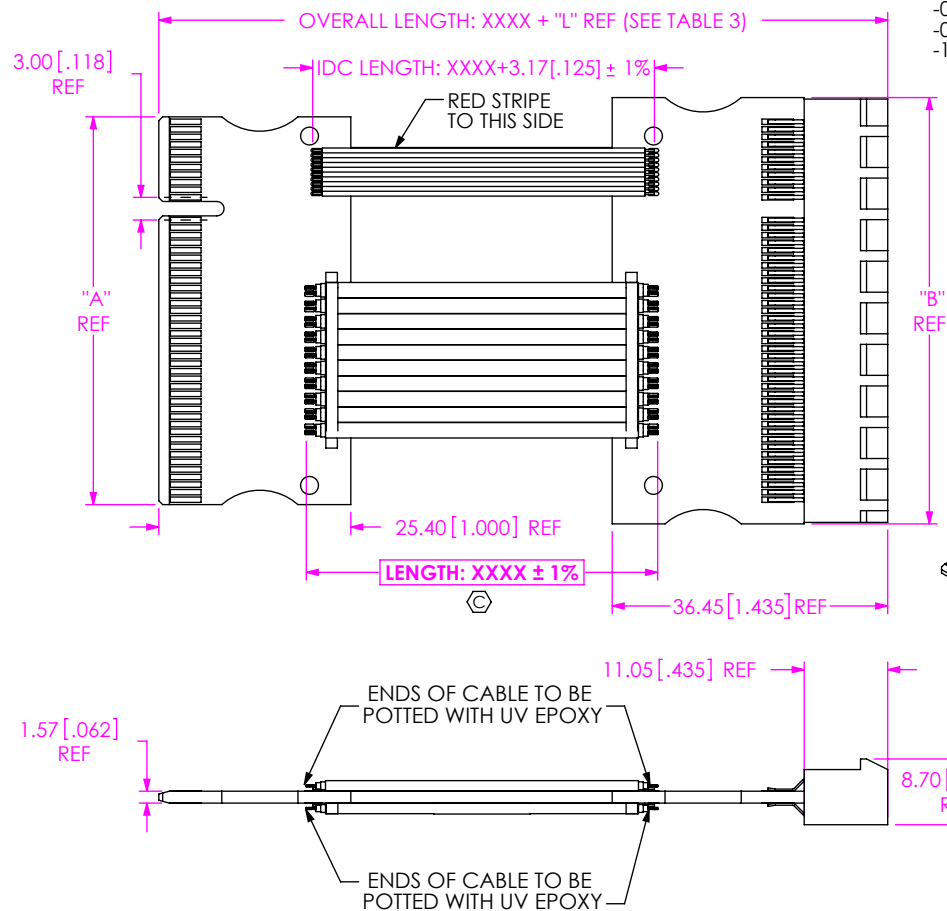


DO NOT  
SCALE FROM  
THIS PRINT

PCIEC-XXX-XXXX-XX-XX-X-XX



No OF POSITIONS  
-036: 36 POSITIONS (X1)  
-064: 64 POSITIONS (X4)  
-098: 98 POSITIONS (X8)  
-164: 164 POSITIONS (X16)

LENGTH  
0050 mm MIN.  
(SEE NOTE 11)

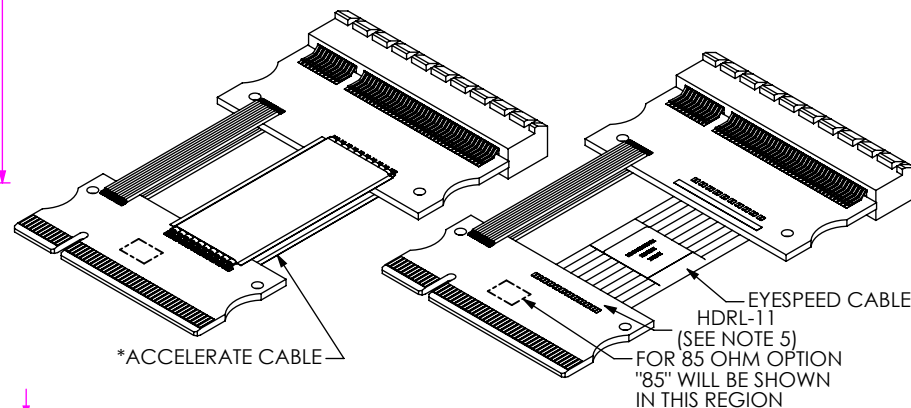
FIRST END  
-EC: EDGE CARD  
(SEE TABLE 4)

IMPEDANCE  
-85: 85 ohm  
(LEAVE BLANK FOR 100 ohm)  
(SEE TABLE 6)

CABLE OPTIONS  
(SEE TABLE 1 & SEE NOTE 9)  
(SEE TABLE 6 FOR PART NUMBER AVAILABILITY)

-P  
-A  
-AP  
-C  
-CP  
-(BLANK)

SECOND END (SEE TABLE 4)  
-EC: PCIE EDGE CARD  
-EM: PCIEC EDGE MOUNT CONNECTOR



NOTES:

- ⊗ REPRESENTS A CRITICAL DIMENSION.
- SUB-TTF LENGTH IS EQUAL TO PCIEC LENGTH.
- ⊗ ALL ASSEMBLIES TO BE 100% ELECTRICALLY TESTED FOR SHORTS AND OPENS.
- ⊗ ALL ASSEMBLIES TO BE 100% HI-POT TESTED AT 300V.
- TOP SUB-TTF NOT SHOWN IN THIS VIEW FOR CLARITY; HDRL-11 IS TO BE CENTERED ON LOWER SUB-TTF AS SHOWN; HDRL-11 IS TO CONTAIN PART NUMBER, SHOP NUMBER, & DATE CODE.
- FOR SUB-ASSEMBLY AND FINISHED GOOD PACKAGING REQUIREMENTS, REFERENCE SAMTEC PACKAGING MANUAL.
- FOR PRE-TINNING PROCESS INFORMATION ON THE SUB-PCB'S, SEE TRAVELER SUB-PCIEC-XXX-EC-XX AND SUB-PCIEC-XXX-EM-XX. FOR -85 OHM OPTION SEE TRAVELER SUB-PCIEC-XXX-EC-XX-85 AND SUB-PCIEC-XXX-EM-XX-85.
- KEY CONSUMES 3 PITCHES.
- NO POWER LINES CREATES A NO CONNECT CONDITION AT POSITIONS B1, B2, B3, B8, A2, A3, A9 AND A10
- HOT PLUG DETECT COMMON AND ONLY FIRST AND LAST USED ON EACH POSITION.
- CABLE LENGTHS LONGER THAN 1015 MILLIMETERS ARE NOT SUPPORTED BY S.I. TEST DATA.
- SIGNAL MAPPING IS ONLY AVAILABLE IN A 1-TO-1 CONFIGURATION. FOR EXAMPLE A1 TO A1, A2 TO A2, ETC.
- REFER TO PREP-SPEC DRAWING FOR CABLE PREP DIMENSIONS. ASSEMBLY USES STANDARD PCB PREP.

FIG 1  
PCIEC-098-XXXX-EC-EM-X SHOWN

END TO END	"L"
-EC TO -EC	39.56
-EC TO -EM	49.62

CABLE OPTIONS	IMPEDANCE	
	85 ohm	100 ohm
-P (W/ POWER LINES)	3285 TAPED SHIELD	*30100 BRAIDED SHIELD
-A	*3085 LAMINATED SHIELD	*30100 LAMINATED SHIELD
-AP (W/ POWER LINES)	*3085 LAMINATED SHIELD	*30100 LAMINATED SHIELD
-C	NOT AVAILABLE	30100CU TAPED SHIELD
-CP (W/ POWER LINES)	NOT AVAILABLE	30100CU TAPED SHIELD
(BLANK)	3285 TAPED SHIELD	*30100 BRAIDED SHIELD

\*: EXISTING CUSTOMERS ONLY

UNLESS OTHERWISE SPECIFIED,  
DIMENSIONS ARE IN MILLIMETERS.  
TOLERANCES ARE:  
DECIMALS ANGLES  
.X: ±0.3 [0.1] 2°  
.XX: ±0.13 [0.05]  
.XXX: ±0.051 [0.020]

PROPRIETARY NOTE  
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 2:1



520 PARK EAST BLVD, NEW ALBANY, IN 47150  
PHONE: 812-944-6733 FAX: 812-948-5047  
e-Mail info@SAMTEC.com code 55322

DESCRIPTION:  
PCIEC CABLE ASSEMBLY

DWG. NO.  
PCIEC-XXX-XXXX-XX-XX-X-XX

BY: D FRALEY 08/24/2006 SHEET 1 OF 3

TABLE 1

NO OF POSITIONS	PART NUMBER	"A"	"B"	SUB- TTF- XXXXX- XX- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- XXX- XX- XX- XXXX (SEE NOTE 7)	QUANTITY OF SUB- TTF	QUANTITY OF SUB- IDC
- 036		20.300	25.400	SUB- TTF- 30100- 02- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 036- XX- XX	2	2
- 064	*PCIEC- XXX- XX- EC- XX	34.298	39.398	SUB- TTF- 30100- 06- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 064- XX- XX	2	2
- 098	*PCIEC- XXX- XX- EC- XX- P	51.298	56.398	SUB- TTF- 30100- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 098- XX- XX	2	2
- 164		84.298	89.398	SUB- TTF- 30100- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 164- XX- XX	4	2
- 036		20.300	25.400	SUB- TTF- 3285- 02- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 036- XX- XX- 85	2	2
- 064	PCIEC- XXX- XX- EC- XX- 85	34.298	39.398	SUB- TTF- 3285- 06- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 064- XX- XX- 85	2	2
- 098	PCIEC- XXX- XX- EC- XX- P- 85	51.298	56.398	SUB- TTF- 3285- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 098- XX- XX- 85	2	2
- 164		84.298	89.398	SUB- TTF- 3285- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 164- XX- XX- 85	4	2
- 036		20.300	25.400	SUB- TTF- 30100LC- 02- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 036- XX- XX- 100A	2	2
- 064	*PCIEC- XXX- XX- EC- XX- A	34.298	39.398	SUB- TTF- 30100LC- 06- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 064- XX- XX- 100A	2	2
- 098	*PCIEC- XXX- XX- EC- XX- AP	51.298	56.398	SUB- TTF- 30100LC- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 098- XX- XX- 100A	2	2
- 164		84.298	89.398	SUB- TTF- 30100LC- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 164- XX- XX- 100A	4	2
- 036		20.300	25.400	SUB- TTF- 3085LC- 02- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 036- XX- XX- 85A	2	2
- 064	*PCIEC- XXX- XX- EC- XX- A- 85	34.298	39.398	SUB- TTF- 3085LC- 06- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 064- XX- XX- 85A	2	2
- 098	*PCIEC- XXX- XX- EC- XX- AP- 85	51.298	56.398	SUB- TTF- 3085LC- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 098- XX- XX- 85A	2	2
- 164		84.298	89.398	SUB- TTF- 3085LC- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 164- XX- XX- 85A	4	2
- 036		20.300	25.400	SUB- TTF- 30100CU- 02- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 036- XX- XX	2	2
- 064	PCIEC- XXX- XX- EC- XX- C	34.298	39.398	SUB- TTF- 30100CU- 06- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 064- XX- XX	2	2
- 098	PCIEC- XXX- XX- EC- XX- CP	51.298	56.398	SUB- TTF- 30100CU- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 098- XX- XX	2	2
- 164		84.298	89.398	SUB- TTF- 30100CU- 10- 01- XX.XX	SUB- IDC- 1- 30- 10- 0250- XX.XX	SUB- PCIEC- 164- XX- XX	4	2

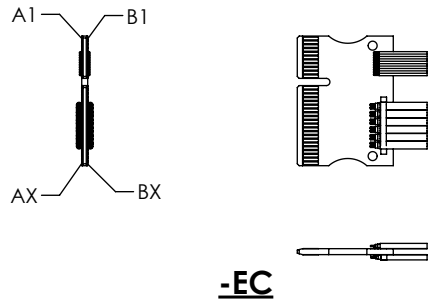
\*: EXISTING CUSTOMERS ONLY

**PROPRIETARY NOTE**  
 THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

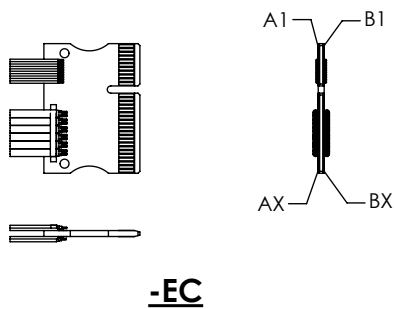
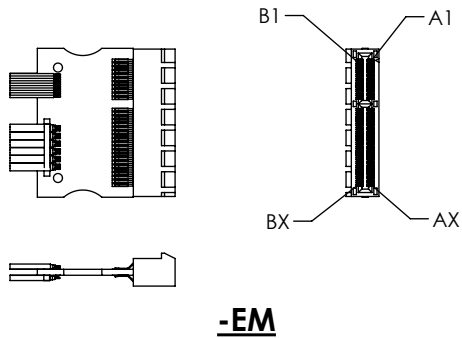
**samtec**  
 520 PARK EAST BLVD, NEW ALBANY, IN 47150  
 PHONE: 812-944-6733 FAX: 812-948-5047  
 e-Mail info@SAMTEC.com code 55322

SHEET SCALE: 1:2

DESCRIPTION:  
 PCIEC CABLE ASSEMBLY  
 DWG. NO.  
**PCIEC-XXX-XXXX-XX-XX-X-XX**  
 BY: D FRALEY 08/24/2006 SHEET 2 OF 3



**SECOND END - EDGE (SEE TABLE 4)**



FIRST END OPTION	FIRST END SUB-PCIEC-XXX-EC-XX (SEE NOTE 7)	COLOR	POWER LINE OPTION	SECOND END OPTION (SUB-PCIEC-XXX-XX-XX) (SEE NOTE 7)			
				-EC	COLOR	-EM	COLOR
-EC	-XXX-EC-01	GREEN	-P	-XXX-EC-02	RED	-XXX-EM-01	GREEN
	-XXX-EC-03	BLUE	(BLANK)	-XXX-EC-02	RED	-XXX-EM-01	GREEN

		SIDE B		SIDE A	
	NAME	DESCRIPTION	NAME	DESCRIPTION	
1	+12V	12 V power	PRSNT1#	Hot-plug detect	
2	+12V	12 V power	+12V	12 V power	
3	+12V	12 V power	+12V	12 V power	
4	GND	GROUND	GND	GROUND	
5	SMCLK	SM Bus Clock	JTAG2	TCK (test clock)	
6	SMDATA	SM Bus Data	JTAG3	TDI (test input data)	
7	GND	GROUND	JTAG4	TDO (test data output)	
8	+3.3V	3.3 V power	JTAG5	TMS (test mode select)	
9	JTAG1	TRST# (test reset)	+3.3V	3.3 V power	
10	+3.3V aux	3.3 V aux power	+3.3V	3.3 V power	
11	WAKE#	Signal for link	PERST#	Fundamental reset	
<b>MECHANICAL KEY</b>					
12	RSVD	RESERVED	GND	GROUND	
13	GND	GROUND	REFCLK+	Reference clock	
14	PETp0	Transmitter, DP	REFCLK-	Diff pair	
15	PETn0	LANE 0	GND	GROUND	
16	GND	GROUND	PERp0	Receiver, DP	
17	PRSNT2#	Hot-plug detect	PERn0	LANE 0	
18	GND	GROUND	GND	GROUND	
<b>END OF X1 CONNECTOR</b>					
19	PETp1	Transmitter, DP	RSVD	RESERVED	
20	PETn1	LANE 1	GND	GROUND	
21	GND	GROUND	PERp1	Receiver, DP	
22	GND	GROUND	PERn1	LANE 1	
23	PETp2	Transmitter, DP	GND	GROUND	
24	PETn2	LANE 2	GND	GROUND	
25	GND	GROUND	PERp2	Receiver, DP	
26	GND	GROUND	PERn2	LANE 2	
27	PETp3	Transmitter, DP	GND	GROUND	
28	PETn3	LANE 3	GND	GROUND	
29	GND	GROUND	PERp3	Receiver, DP	
30	RSVD	RESERVED	PERn3	LANE 3	
31	PRSNT2#	Hot-plug detect	GND	GROUND	
32	GND	GROUND	RSVD	RESERVED	
<b>END OF X4 CONNECTOR</b>					

No OF POSITIONS	X
-036	18
-064	32
-098	49
-164	82

**SEE NOTES 9, 10 & 12**

33	PETp4	Transmitter, DP	RSVD	RESERVED
34	PETn4	LANE 4	GND	GROUND
35	GND	GROUND	PERp4	Receiver, DP
36	GND	GROUND	PERn4	LANE 4
37	PETp5	Transmitter, DP	GND	GROUND
38	PETn5	LANE 5	GND	GROUND
39	GND	GROUND	PERp5	Receiver, DP
40	GND	GROUND	PERn5	LANE 5
41	PETp6	Transmitter, DP	GND	GROUND
42	PETn6	LANE 6	GND	GROUND
43	GND	GROUND	PERp6	Receiver, DP
44	GND	GROUND	PERn6	LANE 6
45	PETp7	Transmitter, DP	GND	GROUND
46	PETn7	LANE 7	GND	GROUND
47	GND	GROUND	PERp7	Receiver, DP
48	PRSNT2#	Hot-plug detect	PERn7	LANE 7
49	GND	GROUND	GND	GROUND
<b>END OF X8 CONNECTOR</b>				
50	PETp8	Transmitter, DP	RSVD	RESERVED
51	PETn8	LANE 8	GND	GROUND
52	GND	GROUND	PERp8	Receiver, DP
53	GND	GROUND	PERn8	LANE 8
54	PETp9	Transmitter, DP	GND	GROUND
55	PETn9	LANE 9	GND	GROUND
56	GND	GROUND	PERp9	Receiver, DP
57	GND	GROUND	PERn9	LANE 9
58	PETp10	Transmitter, DP	GND	GROUND
59	PETn10	LANE 10	GND	GROUND
60	GND	GROUND	PERp10	Receiver, DP
61	GND	GROUND	PERn10	LANE 10
62	PETp11	Transmitter, DP	GND	GROUND
63	PETn11	LANE 11	GND	GROUND
64	GND	GROUND	PERp11	Receiver, DP
65	GND	GROUND	PERn11	LANE 11
66	PETp12	Transmitter, DP	GND	GROUND
67	PETn12	LANE 12	GND	GROUND
68	GND	GROUND	PERp12	Receiver, DP
69	GND	GROUND	PERn12	LANE 12
70	PETp13	Transmitter, DP	GND	GROUND
71	PETn13	LANE 13	GND	GROUND
72	GND	GROUND	PERp13	Receiver, DP
73	GND	GROUND	PERn13	LANE 13
74	PETp14	Transmitter, DP	GND	GROUND
75	PETn14	LANE 14	GND	GROUND
76	GND	GROUND	PERp14	Receiver, DP
77	GND	GROUND	PERn14	LANE 14
78	PETp15	Transmitter, DP	GND	GROUND
79	PETn15	LANE 15	GND	GROUND
80	GND	GROUND	PERp15	Receiver, DP
81	PRSNT2#	Hot-plug detect	PERn15	LANE 15
82	RSVD	RESERVED	GND	GROUND
<b>END OF X16 CONNECTOR</b>				

**PROPRIETARY NOTE**  
 THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.



520 PARK EAST BLVD, NEW ALBANY, IN 47150  
 PHONE: 812-944-6733 FAX: 812-948-5047  
 e-Mail info@SAMTEC.com code 55322

DO NOT SCALE DRAWING

DESCRIPTION:  
 PCIEC CABLE ASSEMBLY

DWG. NO.  
**PCIEC-XXX-XXXX-XX-XX-X-XX**

BY: D FRALEY 08/24/2006 SHEET 3 OF 3

SHEET SCALE: 1:2