2, RJ3, RK0, RK1, RK2, RK3, RL0, RL1, RL2, RL3, RM0, RM1, RM2, RM3		480	
34	RES 56.0 OHM 1/16W 1% 0402 SMD	RC0402FR-0756RL	R0402	12	RP60, RP61, RP62, RP63, RP64, RP65, RP66, RP67, RP68, RP69, RP70, RP71		120	
35	RES 100 OHM 1/10W 1% 0402 SMD	ERJ-2RKf1000X	R0402	36	RA14, RB14, RC14, RD14, RE14, RF14, RG14, RH14, RJ14, RK14, RL14, RM14, R144, R146, R147, R148, R149, R150, RT104, RT106, RT107, RT108, RT109, RT110, RT124, RT126, RT127, RT128, RT129, RT130, RT164, RT166, RT167, RT168, RT169, RT170		360	
36	RES 499 OHM 1/10W 1% 0402 SMD	ERJ-2RKf4990X	R0402	24	RA4, RA5, RB4, RB5, RC4, RC5, RD4, RD5, RE4, RE5, RF4, RF5, RG4, RG5, RH4, RH5, RJ4, RJ5, RK4, RK5, RL4, RL5, RM4, RM5		240	
37	RES 1.00K OHM 1/10W 1% 0402 SMD	ERJ-2RKf1001X	R0402	4	R39, R65, R115, R135		40	
38	RES 1.21K OHM 1/10W 1% 0402 SMD	ERJ-2RKf1211X	R0402	4	R307, R503, R513, R553		40	
39	RES 1.50K OHM 1/10W 1% 0402 SMD	ERJ-2RKf1501X	R0402	2	R41, R67		20	
40	RES 2.00K OHM 1/10W 1% 0402 SMD	ERJ-2RKf2001X	R0402	52	R40, R43, R66, R69, RA10, RA12, RA6, RA8, RB10, RB12, RB6, RB8, RC10, RC12, RC6, RC8, RD10, RD11, RD6, RD8, RE10, RE12, RE6, RE8, RF10, RF12, RF6, RF8, RG10, RG12, RG6, RG8, RH10, RH12, RH6, RH8, RJ10, RJ12, RJ6, RJ8, RK10, RK12, RK6, RK8, RL10, RL12, RL6, RL8, RM10, RM12, RM6, RM8		520	
41	leave it blank						0	
42	RES 3.83K OHM 1/10W 1% 0402 SMD	ERJ-2RKf3831X	R0402	4	R306, R501, R511, R551		40	

43	RES 4.99K OHM 1/10W 1% 0402 SMD	ERJ-2RKF4991X	R0402	4	R42, R45, R68, R71		40	
44	RES 9.10K OHM 1/10W 1% 0402 SMD	ERJ-2RKF9101X	R0402	2	R19, R20		20	
					R100, R101, R102, R107, R108, R109, R114, R120, R121, R122, R127, R128, R129, R134, R35, R36, R37, R38, R44, R46, R47, R61, R62, R63, R64, R70, R72, R73, , R103, R104, R123, R124, R31, R32, RA7, RA9, RA11, RA13, RB7, RB9, RB11, RB13, RC7, RC9, RC11, RC13, RD7, RD9, RD12, RD13, RE7, RE9, RE11, RE13, RF7, RF9, RF11, RF13, RG7, RG9, RG11, RG13, RH7, RH9, RH11, RH13, RJ7, RJ9, RU11, RJ13, RK7, RK9, RK11, RK13, RL7, RL9, RL11, RL13, RM7, RM9, RM11, RM13		820	
45	RES 10.0K OHM 1/10W 1% 0402 SMD	ERJ-2RKF1002X	R0402	82				
46	RES 11.5K OHM 1/10W 1% 0402 SMD	ERJ-2RKF1152X	R0402	2	R305, R510		20	
47	RES 15.8K OHM 1/10W 1% 0402 SMD	ERJ-2RKF1582X	R0402	2	R26, R28		20	
48	RES 27.4K OHM 1/10W 1% 0402 SMD	ERJ-2RKF2742X	R0402	2	R21, R22		20	
49	RES 28.0K OHM 1/10W 1% 0402 SMD	ERJ-2RKF2802X	R0402	4	R500, R504, R550, R554		40	
50	RES 45.3K OHM 1/10W 1% 0402 SMD	ERJ-2RKF4532X	R0402	2	R16, R18		20	
51	RES 48.7K OHM 1/10W 1% 0402 SMD	ERJ-2RKF4872X	R0402	2	R308, R515		20	
52	RES 60.4K OHM 1/10W 1% 0402 SMD	ERJ-2RKF6042X	R0402	2	R502, R552		20	
53	RES 84.5K OHM 1/10W 1% 0402 SMD	ERJ-2RKF8452X	R0402	2	R25, R27		20	
54	RES 100K OHM 1/10W 1% 0402 SMD	ERJ-2RKF1003X	R0402	2	R13, R14		20	
55	RES 105K OHM 1/10W 1% 0402 SMD	ERJ-2RKF1053X	R0402	2	R15, R17		20	
56	RES 121K OHM 1/10W 1% 0402 SMD	ERJ-2RKF1213X	R0402	2	R505, R555		20	
57	leave it blank						0	
58	leave it blank						0	
59	leave it blank						0	
60	CAP CER 22PF 10V 5% NP0 0402	C0402C220J8GACTU	c0402	8	C516, C518, C566, C568, C616, C618, C666, C668		80	
61	CAP CER 1000PF 50V 5% NP0 0402	C1005COG1H102J050BA	c0402	8	CN1, CN11, CN13, CN15, CN3, CN5, CN7, CN9,		80	
62	CAP CER 10000PF 25V 10% X5R 0402	C1005X5R1E103K050BA	c0402	2	C199, C219		20	
					C249, C252, C262, C500, C502, C504, C506, C508, C510, C512, C514, C517, C519, C521, C523, C525, C558, C560, C562, C564, C567, C569, C571, C573, C575, C589, C600, C602, C604, C606, C608, C610, C612, C614, C621, C623, C656, C658, C660, C662, C669, C671, C673, C675, C7, CA1, CA10, CA11, CA12, CA17, CA18, CA19, CA3, CA5, CA7, CA8, CB1, CB10, CB11, CB12, CB18, CB19, CB3, CB5, CB7, CB8, CC1, CC10, CC11, CC12, CC17, CC18, CC19, CC3, CC5, CC7, CC8, CD1, CD10, CD11, CD12, CD18, CD19, CD3, CD5, CD7, CD8, CE1, CE10, CE11, CE17, CE18, CE19, CE3, CE5, CE7, CE8, CF1, CF10, CF11, CF18, CF19, CF3, CF5, CF7, CF8, CG1, CG10, CG11, CG12, CG17, CG18, CG19, CG3, CG5, CG7, CG8, CH1, CH10, CH11, CH17, CH18, CH19, CH3, CH5, CH7, CH8, CJ1, CJ10, CJ11, CJ17, CJ18, CJ19, CJ3, CJ5, CJ7, CJ8, CK1, CK10, CK11, CK17, CK18, CK19, CK3, CK5, CK7, CK8, CL1, CL10, CL11, CL12, CL17, CL18, CL19, CL3, CL5, CL7, CL8, CM1, CM10, CM11, CM17, CM18, CM19, CM3, CM5, CM7, CM8, CN0, CN10, CN12, CN14, CN2, CN4, CN6, CN8, CP1, CP11, CP12, CP14, CP19, CP2, CP24, CP29, CP31, CP34, CP36, CP39, CP4, CP41, CP44, CP46, CP49, CP51, CP54, CP56, CP59, CP6, CP7, CP9, C16, C167, C178, C181, C182, C184, C185, C186, C2, C20, C250, C251, C26, C28, C30, C35, C6, C617, C645, C66, C667, C684, C689, C701, C702, C704, C705, C707, C708, C710, C711, C713, C714, C716, C717, C726, C727, C729, C730, C732, C733, C735, C736, C738, C739, C741, C742, C752, C756, C758, C760, C761, C763, C769, C784, C787, C794, C80, C806, C810, C811, C827, C829, C843, C844, C845, C846, C858, C860, C861, C862, C863, C866, C868, C871, C876, C880, C881, C883, C884, C887, C889, C891, C893, C29		285 OF 606	
63	CAP CER 0.1UF 16V 10% X5R 0402	C1005X5R1C104K050BA	c0402					

					C108, C109, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C120, C121, C125, C126, C127, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, C151, C152, C153, C154, C155, C156, C157, C158, C159, C160, C161, C162, C163, C164, C202, C203, C204, C205, C206, C207, C208, C209, C210, C211, C213, C214, C217, C218, C222, C223, C224, C225, C226, C227, C228, C229, C230, C231, C233, C234, C237, C238, C263, C264, C265, C266, C267, C268, C269, C270, C271, C273, C274, C276, C277, C550, C552, C554, C556, C619, C625, C652, C654, C664, CA13, CA14, CA24, CB13, CB14, CB17, CB24, CC13, CC14, CC24, CD13, CD14, CD17, CD24, CE12, CE13, CE14, CE24, CF12, CF13, CF14, CF17, CF24, CG13, CG14, CG24, CH12, CH13, CH14, CH24, CJ12, CJ13, CJ14, CJ24, CK12, CK13, CK14, CK24, CL13, CL14, CL24, CM12, CM13, CM14, CM24, CP16, CP17, CP21, CP22, CP26, CP27, CP32, CP37, CP42, CP47, CP52, CP57, C10, C101, C102, C104, C106, C12, C14, C169, C170, C171, C172, C173, C174, C175, C176, C177, C179, C18, C180, C183, C187, C188, C201, C22, C221, C239, C24, C240, C253, C254, C261, C3, C32, C34, C37, C38, C40, C41, C43, C44, C46, C47, C49, C50, C533, C536, C539, C540, C57, C59, C60, C62, C63, C646, C649, C65, C650, C68, C687, C69, C71, C72, C751, C754, C755, C757, C759, C762, C764, C765, C766, C767, C768, C770, C771, C776, C777, C779, C780, C781, C782, C783, C785, C786, C788, C789, C790, C791, C792, C793, C795, C796, C801, C802, C804, C805, C807, C808, C809, C81, C812, C813, C814, C815, C816, C817, C818, C819, C820, C821, C826, C83, C830, C831, C832, C833, C834, C835, C836, C837, C838, C839, C84, C840, C841, C842, C851, C852, C854, C855, C856, C857, C859, C86, C864, C865, C867, C869, C87, C870, C877, C879, C882, C885, C886, C888, C89, C890, C892, C894, C895, C896, C90, C98, C99, CZ1, CZ11, CZ2, CZ4, CZ6		
63	CAP CER 0.1UF 16V 10% X5R 0402	C1005X5R1C104K050BA	c0402	321 OF 606		6,060	
64	CAP CER 1UF 6.3V 20% X5R 0402	C1005X5R0J105M050BB	c0402	60	CA0, CA15, CA2, CA4, CA6, CB0, CB15, CB2, CB4, CB6, CC0, CC15, CC2, CC4, CC6, CD0, CD15, CD2, CD4, CD6, CE0, CE15, CE2, CE4, CE6, CF0, CF15, CF2, CF4, CF6, CG0, CG15, CG2, CG4, CG6, CH0, CH15, CH2, CH4, CH6, CJ0, CJ15, CJ2, CJ4, CJ6, CK0, CK15, CK2, CK4, CK6, CL0, CL15, CL2, CL4, CL6, CM0, CM15, CM2, CM4, CM6	600	
65	CAP CER 2.2UF 10V 10% X5R 0402	C1005X5R1A225K050BC	c0402	36	CP60, CP61, CP62, CP63, CP64, CP65, CP66, CP67, CP68, CP69, CP70, CP71, CA9, CB9, CC9, CD16, CD9, CE16, CE9, CF16, CF9, CG9, CH16, CH9, CJ16, CJ9, CK9, CL16, CL9, CM9, CA16, CB16, CC16, CG16, CK16, CM16	360	
66	CAP CER 4.7UF 10V 20% X5R 0402	C1005X5R1A475M050BC	c0402	20	C107, C212, C232, C272, CP10, CP30, CP35, CP40, CP45, CP50, CP55, C105, C200, C220, C260, CP0, CP15, CP20, CP25, CP5	200	
67	CAP CER 4.7UF 25V 10% X5R 0805	C2012X5R1E475K125AB	C0805	6	C241, C242, C243, C244, C245, C246	60	
68	CAP CER 100UF 10V 20% X5R 1206	C3216X5R1A107M160AC	C1206	134	C11, C122, C123, C124, C168, C196, C197, C215, C216, C235, C236, C255, C275, C31, C4, C5, C505, C507, C522, C526, C551, C572, C586, C607, C61, C620, C64, C670, C685, C803, C823, C825, C828, C848, C850, C853, C872, C873, C875, C878, C897, C898, C1, C100, C103, C13, C15, C17, C19, C190, C191, C192, C193, C194, C195, C198, C21, C23, C25, C27, C29, C33, C36, C39, C42, C45, C48, C501, C503, C51, C52, C520, C524, C53, C537, C538, C54, C541, C55, C553, C555, C557, C56, C574, C58, C601, C603, C605, C622, C624, C626, C644, C647, C648, C651, C653, C655, C657, C67, C672, C686, C70, C73, C74, C75, C750, C753, C76, C77	1,340	
69	CAP CER 100UF 16V 20% X5R 1210	EMK325ABJ107MM-T	C1210	26	C189, C247, C509, C511, C563, C565, C659, C661, C665, CZ12, CZ17, C513, C515, C534, C559, C561, C609, C611, C613, C615, C663, CZ0, CZ16, CZ5, CZ7, CZ8	260	
70	FERRITE CHIP BEAD 600 OHM SMD	MPZ2012S601A	F0603	34	B0, B1, B10, B103, B11, B12, B13, B14, B15, B16, B17, B18, B19, B2, B20, B21, B22, B23, B24, B25, B26, B27, B28, B29, B3, B30, B31, B32, B4, B5, B6, B7, B8, B9	340	
71	INDUCTOR SHIELD DUAL 3.3UH SMD	DRQ127-3R3-R	DRQ127-3R3-R	2	T1, T2	20	
72	CAP CER 10UF 6.3V, 20% X5R 0402	CL05A106MQ5NUNC	C0402	12	CP3, CP8, CP13, CP18, CP23, CP28, CP33, CP38, CP43, CP48, CP53, CP58	120	
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						0	
100	Do Not Install				CA20, CA21, CA22, CA23, CB20, CB21, CB22, CB23, CC20, CC21, CC22, CC23, CD20, CD21, CD22, CD23, CE20, CE21, CE22, CE23, CF20, CF21, CF22, CF23, CG20, CG21, CG22, CG23, CH20, CH21, CH22, CH23, CJ20, CJ21, CJ22, CJ23, CK20, CK21, CK22, CK23, CL20, CL21, CL22, CL23, CM20, CM21, CM22, CM23	0	Do Not Install
101	Do Not Install				P1, P2	0	Do Not Install
	Please note, all componets labled as GREEN were changed from last assembly from BestProto.						