

**Sundance Multiprocessor Technology Limited**  
**Front Panel Edge-Mount SLB**  
**Assembly**

Form : QCF51  
Template revision: 11  
February 2009

<b>Unit / Module Description:</b>	
<b>Unit / Module Number:</b>	SMT120
<b>Document Issue Number:</b>	1.2.1
<b>Issue Date:</b>	23 <sup>rd</sup> November 2010
<b>Original Author:</b>	G Parker

**SMT120**  
**SLB Front Panel Assembly for**  
**SMT700.**

Sundance Multiprocessor Technology Ltd, Chiltern House,  
Waterside, Chesham, Bucks. HP5 1PS.

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Certificate Number FM 55022

## Revision History

Issue	Changes Made	Date	Initials
1.0	First draft.	27/10/10	GKP
1.1	Updated pin-out table to include all 3 connectors. Updated dimensioned drawing. Added GND pins to breakout.	27/10/10	GKP
1.2	Mirrored the edge-mount connector on both ends. This has no overall SLB to PIN effect.	28/10/10	GKP
1.2.1	Corrected edge-mount Samtec part number.	23/11/10	GKP

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# 1 Introduction

This board and cable set comprises of the following items:

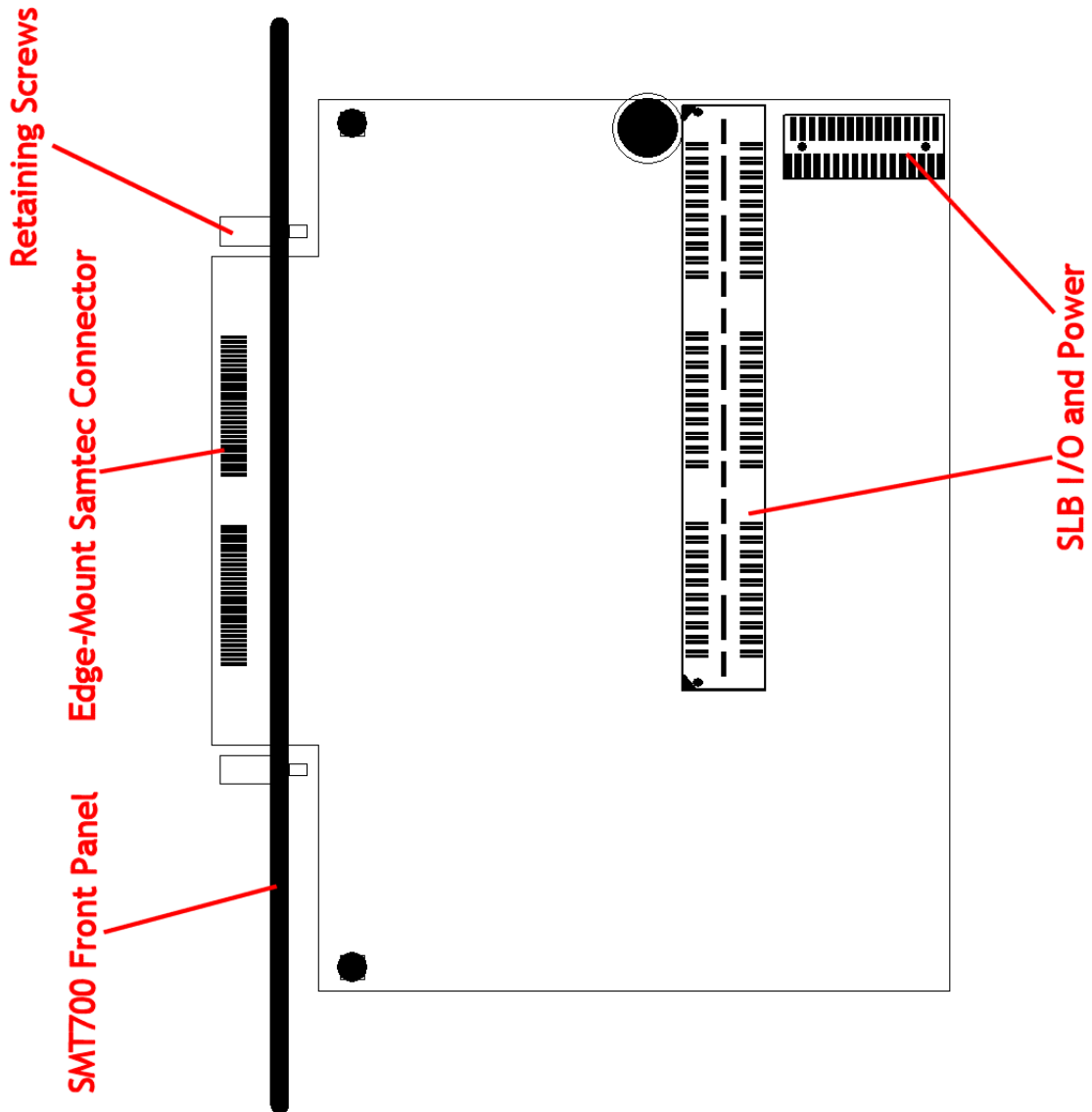
- 1 An SLB mezzanine that attaches to the SMT700 and presents the full 120 pin SLB interface to a front panel edge-mounted Samtec connector; part QSH-060-01-F-D-EM2.
- 2 A 500mm Samtec blue ribbon cable; part HQCD-060-19.69-TEU-TED-1-B: <http://www.samtec.com/documents/webfiles/cpdf/XOXX-TEU-TED.PDF>
- 3 A breakout board which attaches to the cable assembly and provides the SLB signals on standard 0.1" pin headers.

# 2 Verification, Validation & Review Procedures

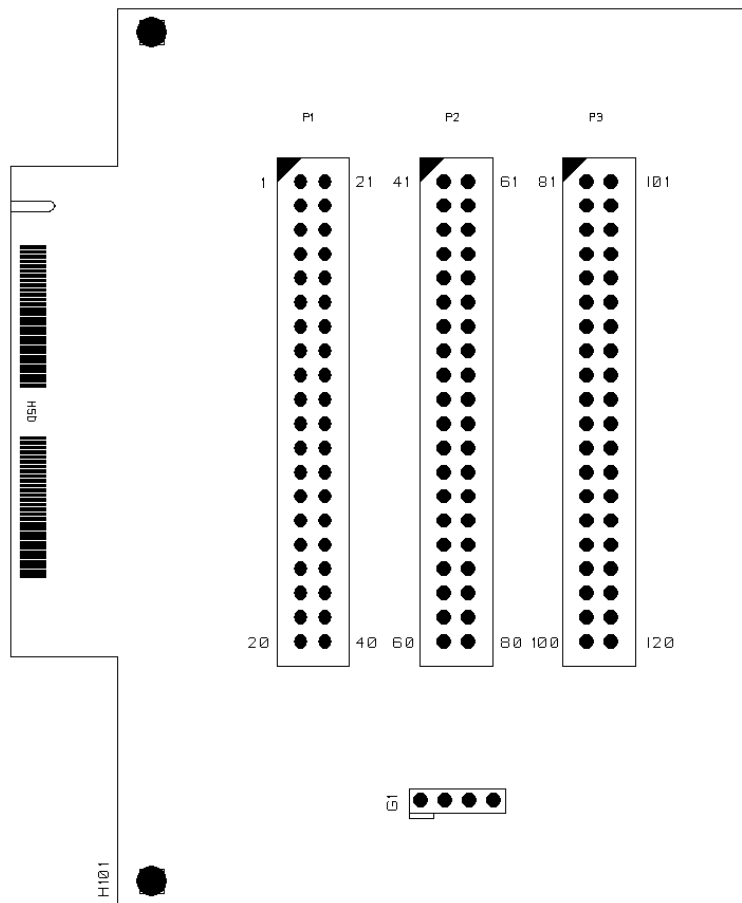
To be carried out in accordance with Sundance's quality system.

### 3 Footprint

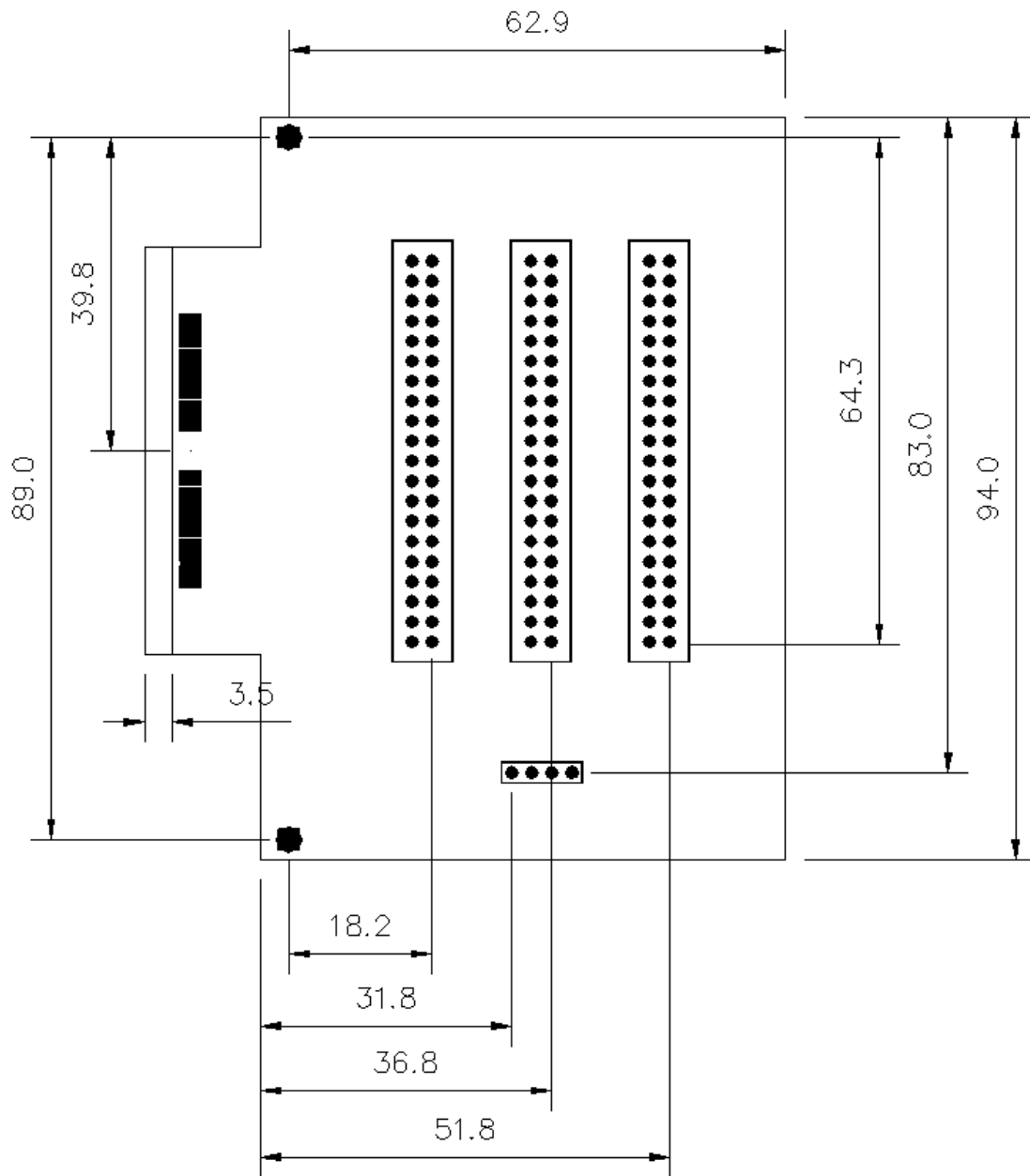
SLB mezzanine that attaches to SMT700 (showing SLB connector and front panel edge-mount connector):



Breakout board showing edge-mount connector and 0.1" pin headers:



Breakout board dimensions:



All pin headers are 0.1" pitch.

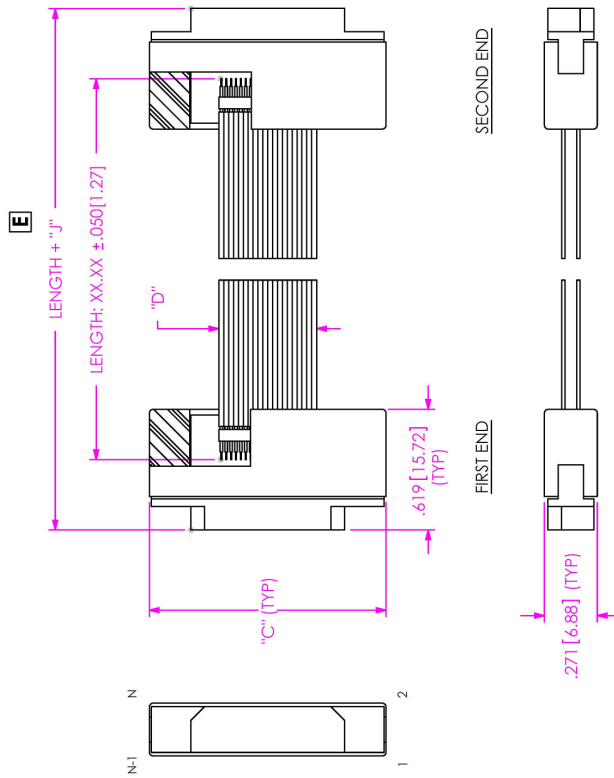
REVISION E  
8/23/2007 EGN:79674

ALL DIMENSIONS REF  
DO NOT SCALE  
FROM THIS PRINT

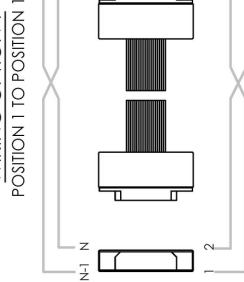
# XQXX-XXX-XXXX-TEU-TED-X-X

**TABLE 2**

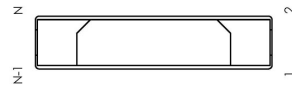
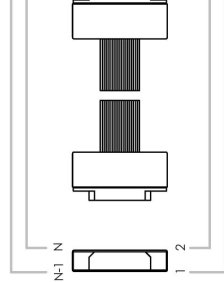
SERIES	"D"
EQCD	0.501 [12.73]
SQCD	0.625 [15.88]
HQCD	0.751 [19.08]
EQDP	0.525 [13.34]
HQDP	0.800 [20.32]
EQSD	0.760 [19.30]



## WIRING OPTION 1



## WIRING OPTION 2



ONLY APPLICABLE FOR SCREW-DOWN END OPTIONS

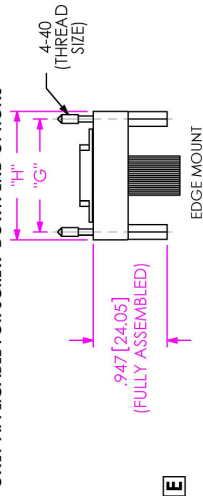


TABLE 3

EQCD POSITIONS	SQCD POSITIONS	HQCD POSITIONS	EQDP POSITIONS	HQDP POSITIONS	EQSD POSITIONS	"G"	"H"
N/A	N/A	N/A	N/A	N/A	N/A	-020	1.448 [36.80] 1.648 [41.88]
N/A	N/A	N/A	N/A	N/A	N/A	-040	2.237 [56.81] 2.436 [61.87]
-020	-025	-030	-014	N/A	N/A	1.448 [36.80] 1.648 [41.88]	
-040	-050	-060	-042	N/A	N/A	2.237 [56.81] 2.436 [61.87]	
-060	-075	-090	-056	N/A	N/A	3.025 [76.82] 3.224 [81.86]	
-080	-100	-120	-070	N/A	N/A	3.812 [96.81] 4.011 [101.86]	
N/A	N/A	N/A	N/A	-020	N/A	1.751 [44.48] 1.951 [49.56]	
N/A	N/A	N/A	N/A	-040	N/A	2.540 [64.49] 2.740 [69.56]	
N/A	N/A	N/A	N/A	-060	N/A	3.328 [84.50] 3.528 [89.56]	
N/A	N/A	N/A	N/A	-080	N/A	4.114 [104.51] 4.314 [109.56]	

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SHEET SCALE: 1:25:1

DESCRIPTION:

QTX / QTX CABLE ASSEMBLY

DWG. NO.

XQXX-XXX-XXXX-TEU-TED-X-X

BY: BRATCHER 6/20/2003

SHEET 1 OF 1

TABLE 1

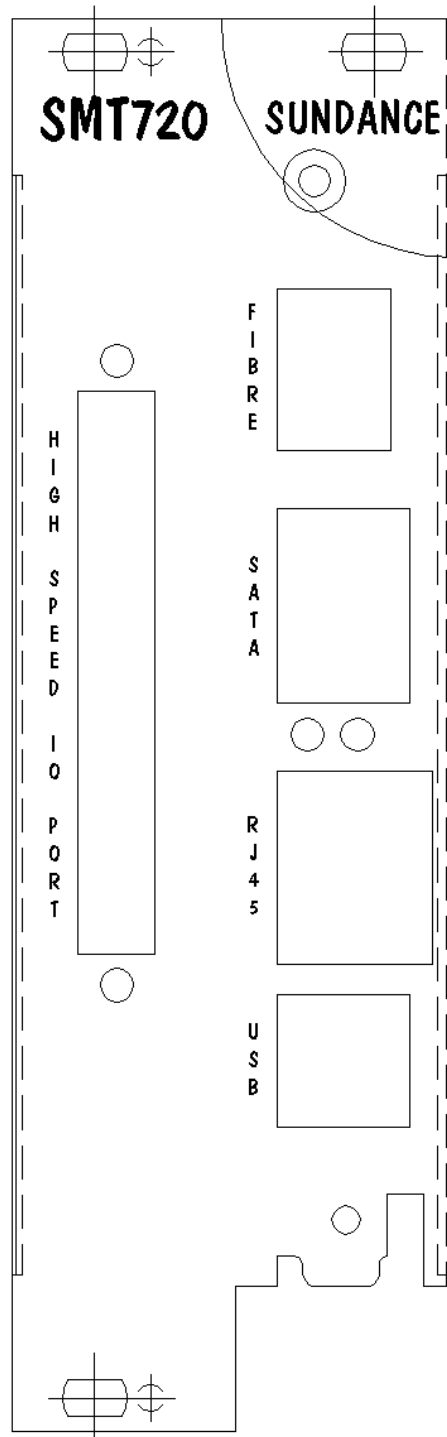
EQCD No. OF POSITIONS	SQCD No. OF POSITIONS	HQCD No. OF POSITIONS	EQDP No. OF POSITIONS	HQDP No. OF POSITIONS	EQSD No. OF POSITIONS	"C"	"J"
N/A	N/A	N/A	N/A	N/A	-020	1.213 [30.80]	0.720 [18.29]
N/A	N/A	N/A	N/A	N/A	-040	2.000 [50.80]	0.720 [18.29]
-020	-025	-030	-014	N/A	N/A	1.213 [30.80]	0.720 [18.29]
-040	-050	-060	-028	N/A	N/A	2.000 [50.80]	0.720 [18.29]
-060	-075	-090	-042	N/A	N/A	2.788 [70.80]	0.720 [18.29]
-080	-100	-120	-056	N/A	N/A	3.575 [90.80]	0.720 [18.29]
N/A	N/A	N/A	N/A	-020	N/A	1.515 [38.48]	0.980 [24.89]
N/A	N/A	N/A	N/A	-040	N/A	2.303 [58.50]	0.980 [24.89]
N/A	N/A	N/A	N/A	-060	N/A	3.090 [78.49]	0.980 [24.89]
N/A	N/A	N/A	N/A	-080	N/A	3.878 [98.50]	0.980 [24.89]

P:\DWG5\WIBC\Wibg\Xqxx\Xqxx-TEU-TED.rdw

Blue Ribbon cable details. Reproduced with kind permission from Samtec.



## 4 SMT700 Front Panel



## 5 Pinout

SLB Pin	FP Pin	Pin hdr
120	2	1
118	4	41
116	6	81
114	8	2
112	10	42
110	12	82
108	14	3
106	16	43
104	18	83
102	20	4
100	22	44
98	24	84
96	26	5
94	28	45
92	30	85
90	32	6
88	34	46
86	36	86
84	38	7
82	40	47
80	42	87
78	44	8
76	46	48
-12V	48	88
+5V	50	9
+5V	52	49
68	54	89
66	56	10
64	58	50
62	60	90

SLB Pin	FP Pin	Pin hdr
60	62	11
58	64	51
56	66	91
54	68	12
52	70	52
50	72	92
48	74	13
46	76	53
44	78	93
42	80	14
40	82	54
38	84	94
36	86	15
34	88	55
32	90	95
30	92	16
28	94	56
26	96	96
24	98	17
22	100	57
20	102	97
18	104	18
16	106	58
14	108	98
12	110	19
10	112	59
8	114	99
6	116	20
4	118	60
2	120	100

SLB Pin	FP Pin	Pin hdr
119	1	21
117	3	61
115	5	101
113	7	22
111	9	62
109	11	102
107	13	23
105	15	63
103	17	103
101	19	24
99	21	64
97	23	104
95	25	25
93	27	65
91	29	105
89	31	26
87	33	66
85	35	106
83	37	27
81	39	67
79	41	107
77	43	28
75	45	68
+12V	47	108
+3.3V	49	29
69	51	69
67	53	109
65	55	30
63	57	70
61	59	110

SLB Pin	FP Pin	Pin hdr
59	61	31
57	63	71
55	65	111
53	67	32
51	69	72
49	71	112
47	73	33
45	75	73
43	77	113
41	79	34
39	81	74
37	83	114
35	85	35
33	87	75
31	89	115
29	91	36
27	93	76
25	95	116
23	97	37
21	99	77
19	101	117
17	103	38
15	105	78
13	107	118
11	109	39
9	111	79
7	113	119
5	115	40
3	117	80
1	119	120

Above table shows the pin-out of the SLB mezzanine; showing connectivity between the SLB pins and the Front Panel connector pins:

## 6 Physical Properties

SLB mezzanine:

Dimensions	94x80	mm.
Weight	TBD	g.
Supply Voltages	N/A	
Supply Current	N/A	
MTBF	TBD	years.

Breakout board:

Dimensions	94x78	mm.
Weight	TBD	g.
Supply Voltages	N/A	
Supply Current	N/A	
MTBF	TBD	years.

## 7 Safety

This assembly presents no hazard to the user when in normal use.

## 8 EMC

These boards are designed to operate from within an enclosed host system, which is build to provide EMC shielding. Operation within the EU EMC guidelines is not guaranteed unless it is installed within an adequate host system.

This assembly is protected from damage by fast voltage transients originating from outside the host system which may be introduced through the output cables.

Short circuiting any output to ground does not cause the host PC system to lock up or reboot.