

PARTS LIST	CEEM INDIANA UNIVERSITY		PROJECT	BELLE-II	PART NO	4020025	REVISION -	DATE: 11/22/2011
LIST TITLE:			APPROVAL	REV AUTH NO				
PRINTED WIRING ASSEMBLY RPC FEE PROTOTYPE			B. KUNKLER					
FIND NO	REF DES	QTY	PART NO	DESCRIPTION	MANUFACTURER	NOTE OR REMARK		
1	C1, C2, C4-C7, C9, C10, C12-C14, C16-C19, C21-C23, C25, C26, C28-C30, C32, C33, C35-C37, C39, C40, C42, C43, C45-C47, C49, C50, C52, C53, C55, C56, C58, C60, C61, C63, C65, C66, C68, C70, C71, C73, C75, C76, C78, C80, C81, C83, C85, C86, C88, C90, C91, C93, C95, C96, C98, C100, C101, C103, C105, C106, C108, C110, C111, C113, C115, C116, C118, C120, C121, C123, C125, C126, C128, C130, C131, C133, C135, C136, C138, C140, C141, C143, C145, C146, C148, C150, C151, C153, C155, C156, C158, C160, C161, C163,	186	0402ZD105KAT	CAPACITOR, CERMAMIC, 1.0UF, 10V, X5R, 0402	AVX CORPORATION			

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2	C3, C8, C11, C15, C20, C24, C27, C31, C34, C41, C44, C48, C51, C54, C57, C59, C62, C64, C67, C69, C72, C74, C77, C79, C82, C84, C87, C89, C92, C94, C97, C99, C102, C104, C107, C109, C112, C114, C117, C119, C122, C124, C127, C129, C132, C134, C137, C139, C142, C144, C147, C149, C152, C154, C157, C159, C162, C164, C167, C169, C172, C174, C177, C179, C182, C184, C187, C189, C192, C194, C197, C199, C202, C204, C207, C209, C212, C214, C217, C219, C223, C231, C235, C236, C239, C241, C244, C246, C254,	96	GRM188R72A104KA35D	CAPACITOR, CERAMIC, 0.1UF, +/- 10%, 100V, X7R, 0603	MURATA	
3	C38, C325	2	0805YD106MAT	CAPACITOR, CERAMIC, 10UF, 20%, 16V , X5R, 0805	AVX CORPORATION	
4	C222, C227, C230, C251, C256, C257, C327	7	C0603C106M9PAC	CAPACITOR, CERAMIC, 10UF, 20%, 6.3V, X5R, 0603	KEMET	

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5	C225, C226, C228, C229, C247, C250, C252, C253, C274-C280, C285-C287, C289-C291, C301-C310	31	GRM155R60J475ME87D	CAPACITOR, CERAMIC, 4.7UF, 6.3V, X5R, +/-20%, 0402	MURATA	
6	C311-C315, C317	6	1206YD226MAT	CAPACITOR, CERAMIC, 22UF, 16V, X5R, +/-20%, 1206	AVX CORPORATION	
7	C316, C326	2	04023C103KAT	CAPACITOR, CERAMIC, 0.01UF, 25V, X7R, +/-10%, 0402	AVX CORPORATION	
8	D1-D48	48	VBUS05L1-DD1	DIODE, ESD-PROTECTION, BIDIRECTIONAL, SMT	VISHAY	
9	E1-E192, E197-E200	196	NA	CONNECTOR, 0.60MM PLATED HOLE, 26 AWG WIRE	NA	
10	E193-E196	4	NA	MOUNTING HOLE, PLATED, M3.0 SCREW, LOOSE FIT, 7.6MM FLAT WASHER	NA	
11	J1	1	8830E-100-170L-F	CONNECTOR, HEADER, 100 POS, 1.27MM, RIGHT ANGLE, THRU	KEL	
12	J2	1	46556-1145	CONNECTOR, BOARD-BOARD, 40 POS, 1.27MM, SMT	MOLEX	
13	J3	1	46557-1545	CONNECTOR, BD-BD, 40 POS, RCPT, 1.27MM, SMT	MOLEX	
14	J4	1	87832-1420	CONNECTOR, HEADER, 14 POS, 2MM, VERTICAL, SMT	MOLEX	
15	J5, J6, J8	3	87759-0414	CONNECTOR, HEADER, 4 POS, DL 2MM VERT SMD	MOLEX	
16	J7, J11	2	EPL.00.250.NTN	CONNECTOR, ELBOW SOCKET, 50 OHM, PCB R/A	LEMO	
17	J9	1	39502-1002	CONNECTOR, HEADER, 2 POS, 3.5MM, R/A PCB	MOLEX	
18	J10	1	52991-0308	CONNECTOR, BOARD-BOARD, 30 POS, 0.5MM, SMT	MOLEX	

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19	R1, R10-R14, R16, R24, R32, R34-R38, R47, R56, R65, R74, R83, R92, R101, R110, R119, R128, R137, R146, R155, R164, R173, R182, R191, R200, R209, R218, R227, R236, R245, R254, R263, R272, R281, R290, R299, R308, R317, R326, R335, R344, R353, R362, R371, R380, R389, R398, R407, R416, R425, R434, R443-R448, R457-R459, R464	68	CRCW040233R0FK	RESISTOR, THICK FILM, 33.0 OHM, 1%, 1/16W, 0402	VISHAY DALE	

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20	R2, R3, R15, R17, R25, R26, R39, R40, R48, R49, R57, R58, R66, R67, R75, R76, R84, R85, R93, R94, R102, R103, R111, R112, R120, R121, R129, R130, R138, R139, R147, R148, R156, R157, R165, R166, R174, R175, R183, R184, R192, R193, R201, R202, R210, R211, R219, R220, R228, R229, R237, R238, R246, R247, R255, R256, R264, R265, R273, R274, R282, R283, R291, R292, R300, R301, R309, R310, R318, R319, R327, R328, R336, R337, R345, R346, R354, R355, R363, R364, R372, R373, R381, R382, R390, R391,	96	CRCW040220K0FK	RESISTOR, THICK FILM, 20.0K OHM, 1%, 1/16W, 0402	VISHAY DALE	

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21	R4, R5, R18, R20, R30, R31, R41, R43, R51, R52, R60, R61, R68, R72, R77, R78, R86, R88, R95, R97, R105, R106, R113, R115, R122, R123, R131, R133, R140, R141, R149, R151, R158, R160, R167, R169, R176, R177, R185, R187, R194, R196, R203, R205, R212, R214, R221, R223, R230, R232, R239, R241, R248, R249, R257, R259, R266, R270, R275, R277, R284, R286, R293, R295, R302, R304, R312, R313, R320, R323, R329, R331, R338, R340, R347, R350, R357, R358, R365, R367, R374, R375, R383, R385, R392, R395,	96	CRCW0805113RFK	RESISTOR, THICK FILM, 113 OHM, 1%, 1/8W, 0805	VISHAY DALE	

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22	R6, R9, R19, R23, R27, R29, R42, R46, R50, R55, R59, R64, R69, R73, R79, R82, R87, R91, R96, R100, R104, R109, R114, R118, R124, R127, R132, R136, R142, R145, R150, R154, R159, R163, R168, R172, R178, R181, R186, R190, R197, R199, R204, R208, R213, R217, R222, R226, R231, R235, R240, R244, R250, R253, R258, R262, R267, R271, R276, R280, R285, R289, R294, R298, R303, R307, R311, R316, R321, R325, R330, R334, R339, R343, R348, R352, R356, R361, R366, R370, R376, R379, R384, R388, R393,	96	CRCW0402100RFK	RESISTOR, THICK FILM, 100 OHM, 1%, 1/16W, 0402	VISHAY DALE	

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23	R7, R21, R28, R44, R53, R62, R70, R80, R89, R98, R107, R116, R125, R134, R143, R152, R161, R170, R179, R188, R195, R206, R215, R224, R233, R242, R251, R260, R268, R278, R287, R297, R305, R314, R324, R332, R341, R349, R359, R368, R378, R386, R394, R403, R414, R422, R430, R440, R450	49	CRCW04022K40FK	RESISTOR, THICK FILM, 2.40K OHM, 1%, 1/16W, 0402	VISHAY DALE	

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24	R8, R22, R33, R45, R54, R63, R71, R81, R90, R99, R108, R117, R126, R135, R144, R153, R162, R171, R180, R189, R198, R207, R216, R225, R234, R243, R252, R261, R269, R279, R288, R296, R306, R315, R322, R333, R342, R351, R360, R369, R377, R387, R396, R404, R412, R423, R432, R441, R449, R451-R456, R460-R462, R465, R466, R468, R469, R478, R479	64	CRCW04024K70FK	RESISTOR, THICK FILM, 4.70K OHM, 1%, 1/16W, 0402	VISHAY DALE	
25	R463	1	CRCW0402332RFK	RESISTOR, THICK FILM, 332 OHM, 1%, 1/16W, 0402	VISHAY DALE	
26	R467	1	CRCW121049R9FK	RESISTOR, THICK FILM, 49.9 OHM, 1%, 1/2W, 1210	VISHAY DALE	
27	R470	1	CRCW04020000ZSTD	RESISTOR, THICK FILM, 0.0 OHM, 1/16W, 0402	VISHAY DALE	
28	R471, R472, R475, R477	4	CRCW04022K00FK	RESISTOR, THICK FILM, 2.00K OHM, 1%, 1/16W, 0402	VISHAY DALE	
29	R473	1	CRCW04022K15FK	RESISTOR, THICK FILM, 2.15K OHM, 1%, 1/16W, 0402	VISHAY DALE	
30	R474	1	CRCW04026K20FK	RESISTOR, THICK FILM, 6.20K OHM, 1%, 1/16W, 0402	VISHAY DALE	
31	R476	1	CRCW04022K26FK	RESISTOR, THICK FILM, 2.26K OHM, 1%, 1/16W, 0402	VISHAY DALE	

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32	T1-T48	48	TC1.5-52T+	TRANSFORMER, RF 50 OHM, 0.5 TO 550 MHZ, AT224-1	MINI-CIRCUITS	
33	TP1-TP5	5	5015	TEST POINT, MINIATURE, SMT	KEYSTONE	
34	U1, U5, U8, U12, U16, U19, U22, U24, U26, U28, U30, U32, U34, U36, U38, U40, U42, U44, U46, U48, U50, U52, U54, U56, U58, U60, U62, U64, U66, U68, U70, U72, U74, U76, U78, U80, U82, U84, U86, U88, U90, U92, U95, U97, U99, U101, U103, U105	48	MAX9010EXT+T	IC, COMPARATOR, PRECISION TTL, SOT23-6	MAXIM IC	
35	U2, U6, U10, U13, U17, U20, U23, U25, U27, U29, U31, U33, U35, U37, U39, U41, U43, U45, U47, U49, U51, U53, U55, U57, U59, U61, U63, U65, U67, U69, U71, U73, U75, U77, U79, U81, U83, U85, U87, U89, U91, U93, U96, U98, U100, U102, U104, U106	48	SN74AUC1G125DCKR	IC, BUFFER GATE, SINGLE , SOT-353	TEXAS INSTRUMENTS	

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36	U3, U7, U11, U14, U18, U21	6	LTC2636CMS-HMI8#PBF	IC, DAC, 8-BIT, OCTAL, 16-SOP	LINEAR TECHNOLOGY	
37	U4, U9, U125, U126	4	SN74LVC8T245PW	IC, BUS XCVR, 8-BIT, DUAL-SUPPLY, SOP-24	TEXAS INSTRUMENTS	
38	U15	1	REF5025AIDGK	IC, VOLTAGE REFERENCE, LOW NOISE, 2.5V, 8-SOP	TEXAS INSTRUMENTS	
39	U94	1	XC6SLX25-2CSG324C	IC, SPARTAN-6 FPGA, 24K, 324-CSPBGA	XILINX	
40	U107, U115, U116	3	SN74ALVC244PW	IC, OCTAL BUFFER/DRIVER, SOP-20	TEXAS INSTRUMENTS	
41	U108-U110, U112-U114	6	SN74LV595APW	IC, SHIFT REGISTER, 8-BIT, SOP-16	TEXAS INSTRUMENTS	
42	U111	1	AT45DB081D-SSU-2.5	IC, DATA FLASH, 8 MBIT, SPI, SOIC-8	ATMEL	
43	U117, U119	2	SN74LVC157APW	IC, QUAD 2:1 MULTIPLEXER, SOP-16	TEXAS INSTRUMENTS	
44	U118	1	SN74LVC74APW	IC, DUAL FLIP-FLOP, D-TYPE, SOP-14	TEXAS INSTRUMENTS	
45	U120	1	632N3I025M00000	OSCILLATOR, 2.5V, 25.000 MHZ, 50 PPM, SMT	CTS ELECTRONIC COMPONENTS	
46	U121, U122	2	LT1764AEQ#PBF	IC, LDO REG, ADJ, 3A, 5-DDPAK	LINEAR TECHNOLOGY	
47	U123	1	LT1763CS8	IC, LDO REG, LOW NOISE, ADJ, 8-SOIC	LINEAR TECHNOLOGY	
48	U124	1	LT1762EMS8	IC, LDO REG, LOW NOISE, ADJ, 8-MSOP	LINEAR TECHNOLOGY	
49		1	4020024	PRINTED WIRING BOARD, 48-CHANNEL TDC	INDIANA UNIVERSITY	
50		REF	4020023	48-CHANNEL TDC, SCHEMATIC DIAGRAM	INDIANA UNIVERSITY	