



Embedded Planet, LLC.
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[illegible]

	Signature	Date
Marketing	<input type="checkbox"/>	
Operations	<input checked="" type="checkbox"/>	
Purchasing	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Customer	<input type="checkbox"/>	

CEO	<input type="checkbox"/>
Admin	<input type="checkbox"/>
Engineering	<input type="checkbox"/>
Marketing	<input type="checkbox"/>
Operations	<input type="checkbox"/>
Purchasing	<input type="checkbox"/>

Option List		
Option	Designator	Function
Option 1 (Processor)	440EPx533	PPC440EPx @ 533MHz Core w/ Security Feature
	440EPx667	PPC440EPx @ 667MHz Core w/ Security Feature
	440GRx533	PPC440EPx @ 533MHz Core w/ Security Feature
	440GRx667	PPC440GRx @ 667MHz Core w/ Security Feature
Option 2 (DDR2 SDRAM)	D	256MBytes
Option 3 (FLASH)	32	32MBytes
	64	64MBytes
Option 4 (NAND FLASH)	A	32MBytes
Option 5 (EBC Connector)	N	No Pop EBC Bus Expansion Connector
	E	Populate EBC Bus Expansion Connector
Option 6 (+/-12V Power)	P	Populate +12V & -12V Power Modules and related parts for PCI

Capacitors Base Board														
Item	EP#	EP#	GRN	Qty	Reference Designators	MAS90 Reference Designators	Part Value	Description	PCB Footprint	MFG #1	MFG #2	MFGI #1	MFGI #2	Notes
1	P101000000000015	P101000000000015	LHR	4	C48,C49,C51,C52	C48-49,51-52;	18pF	CAP 18PF 0402 25V 10% COG	C 0402 IPC	AVX: 04023A180KAT2A	KEM: C0402C180K3GAC	AVX: 04023A180KAT2A	KEM: C0402C180K3GAC	
2	P101000000000028	P101000000000028	LHR	23	CC1,CC2,CC3,CC4,CC5,CC6,CC7,CC8,CC9,CC10,CC11,CC12,CC13,CC14,CC15,CC16,CC17,CC18,CC19,CC20,CC21,CC22,CC23	CC1-23;	24pF	CAP 24PF 0402 25V 10% COG	C 0402 IPC	AVX: 04023A240KAT2A	KEM: C0402C240K3GAC	AVX: 04023A240KAT2A	KEM: C0402C240K3GAC	
3	P101000000000004	P101000000000004	LHR	3	CE-1,CE-2,CE-5	CE-1,2,5;	1000pF	CAP 100PF 0402 25V 10% X7R	C 0402 IPC	AVX: 04023C101KAT2A	KEM: C0402C101K3RAC	AVX: 04023C101KAT2A	KEM: C0402C101K3RAC	
4	P101000000000025	P101000000000025	LHR	5	C14,C18,C19,C20,C31	C14,18,20,31;	220pF	CAP 220PF 0402 25V 10% X7R	C 0402 IPC	AVX: 04023C221KAT2A	KEM: C0402C221K3RAC	AVX: 04023C221KAT2A	KEM: C0402C221K3RAC	
5	P101000000000034	P101000000000034	LHR	4	C1P-3,C1P-6,C1P-10,C1P-14	C1P-3,6,10,14;	470pF	CAP 470PF 0402 25V 10% X7R	C 0402 IPC	AVX: 04023C471KAT2A	KEM: C0402C471K3RAC	AVX: 04023C471KAT2A	KEM: C0402C471K3RAC	
6	P101000000000017	P101000000000017	LHR	7	C33-1,C33-8,C34-1,C34-9	C33-1,9,17,C34-1,9,17,C58;	1000pF	CAP 1NF 0402 25V 10% X7R	C 0402 IPC	AVX: 04023C102KAT2A	KEM: C0402C102K3RAC	AVX: 04023C102KAT2A	KEM: C0402C102K3RAC	
7	P101000000000020	P101000000000020	LHR	2	C178,C183	C178,183;	1000pF_2KV	CAP 1NF 1808 2KV 10% X7R	C 1808 AVX	AVX: 1808GC102KAT2A	NOV: 1808B102K202NT	AVX: 1808GC102KAT2A	NOV: 1808B102K202NT	
8	P101000000000030	P101000000000030	LHR	1	C32-9	C32-9;	2200pF	CAP 2r2NF 0402 25V 10% X7R	C 0402 IPC	AVX: 04023C222KAT2A	KEM: C0402C222K3RAC	AVX: 04023C222KAT2A	KEM: C0402C222K3RAC	
9	P101000000000008	P101000000000008	LHR	35	C1P-2,C1P-5,C1P-9,C61,C62,C63,C64,C65,C66,C1P-13,C173,C1-87,C11-11,C12-11,C13-11,C14-11,C33-10,C170,C171,C172,C184,C185,C186,C187,C33-2,C33-3,C34-2,C34-3,C33-11,C33-18,C33-19,C34-10,C34-11,C34-18,C34-19	C1P-2,5,9,13,C61-63,84,86,170-173;	01uF	CAP 10NF 0402 25V 10% X7R	C 0402 IPC	KEM: C0402C103K3RAC	VIS: VJ0402Y103KXX	KEM: C0402C103K3RAC	VIS: VJ0402Y103KXX	
10	P101000000000001	P101000000000001	LHR	280	CVT-3,C3,CVT-4,C4,CVT-5,C5,CVT-6,CVT-7,CVT-8,C8,CVT-9,C9,CVT-10,CVT-11,CVT-12,C11,C1-1,CVT-12,C1-2,CVT-13,C13,C1-3,CVT-14,C1P-4,C1-4,C1-5,C16,C1-6,C1P-7,C1-7,C1P-8,C1-9,C1-9,C21,C22,C29,C30,C53,C54,C66,C67,C68,C69,C70,C71,C72,C73,C74,C75,C78,C79,C80,C81,C90,C91,C9-1,C92,C93,C98,C99,C100,C101,C10-1,C102,C10-2,C103,C104,C105,C108,C109,C1-10,C1P-11,C11-1,C1-11,C1P-12,C11-2,C1-12,C113,C1-13,C11-4,C1-14,C11-5,C1-15,C11-6,C1-16,C11-7,C1-17,C11-8,C1-18,C11-9,C1-19,C1-20,C12-1,C1-21,C12-2,C1-22,C12-3,C1-23,C12-4,C1-24,C12-5,C1-25,C12-6,C1-26,C12-7,C1-27,C12-8,C1-28,C12-9,C1-29,C1-30,C13-1,C1-31,C13-2,C1-32,C13-3,C1-33,C13-4,C1-34,C13-5,C1-35,C13-6,C1-36,C13-7,C1-37,C13-8,C1-38,C13-9,C1-39,C1-40,C14-1,C1-41,C14-2,C1-42,C14-3,C1-43,C14-4,C1-44,C14-5,C1-45,C14-6,C1-46,C14-7,C1-47,C14-8,C1-48,C14-9,C1-49,C1-50,C15-1,C1-51,C15-2,C1-52,C15-3,C1-53,C1-54,C1-55,C1-56,C1-57,C1-58,C1-59,C1-60,C16-1,C1-61,C1-62,C1-63,C1-64,C1-65,C1-66,C1-67,C1-68,C1-69,C1-70,C1-71,C1-72,C1-73,C174,C1-74,C175,C1-75,C176,C1-76,C177,C1-77,C1-78,C179,C1-79,C180,C1-80,C181,C1-81,C182,C1-82,C1-83,C1-84,C1-85,C1-86,C19-1,C192,C193,C194,C195,C196,C197,C198,C199,C20-1,C204,C205,C21-1,C22-1,C22-2,C23-1,C24-1,C24-3,C24-4,C24-5,C24-6,C24-7,C24-8,C24-9,C25-1,C25-2,C25-3,C25-4,C25-5,C25-6,C25-7,C25-8,C25-9,C26-1,C27-1,C28-1,C31-1,C32-1,C32-2,C32-3,C32-4,C32-5,C32-6,C32-7,C33-4,C33-5,C33-6,C33-7,C33-8,C34-4,C34-5,C34-6,C34-7,C34-8,C11-10,C12-10,C13-10,C14-10,C24-10,C24-11,C25-10,C33-12,C33-13,C33-14,C33-15,C33-16,C33-20,C33-21,C33-22,C34-12,C34-13,C34-14,C34-15,C34-16,C34-20,C34-21,C34-22,C35-1,C57,C210,C238,C36-1,C37-1	CVT-3,14,C3,5,8,9,11,13,16,21,22,25-1,10,C26-1,C27-1,C28-1,C31-1;	0.1uF	CAP 100NF 0402 16V 10% X7R	C 0402 IPC	VEN: C0402X7R160-104KN	NA	VEN: C0402X7R160-104KN	NA	
11	P101000000000022	P101000000000022	LHR	2	C206,C211	C206,211;	1uF	CAP 1UF 0805 16V 10% X7R	C 0805 IPC	KEM: C0805C105K4RAC	VEN: C0805X7R160-105KN	KEM: C0805C105K4RAC	VEN: C0805X7R160-105KN	
12	P101000000000031	P101000000000031	LHR	5	C7,C23,C47,C233,C236	C7,23,47,233,236;	2.2uF	CAP 2r2UF 0805 25V 10% X7R	C 0805 IPC	AVX: 0805C225KAT2A	KEM: C0805C225K3RAC	AVX: 0805C225KA12A	KEM: C0805C225K3RAC	
13	P101000000000039	P101000000000039	LHR	4	C228,C232,C235,C32-8	C228,232,235,C32-8;	4.7uF	CAP 47UF 0805 10V 10% X5R	C 0805 IPC	AVX: 0805D475KAT2A	KEM: C0805C475K6PAC	AVX: 0805D475KA12A	KEM: C0805C475K6PAC	
14	P101000000000011	P101000000000011	LHR	5	C24,C25,C26,C27,C28	C24,28;	10uF	CAP 10UF 0805 6.3V 10% X5R	C 0805 IPC	AVX: 0805D6106KAT2A	KEM: C0805C106K9PAC	AVX: 0805D6106KA12A	KEM: C0805C106K9PAC	
15	P101000000000045	P101000000000045	LHR	1	C207	C207;	10uF	CAPT 10UF C6032 25V 20% L0500	CT 6032 IPC	AVX: TPSC106M025R0500	KEM: T494C106M025AT	AVX: TPSC106M025R0500	KEM: T494C106M025AT	
16	P101000000000027	P101000000000027	LHR	20	C2,C6,C32,C64,C65,C76,C77,C82,C83,C94,C95,C96,C97,C106,C107,C202,C203,C216,C24-2,C24-12	C2,6,32,64,65,76,77,82,83,94,97,106,107;	22uF	CAP 22UF 1210 16V 10% X5R	C 1210 IPC	AVX: 1210YD226K4PAC	KEM: C1210C226K4PAC	AVX: 1210YD226KA12A	KEM: C1210C226K4PAC	
17	P101000000000041	P101000000000041	LHR	16	CB-1,CB-2,CB-3,CB-4,CB-5,CB-6,CB-7,CB-8,CB-9,CB-10,CB-11,CB-12,CB-13,CB-14,CB-15,CB-16	CB-1,16;	100uF	CAPT 100UF 3528 6.3V 10% LXXXX	CT 3528 IPC	AVX: TFSB107K006R	KEM: T494B107K006ATH	AVX: TFSB107K006R	KEM: T494B107K006ATH	
18	P101000000000048	P101000000000048	LHR	3	C1,C200,C201	C1,200,201;	220uF	CAPT 220UF D7343 10V 10% L0050	CT 7343 IPC	AVX: TPSD227K010R0050	KEM: T494D227K010ATH	AVX: TPSD227K010R0050	KEM: T494D227K010ATH	
19	P101000000000054	P101000000000054	LHR	8	CVT-1,CVT-2,C10,C12,C15,C17,C208,C209	CVT-1,2,C10,12,15,17,208,209;	330uF	CAPT 330UF D7343 4V 10% L0035	CT 7343 IPC	AVX: TPSD337K004R0035	NEM: LSR33004DK35	AVX: TPSD337K004R0035	NEM: LSR33004DK35	

Resistors Base Board														
Item	EP#	EP#	GRN	Qty	Reference Designators	MAS90 Reference Designators	Part Value	Description	PCB Footprint	MFG #1	MFG #2	MFGI #1	MFGI #2	Notes
20	P11400000000000	P11400000000000	LHR	13	R10,R11,R12,R13,R14,R15, R16,R17,R18,R19,R20,R21, R22	R10:22; R22	0	RES 0 0402 5%	R_0402_IPC	YAE: 9C04021A0R0JJEFF3	BRN: CR0402J000GLF	YAE: 9C04021A0R0JJEFF3	BRN: CR0402J000GLF	
20	P11400000000000	P11400000000000	LHR	3	RO10,RO11,RO45	RO10:11.45; RO39:40 (1/2)+G200;	0	RES 0 0402 5% OPT RES 0 0402 5% OPT3P	R_0402_IPC R_0402_3P_IPC	YAE: 9C04021A0R0JJEFF3 YAE: 9C04021A0R0JJEFF3	BRN: CR0402J000GLF BRN: CR0402J0R1GLF	YAE: 9C04021A0R0JJEFF3 YAE: 9C04021A0R0JJEFF3	BRN: CR0402J000GLF BRN: CR0402J0R1GLF	
21	P11400000000176	P11400000000176	LHR	23	RDS1,RDS2,RDS3,RDS4,RDS5, RDS6,RDS7,RDS8,RDS9, RDS10,RDS11,RDS12,RDS13, RDS14,RDS15,RDS16,RDS17, RDS18,RDS19,RDS20,RDS21, RDS22,RDS23	RDS1:23; RDS10:11.45; RDS12:13; RDS14:15; RDS16:17; RDS18:19; RDS20:21; RDS22:23; RDS23:24	3.3	RES 3/3 0402 5%	R_0402_IPC	YAE: RC0402JR-073R3L YAE: RC0402JW3R3GLF	BRN: CR0402JR-073R3L BRN: CR0402JW3R3GLF	YAE: RC0402JR-073R3L YAE: RC0402JW3R3GLF	BRN: CR0402JR-073R3L BRN: CR0402JW3R3GLF	
22	P11400000000009	P11400000000009	LHR	1	R1	R1;	10	RES 10 0805 5%	R_0805_IPC	YAE: 9C08052A10R0JEFF3	BRN: CR0805JE100GLF	YAE: 9C08052A10R0JEFF3	BRN: CR0805JE100GLF	
23	P11400000000174	P11400000000174	LHR	80	RDS24,RDS25,RDS26,RDS27, RDS28,RDS29,RDS30,RDS31, RDS32,RDS33,RDS34,RDS35, RDS36,RDS37,RDS38,RDS39, RDS40,RDS41,RDS42,RDS43, RDS44,RDS45,RDS46,RDS47, RDS48,RDS49,RDS50,RDS51, RDS52,RDS53,RDS54,RDS55, RDS56,RDS57,RDS58,RDS59, RDS60,RDS61,RDS62,RDS63, RDS64,RDS65,RDS66,RDS67, RDS68,RDS69,RDS70,RDS71, RDS72,RDS73,RDS74,RDS75, RDS76,RDS77,RDS78,RDS79, RDS80,RDS81,RDS82,RDS83, RDS84,RDS85,RDS86,RDS87, RDS88,RDS89,RDS90,RDS91, RDS92,RDS93,RDS94,RDS95, RDS96,RDS97,RDS98,RDS99, RDS100,RDS101,RDS102, RDS103	RDS24:103; RDS28:31; RDS32:35; RDS36:39; RDS40:43; RDS44:47; RDS48:51; RDS52:55; RDS56:59; RDS60:63; RDS64:67; RDS68:71; RDS72:75; RDS76:79; RDS80:83; RDS84:87; RDS88:91; RDS92:95; RDS96:99; RDS100:103	22	RES 22 0402 5%	R_0402_IPC	YAE: RC0402JR-072ZRL YAE: RC0402JW220GLF	BRN: CR0402JR-072ZRL BRN: CR0402JW220GLF	YAE: RC0402JR-072ZRL YAE: RC0402JW220GLF	BRN: CR0402JR-072ZRL BRN: CR0402JW220GLF	
24	P11400000000076	P11400000000076	LHR	25	R90,R91,R92,R93,R94,R95, R96,R97,R98,R99,R100, R101,R102,R123,R124,R125, R126,R127,R128,R129,R130, R131,R132,R133,R134	R90:102,123,134; R96:97,R98,R99,R100; R101,R102,R123,R124,R125; R126,R127,R128,R129,R130; R131,R132,R133,R134	22.1, 1%	RES 22.1 0402 1%	R_0402_IPC	YAE: 9C04021A22R1FKPF3	BRN: CR0402FK22R1GLF	YAE: 9C04021A22R1FKPF3	BRN: CR0402FK22R1GLF	
25	P11400000000097	P11400000000097	LHR	14	RS-1,RS-2,RS-3,RS-4,RS-5, RS-6,RS-7,RS-8,RS-9,R26	RS-1:13,R26; RS-6:7,RS-8:9,R26	33	RES 33 0402 5%	R_0402_IPC	YAE: 9C04021A33R0JEFF3	BRN: CR0402JE330GLF	YAE: 9C04021A33R0JEFF3	BRN: CR0402JE330GLF	
26	P11400000000111	P11400000000111	LHR	23	RD1,RD2,RD3,RD4,RD5, RD6,RD7,RD8,RD9, RD10,RD11,RD12,RD13, RD14,RD15,RD16,RD17, RD18,RD19,RD20,RD21, RD22,RD23	RD1:23; RD16:17; RD18:19; RD20:21; RD22:23; RD23:24	47	RES 47 0402 5%	R_0402_IPC	YAE: 9C04021A47R0JEFF3	BRN: CR0402JE470GLF	YAE: 9C04021A47R0JEFF3	BRN: CR0402JE470GLF	
27	P11400000000119	P11400000000119	LHR	16	R103,R104,R105,R106,R107, R108,R109,R110,R135,R136, R137,R138,R139,R140,R141, R142	R103:110,135,142; R108:109,R110,R135,R136; R137,R138,R139,R140,R141; R142	49.9, 1%	RES 49.9 0402 1%	R_0402_IPC	YAE: 9C04021A49R9FKPF3	BRN: CR0402FK49R9GLF	YAE: 9C04021A49R9FKPF3	BRN: CR0402FK49R9GLF	
28	P11400000000151	P11400000000151	LHR	10	R111,R112,R113,R114,R143, R144,R145,R146,R178,R179	R111:114,143,146,178,179; R144,R145,R146,R178,R179	75	RES 75 0402 5%	R_0402_IPC	YAE: 9C04021A75R0JEFF3	BRN: CR0402JE750GLF	YAE: 9C04021A75R0JEFF3	BRN: CR0402JE750GLF	
29	P11400000000028	P11400000000028	LHR	7	R6,R43,R44,R45,R46,R47,R48	R6:43,48; R42:197,199,203;	120, 1%	RES 120 0402 1%	R_0402_IPC	YAE: 9C04021A1200XPF3	BRN: CR0402FX1200GLF	YAE: 9C04021A1200XPF3	BRN: CR0402FX1200GLF	
30	P11400000000043	P11400000000043	LHR	7	R42,R197,R199,R200, R201,R202,R203	R42:197,199,203; R201,R202,R203	180	RES 180 0402 5%	R_0402_IPC	YAE: 9C04021A180RJEFF3	BRN: CR0402JE181GLF	YAE: 9C04021A180RJEFF3	BRN: CR0402JE181GLF	
31	P11400000000093	P11400000000093	LHR	4	R115,R116,R147,R148	R115:116,147,148; R23:25,83,84;	300	RES 300 0402 5%	R_0402_IPC	YAE: 9C04021A300RJEFF3	BRN: CR0402JE301GLF	YAE: 9C04021A300RJEFF3	BRN: CR0402JE301GLF	
32	P11400000000048	P11400000000048	LHR	5	R23,R24,R25,R83,R84	R23:25,83,84; R83:84;	1K	RES 1K 0402 5%	R_0402_IPC	YAE: 9C04021A1001JEFF3	BRN: CR0402JE102GLF	YAE: 9C04021A1001JEFF3	BRN: CR0402JE102GLF	
33	P11400000000171	P11400000000171	LHR	1	R5E76	R5E76; R5E76;	1.33K 1%	RES 1.33K 0402 1%	R_0402_IPC	YAE: RC0402FR-071K33L	BRN: CR0402FX1331GLF	YAE: RC0402FR-071K33L	BRN: CR0402FX1331GLF	
34	P11400000000172	P11400000000172	LHR	1	R5E77	R5E77; R5E77;	1.96K 1%	RES 1.96K 0402 1%	R_0402_IPC	YAE: RC0402FR-071K96L	BRN: CR0402FX1961GLF	YAE: RC0402FR-071K96L	BRN: CR0402FX1961GLF	
35	P11400000000089	P11400000000089	LHR	10	R49,R50,R51,R52,R53,R54, R55,R56,R57,R58	R49:58; R55:56,R57:58; R5E75;	2.7K	RES 2.7K 0402 5%	R_0402_IPC	YAE: 9C04021A2701JEFF3	BRN: CR0402JE272GLF	YAE: 9C04021A2701JEFF3	BRN: CR0402JE272GLF	
36	P11400000000175	P11400000000175	LHR	1	R5E75	R5E75; R7:27,35,60,82,117,118,180,181,203,3K	3.16K, 1%	RES 3.16K 0402 1%	R_0402_IPC	YAE: RC0402FR-073K16L	BRN: CR0402FX3161GLF	YAE: RC0402FR-073K16L	BRN: CR0402FX3161GLF	
37	P11400000000106	P11400000000106	LHR	40	R27,R28,R29,R30,R31,R32, R33,R34,R35,R60,R61,R62, R63,R64,R65,R66,R67,R68, R69,R70,R71,R72,R73,R74, R75,R76,R77,R78,R79,R80, R81,R82,R117,R118,R180, R181,R204,R205,R206,R7	R27:28,R29,R30,R31,R32; R33,R34,R35,R60,R61,R62; R63,R64,R65,R66,R67,R68; R69,R70,R71,R72,R73,R74; R75,R76,R77,R78,R79,R80; R81,R82,R117,R118,R180; R181,R204,R205,R206,R7	17, 27,35,60,82,117,118,180,181,203,3K	RES 3.9K 0402 5%	R_0402_IPC	YAE: 9C04021A3301JEFF3	BRN: CR0402JE332GLF	YAE: 9C04021A3301JEFF3	BRN: CR0402JE332GLF	
38	P114000000000229	P114000000000229	LHR	1	R182	R182; R19:120,149;	3.40K 1%	RES 3.40K 0402 1%	R_0402_IPC	PAN: ERJ-2RFK3401X	YAE: RC0402FR-073K4L	PAN: ERJ-2RFK3401X	YAE: RC0402FR-073K4L	
39	P11400000000122	P11400000000122	LHR	3	R119,R120,R149	R119:120,149; R06:8,R121:122,150,177;	4.7K	RES 4.7K 0402 5%	R_0402_IPC	YAE: 9C04021A4701JEFF3	BRN: CR0402JE472GLF	YAE: 9C04021A4701JEFF3	BRN: CR0402JE472GLF	
40	P11400000000126	P11400000000126	LHR	33	R06,R07,R08,R150,R151, R152,R153,R154,R155,R156, R157,R158,R159,R160,R161, R162,R163,R164,R165,R166, R167,R168,R169,R170,R171, R172,R173,R174,R175,R176, R177,R178,R179	R06:8,R121:122,150,177; R152,R153,R154,R155,R156; R157,R158,R159,R160,R161; R162,R163,R164,R165,R166; R167,R168,R169,R170,R171; R172,R173,R174,R175,R176; R177,R178,R179	4.99K 1%	RES 4.99K 0402 1%	R_0402_IPC	YAE: 9C04021A4991FKPF3	BRN: CR0402FK4991GLF	YAE: 9C04021A4991FKPF3	BRN: CR0402FK4991GLF	
41	P11400000000020	P11400000000020	LHR	15	R36,R37,R38,R39,R40,R59, R86,R87,R190,R191,R192, R193,R194,R195,R196	R36:40,59,86,87,190,196; R86,R87,R190,R191,R192; R193,R194,R195,R196	10K	RES 10K 0402 5%	R_0402_IPC	YAE: 9C04021A1002JEFF3	BRN: CR0402JE103GLF	YAE: 9C04021A1002JEFF3	BRN: CR0402JE103GLF	
41	P11400000000020	P11400000000020	LHR	3	RO36,RO37,RO38	RO36:38 (1/2); R187;	10K	RES 10K 0402 5% OPT3P	R_0402_3P_IPC	YAE: 9C04021A1002JEFF3	BRN: CR0402JE103GLF	YAE: 9C04021A1002JEFF3	BRN: CR0402JE103GLF	
42	P11400000000030	P11400000000030	LHR	1	R187	R187; R8:9;	12K 1%	RES 12K 0402 1%	R_0402_IPC	YAE: 9C04021A1002FKPF3	BRN: CR0402FK1202GLF	YAE: 9C04021A1002FKPF3	BRN: CR0402FK1202GLF	
43	P11400000000038	P11400000000038	LHR	9	R3,R5,R88,R89,R41,R183,R184,R185	R3:5,41,88,89,183,186; R5E76:7,RS-8:9,R26	15K	RES 15K 0402 5%	R_0402_IPC	YAE: 9C04021A1502JEFF3	BRN: CR0402JE153GLF	YAE: 9C04021A1502JEFF3	BRN: CR0402JE153GLF	
44	P11400000000077	P11400000000077	LHR	5	R5E72,R2,R5E74,R5E79, R5E80	R5E72:4,9,11,R2; R5E74:9,11,R2; R5E79:7,RS-8:9,R26; R5E80:7,RS-8:9,R26	22 1K 1%	RES 22 1K 0402 1%	R_0402_IPC	YAE: 9C04021A2212FKPF3	BRN: CR0402FK2212GLF	YAE: 9C04021A2212FKPF3	BRN: CR0402FK2212GLF	
45	P11400000000103	P11400000000103	LHR	3	R5E73,R4,R5E78	R5E73:8,R4; R5E78:1; R5E71;	33.2K 1%	RES 33.2K 0402 1%	R_0402_IPC	YAE: 9C04021A3322FKPF3	BRN: CR0402FK3322GLF	YAE: 9C04021A3322FKPF3	BRN: CR0402FK3322GLF	
46	P11400000000110	P11400000000110	LHR	1	R5E71	R5E71; R5E71;	44.2K 1%	RES 44.2K 0402 1%	R_0402_IPC	YAE: 9C04021A4422FKPF3	BRN: CR0402FK4422GLF	YAE: 9C04021A4422FKPF3	BRN: CR0402FK4422GLF	
47	P114000000000025	P114000000000025	LHR	1	R5E710	R5E710; R5E710;	110K 1%	RES 110K 0402 1%	R_0402_IPC	YAE: 9C04021A1103FKPF3	BRN: CR0402FK1103GLF	YAE: 9C04021A1103FKPF3	BRN: CR0402FK1103GLF	
Connectors Base Board														
Item	EP#	EP#	GRN	Qty	Reference Designators	MAS90 Reference Designators	Part Value	Description	PCB Footprint	MFG #1	MFG #2	MFGI #1	MFGI #2	Notes
48	P102000000000027	P102000000000027	LHR	1	J1	J1;	25in F SMT	CON MICTOR 2X19 F VT 0/25 SMT	767054-1	AMP: 5767054-1	NA	AMP: 5767054-1	NA	
49	P102000000000017	P102000000000017	LHR	1	J3	J3;	0.1in M SMT	CON HDR 2X2 M VT 0/1 SMT	TSM 2X2 DV	SAM: TSM-102-01-TM-DV	NA	SAM: TSM-102-01-TM-DV	NA	
50	P102000000000010	P102000000000010	LHR	7	J2,J4,J5,J6,J7,J10,J11	J2,J4,J5,J6,J7,J10,J11	0.1in M SMT	CON HDR 1X2 M VT 0/1 SMT	TSM 2X1 SV	SAM: TSM-102-01-TM-SV	MET: M650-H102-02-01G	SAM: TSM-102-01-TM-SV	MET: M650-H102-02-01G	
51	P121000000000002	P121000000000002	LHR	6	Jumpers for J2(pins 1 only),J3(x2),J4	J2,J3,J4	0.1in M SMT	HRDW JUMPER 2x54MM BLACK	TSM 2X1 SV	S				

Misc Base Board														
Item	EP#	EP#	GRN	Qty	Reference Designators	MAS90 Reference Designators	Part Value	Description	PCB Footprint	MFG #1	MFG #2	MFGI #1	MFGI #2	Notes
60	P10300000000004	P10300000000004	LHR	4	CR1,CR2,CR3,CR4	CR1-4:	GRN	DIODE LED 0805, GRN	LED 0805	FAI: QTLPE30C-4	AGI: HSMG-C150	FAI: QTLPE30C-4	FAI: QTLPE10C-4	
61	P10300000000005	P10300000000005	LHR	2	CR5,CR6	CR5-6:	RED	DIODE LED 0805, RED	LED 0805	FAI: QTLPE30C-2	AGI: HSMH-C150	FAI: QTLPE30C-2	FAI: QTLPE10C-2	
62	P10300000000015	P10300000000015	LHR	1	D1	D1:	BAV70	DIODE SIG. SOT23, 150mA, BAV70	SOT 23, 3	VIS: BAV70-V	FAI: BAV70NL	VIS: BAV70-V	FAI: BAV70NL	
63	P10400000000006	P10400000000006	LHR	2	FH1,FH2	FH1-2:	10A Holder	FUSE 10A SMT HOLDER	154, SERIES	LIF: 154010	NA	LIF: 154010	NA	
64	P10400000000004	NA	LHR	3	FH3,FH4,FH5	FH3-5:	5A Holder	FUSE 5A SMT HOLDER	154, SERIES	LIF: 154005	NA	LIF: 154005	NA	
65	P10400000000005	NA	LHR	2	FH6,FH7	FH6-7:	10A Holder	FUSE 8A SMT HOLDER	154, SERIES	LIF: 154008	NA	LIF: 154008	NA	
66	P110000000000010	P110000000000010	LHR	7	L1,L2,L3,L4,L5,L6,L7	L1-7:	600Ohm 200mA	IND. BEAD, 0805, 600OHM, 200MA	L 0805, IPC	MUR: BLM21B601SPT	TDK: MMZ2012Y601B	MUR: BLM21B601SPT	TDK: MMZ2012Y601B	
67	P110000000000009	P110000000000009	LHR	12	L8,L9,L10,L11,L12,L13	L8-19:	180Ohm 1.5A	IND. BEAD, 0603, 180OHM, 1r5A, 25%	L 0603, IPC	MUR: BLM18P6181SN1x	NA	MUR: BLM18P6181SN1x	NA	
68	P110000000000003	P110000000000003	LHR	2	L20,L21	L20-21:	1.5uH	IND 15uH, 7MMX7MM, 8A, SMT	FDV0630, IHLF	VIS: IHLF-2525CZ-RZ-1R5-M-01	TOK: FDV0630-1R8M-P3	VIS: IHLF-2525CZ-RZ-1R5-M-01	TOK: FDV0630-1R8M-P3	
69	P119000000000009	P119000000000009	LHR	2	Q1,Q2	Q1-2:	SI7540DP	XSTR, PWR, NFET, PPKS08, SI7540DP	PPAK, SO-8	VIS: SI7540DP-E3	NA	VIS: SI7540DP-E3	NA	
70	P116000000000002	P116000000000002	LHR	1	SW1	SW1:	SPST	SWITCH PUSH, SPST, RA, SMT4	ITT, KT11B2SAM, T	CAN: KT11B2SAM3-LFS	NA	CAN: KT11B2SAM3-LFS	NA	
71	P116000000000001	P116000000000001	LHR	2	SW2, SW3	SW2-3:	4P0LE	SWITCH DIP, 4P0LE, Q1, SMT3	Q90B, SERIES	OMR: A6S-4101	GRA: 90HBW04PT	OMR: A6S-4101	GRA: 90HBW04PT	
72	P118000000000002	P118000000000002	LHR	2	T1,T2	T1-2:	EPIC4011	XNBR, 11, SOT23, GENET, QUAD	T1, EPIC4011	PCA: EPIC4011J-LF	NA	PCA: EPIC4011J-LF	NA	
73	P120000000000015	P120000000000016	LHR	1	Y1	Y1:	22, 1184MHz	XTAL, 22n1184MHz, SMT6x3, 18PF, 50P	FX532A	CIT: CS10-22,1184MAJ-UT (Digi-Key)	FOX: 419-22,1184-F	CIT: CS10-22,1184MAGJ-UT	FOX: 419-22,1184-F	
74	P120000000000013	P120000000000014	LHR	2	Y2	Y2:	12,00 MHz	XTAL, 1200MHz, SMT6x3, 18PF, 50PPM	FX532A	CIT: CS10-12,000MAJ-UT (Digi-Key)	FOX: 419-12-56 (FX532 Series)	CIT: CS10-12,000MAGJ-UT	FOX: 419-12-57	
Cis Base Board														
Item	EP#	EP#	GRN	Qty	Reference Designators	MAS90 Reference Designators	Part Value	Description	PCB Footprint	MFG #1	MFG #2	MFGI #1	MFGI #2	Notes
75	P113000000000006	P113000000000006	LHR	1	U2	U2:	LTC3736EUF	REG. SW, OFN24, LTC3736	QFN 24, UF	LIN: LTC3736EUF#PBF	NA	LIN: LTC3736EUF#PBF	NA	
76	P113000000000016	P113000000000016	LHRG	1	U3	U3:	TPS51100	REG. LIN, MSOP10, TPS51100, DRTERM	SO150,480-10L	TI: TPS51100DGQ4	NA	TI: TPS51100DGQ4	NA	
77	P113000000000019	P113000000000019	LHR	1	U4	U4:	AXH016A0X3	REG. MOD, 10PIN, SIP, 075V4- 16A	AXH016A0X3	TYC: AXH016A0X3Z	ERIC: PMB451845TWP	TYC: AXH016A0X3Z	ERIC: PMB451845TWP	
78	P113000000000015	P113000000000015	LHR	2	U7,U8	U7-8:	MCP1726	REG. LIN, DFN8, MCP1726, ADJ	DFN, PACK, 8	MIP: MCP1726-ADJ2E/MF	NA	MIP: MCP1726-ADJ2E/MF	NA	
79	P1050000000000180	P1050000000000181	LHR	1	U9	U9:	CY2281FX, Q211	IC, CLKGEN, SOIC8, Q211P22	SOIC127P600-8L	CYP: CY2281FXC, Q211P22	NA	CYP: CY2281FXI, Q211P22	NA	
80	P105000000000086	NA	LHR	1	U10	U10:	CY2282FZX, Q211	IC, CLKGEN, TSSOP16, Q211P10	SOP83X600-16	CYP: CY2282FZX, Q211P1	NA	NA	NA	
81	P105000000000068	P105000000000068	LHR	2	U16,U20	U16-20:	IC, RS232, SSOP20, 3225, E3-5V	IC, RS232, SSOP20, 3225, E3-5V	SOP8X780-20	INS: IC13225EACZ	MAX: MAX3225EAC+	INS: IC13225EACZ	MAX: MAX3225EAC+	
82	P111000000000005	P111000000000005	LHR	3	U17,U18,U29	U17-18,29:	AT24C04	MEMEE, 812Mbx8, D8GA6, 100KHZ, I2C	BGA100-50P2X4-8A	ATM: AT24C04U3-100U-1.8	NA	ATM: AT24C04U3-100U-1.8	NA	
83	P105000000000081	P105000000000081	LHR	1	U19	U19:	AD7414-0	IC, TEMP, SOT23-6, I2C, AD7414-0	SOT 23, 6	ANA: AD7414ARTZ-0	NA	ANA: AD7414ARTZ-0	NA	
84	P105000000000021	P105000000000021	LHR	2	U21,U23	U21,23:	74CBTLV16800	IC, BUSSWPCHG, TVSOP48, 7416800	SOP40P600-48	TI: SN74CBTLV16800VR	IDT: IDT74CBTLV16800PF	TI: SN74CBTLV16800VR	IDT: IDT74CBTLV16800PF	
85	P106000000000043	P106000000000043	LHR	1	U25	U25:	EPM2401	IC, CPLD, TQFP100, EPM2401-DC50211	TQFP100, A	ALT: EPM2401-100CSN, 211P2	NA	ALT: EPM2401-100SN	NA	
86	P105000000000038	P105000000000038	LHRG	6	U26,U27,U28,U30,U36,U37	U26-28,30,36-37:	PH643157	IC, AN50V, ZDRN6, SNOT, JXX3157	TDFN, 2x4, 6	FAI: NC7S83157LX, NL	FAI: NC7S83157LX, NL	FAI: NC7S83157LX, NL	FAI: NC7S83157LX, NL	
87	P105000000000075	P105000000000075	LHR	1	U31	U31:	MIC2774N-29	IC, RSTVM, SOT235, 2774, THR293V	SOT 23, 5	MIC: MIC2774N-29YMS	MAM: MAX3606UK29D3+T	MIC: MIC2774N-29YMS	MAM: MAX3606UK29D3+T	
88	P105000000000023	NA	HR	1	U32	U32:	9x877	IC, CLKBUF, QFN40, DIFF, 100UT	QFN50P600X600-40W2N	ICS: IC59U787XKLF-T	MOT: MPC9877E	NA	MOT: MPC9877E	
89	P108000000000004	P108000000000005	HR	2	U33,U34	U33-34:	88E1111	IC, ENETG, 98E6C, 88E1111	BCC, PACK, 96	MAR: 88E1111-B2-CAA1C000	NA	MAR: 88E1111-B2-CAA1C000	NA	
90	P105000000000002	P105000000000002	LHRG	1	U35	U35:	74LVCTG08	IC, AND, SC70, SINGLE, 74LVCTG08	SC70, 5	FAI: NC7S08P5X	FAI: NC7S08P5X	FAI: NC7S08P5X	FAI: NC7S08P5X	
Option 1 - 440EPx533 for PPC440EPx w/ Security Feature and 533MHz Core Clock (USB Supported)														
Item	EP#	EP#	GRN	Qty	Reference Designators	MAS90 Reference Designators	Part Value	Description	PCB Footprint	MFG #1	MFG #2	MFGI #1	MFGI #2	Notes
91	P107000000000016	P107000000000016	HR	1	U1	U1:	440EPxGrx	IC, CPU, TE-PBGA680, 440EPx5333	BGA100P34X34-680T	AMC: PPC440EPx-SUA533T	NA	AMC: PPC440EPx-SUA533T	NA	
20	P114000000000000	P114000000000000	LHR	1	RO30 (1/2)	RO30 (1/2):	C56:	RES 0 0402, 5%, OPT3P	R 0402, 3P, IPC	YAE: 9C04021A0R00JEFF3	BRN: CR0402J0R1GLF	YAE: 9C04021A0R00JEFF3	BRN: CR0402J0R1GLF	
18	P101000000000048	P101000000000048	LHR	1	C56	C56:	220uF	CAPT, 220UF, D7343, 10V, 10%, L0050	CT, 7343, IPC	AVX: TPSD227K010R0050	KEM: T494D227K010ATH	AVX: TPSD227K010R0050	KEM: T494D227K010ATH	
92	P104000000000003	P104000000000003	LHR*	1	F12	F12:	500mA	FUSE, 500MA, 1206, SMT, PTC	FU, 1206L	LIF: 1206L050	NA	LIF: 1206L050	NA	
93	P105000000000128	P105000000000128	LHR	1	U24	U24:	GT3250-ABZJ	IC, USB20-PHY, TQFP56, GT3250-ABZ	QFN50P600X800-56W6N	SMS: GT3250-ABZJ	NA	SMS: GT3250-ABZJ	NA	
94	P102000000000047	P102000000000047	LHR	2	P5,P6	P5-6:	FTH	CON, USB8, 1X4, F, RA, TH	787780, TH	AMP: 292304-1	ADA: USB-B-S-RA-RC	AMP: 292304-1	ADA: USB-B-S-RA-RC	
95	P102000000000045	P102000000000045	LHR	1	P7	P7:	FTH	CON, USB8, 1X4, F, RA, TH	787616, TH	AMP: 292303-1	ADA: USB-A-S-RA-RC	AMP: 292303-1	ADA: USB-A-S-RA-RC	
96	P115000000000000	P115000000000000	LHR	3	SP1,SP2,SP3	SP1-3:	PGB102ST3WR	SUP, ESD, SOT23, 1KV	SOT23, 3T	LIT: PGB102ST3WR	NA	LIT: PGB102ST3WR	NA	
97	P117000000000000	P117000000000000	LHR	6	VR1,VR2,VR3,VR4,VR5,VR6	VR1-6:	5.5V 20A	VAR, 5r5V, 0603, 30A	VR, 0603	LIF: V5.5MLA0603xxx	NA	LIF: V5.5MLA0603xxx	NA	
Option 1 - 440EPx667 for PPC440EPx w/ Security Feature and 667MHz Core Clock (USB Supported)														
Item	EP#	EP#	GRN	Qty	Reference Designators	MAS90 Reference Designators	Part Value	Description	PCB Footprint	MFG #1	MFG #2	MFGI #1	MFGI #2	Notes
91	P107000000000189	P107000000000189	HR	1	U1	U1:	440EPxGrx	IC, CPU, TE-PBGA680, 440EPx5667	BGA100P34X34-680T	AMC: PPC440EPx-SUA667T	NA	AMC: PPC440EPx-SUA667T	NA	
20	P114000000000000	P114000000000000	LHR	1	RO30 (1/2)	RO30 (1/2):	C56:	RES 0 0402, 5%, OPT3P	R 0402, 3P, IPC	YAE: 9C04021A0R00JEFF3	BRN: CR0402J0R1GLF	YAE: 9C04021A0R00JEFF3	BRN: CR0402J0R1GLF	
18	P101000000000048	P101000000000048	LHR	1	C56	C56:	220uF	CAPT, 220UF, D7343, 10V, 10%, L0050	CT, 7343, IPC	AVX: TPSD227K010R0050	KEM: T494D227K010ATH	AVX: TPSD227K010R0050	KEM: T494D227K010ATH	
92	P104000000000003	P104000000000003	LHR*	1	F12	F12:	500mA	FUSE, 500MA, 1206, SMT, PTC	FU, 1206L	LIF: 1206L050	NA	LIF: 1206L050	NA	
93	P105000000000128	P105000000000128	LHR	1	U24	U24:	GT3250-ABZJ	IC, USB20-PHY, TQFP56, GT3250-ABZ	QFN50P600X800-56W6N	SMS: GT3250-ABZJ	NA	SMS: GT3250-ABZJ	NA	
94	P102000000000047	P102000000000047	LHR	2	P5,P6	P5-6:	FTH	CON, USB8, 1X4, F, RA, TH	787780, TH	AMP: 292304-1	ADA: USB-B-S-RA-RC	AMP: 292304-1	ADA: USB-B-S-RA-RC	
95	P102000000000045	P102000000000045	LHR	1	P7	P7:	FTH	CON, USB8, 1X4, F, RA, TH	787616, TH	AMP: 292303-1	ADA: USB-A-S-RA-RC	AMP: 292303-1	ADA: USB-A-S-RA-RC	
96	P115000000000000	P115000000000000	LHR	3	SP1,SP2,SP3	SP1-3:	PGB102ST3WR	SUP, ESD, SOT23, 1KV	SOT23, 3T	LIT: PGB102ST3WR	NA	LIT: PGB102ST3WR	NA	
97	P117000000000000	P117000000000000	LHR	6	VR1,VR2,VR3,VR4,VR5,VR6	VR1-6:	5.5V 20A	VAR, 5r5V, 0603, 30A	VR, 0603	LIF: V5.5MLA0603xxx	NA	LIF: V5.5MLA0603xxx	NA	
Option 1 - 440GRx533 for PPC440GRx w/ Security Feature and 533MHz Core Clock (USB Not Supported)														
Item	EP#	EP#	GRN	Qty	Reference Designators	MAS90 Reference Designators	Part Value	Description	PCB Footprint	MFG #1	MFG #2	MFGI #1	MFGI #2	Notes
91	P107000000000017	P107000000000017	HR	1	U1	U1:	440EPxGrx	IC, CPU, TE-PBGA680, 440GRx5333	BGA100P34X34-680T</					