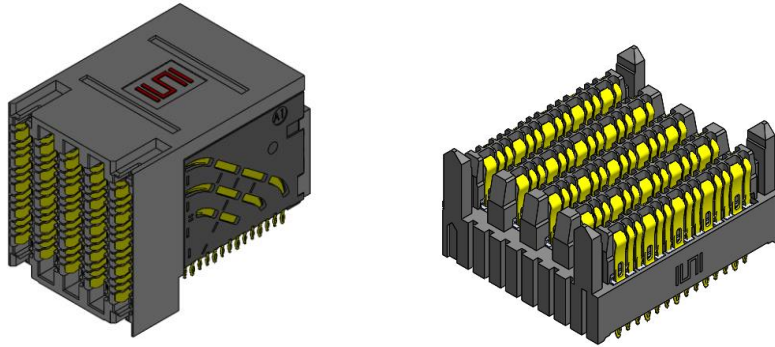


Project: ExaMAX Intermateability	Test Request Number: 694874
Requested by: Josh Ferry	Date: 3/1/2016
Part Number Tested: EBTF-4-10-2.0-S-RA-1/EBTM-4-10-2.0-S-VT-1 & 10126366-101LF/1012636-101LF	
Part description: High Speed Backplane	Technician: Troy Cook
Test Start: 9/28/2015	Test Completed: 1/28/2016



INTERMATEABILITY REPORT

Samtec: EBTF-4-10-2.0-S-RA-1 / EBTM-4-10-2.0-S-VT-1
AFCI: 10126366-101LF / 1012636-101LF

HIGH SPEED BACKPLANE

Test Request Number: 694874	Part #: EBTF-4-10-2.0-S-RA-1/EBTM-4-10-2.0-S-VT-1 and 10126366-101LF/1012636-101LF
Part description: High Speed Backplane	

REVISION HISTORY

DATE	REV. NUM.	DESCRIPTION	ENG
2/25/2016	1	Initial Issue	EM

CERTIFICATION

All instruments and measuring equipment were calibrated to National Institute for Standards and Technology (NIST) traceable standards according to ISO 10012-1 and ANSI/NCSS 2540-1, as applicable.

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SCOPE

This report documents the testing performed to qualify the intermateability of Samtec and AFCI High Speed Backplane connectors.

APPLICABLE DOCUMENTS

Standards: EIA Publication 364, GR-1217-CORE-12/08

TEST SAMPLES AND PREPARATION

- 1) All materials were manufactured in accordance with the applicable product specification.
- 2) All test samples were identified and encoded to maintain traceability throughout the test sequences.
- 3) Any additional preparation will be noted in the individual test sequences.
- 4) Samtec Test PCBs used: PCB-107033-TST, PCB-107178-TST, PCB-107034-TST

TEST LOCATIONS

- 1) The test locations are defined below:
 - a. Location A: Samtec, Inc. – New Albany, IN
 - i. Request # 694874
 - b. Location B: AFCI Product Test Laboratory – Etters, PA
 - i. Request # EL-2015-10-005, EL-2016-01-028
 - c. Location C: Contech Research – Rumford, RI
 - i. Request # 215143

FLOWCHARTS

Thermal Aging

Note: The mating force shall be $\leq 50.4N$

Note: The unmating force shall not be $\geq 14.0N$

Note: Initial LLCR shall be $\leq 60\text{ mOhms}$

<u>Group 1</u>	<u>Group 2</u>	<u>Group 3</u>	<u>Group 4</u>
EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (560 LLCR Points) <i>Note: Test Location A</i>	10126366-101LF (AFCI VH) 10126363-101LF (AFCI RAR) 4 Assemblies (560 LLCR Points) <i>Note: Test Location A</i>	EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) 10126366-101LF (AFCI VH) 4 Assemblies (560 LLCR Points) <i>Note: Test Location A</i>	10126363-101LF (AFCI RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (560 LLCR Points) <i>Note: Test Location A</i>
Step	Description	Step	Description
1.	Visual Inspection	1.	Visual Inspection
2.	LLCR (1)	2.	LLCR (1)
3.	Mating/Unmating Force (2)	3.	Mating/Unmating Force (2)
4.	Thermal Age (3) - Non Standard	4.	Thermal Age (3) - Non Standard
5.	LLCR (1) Max Delta = 10 mOhm	5.	LLCR (1) Max Delta = 10 mOhm
6.	Mating/Unmating Force (2)	6.	Mating/Unmating Force (2)
7.	Visual Inspection	7.	Visual Inspection

- (1) LLCR = EIA-364-23
Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max
- (2) Mating/Unmating Force = EIA-364-13
- (3) Thermal Age = Other
Test Condition = 3 (85°C)
Time Condition = C (500 Hours)
EIA-364-17

Durability/Thermal Shock/Humidity With Temperature Cycling

Note: The mating force shall be <= 50.4N

Note: The unmating force shall not be >= 14.0N

Note: Initial LLCR shall be <= 60 mOhms

Note: Mating/Unmating Force shall be taken on the first three cycles

Group 1		Group 2		Group 3		Group 4	
EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (560 LLCR Points) Note: Test Location C		10126366-101LF (AFCI VH) 10126363-101LF (AFCI RAR) 4 Assemblies (560 LLCR Points) Note: Test Location C		10126363-101LF (AFCI RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (560 LLCR Points) Note: Test Location C		EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) 10126366-101LF (AFCI VH) 4 Assemblies (560 LLCR Points) Note: Test Location C	
Step	Description	Step	Description	Step	Description	Step	Description
1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection
2.	LLCR (2)	2.	LLCR (2)	2.	LLCR (2)	2.	LLCR (2)
3.	Thermal Shock (4) - Non Standard	3.	Thermal Shock (4) - Non Standard	3.	Thermal Shock (4) - Non Standard	3.	Thermal Shock (4) - Non Standard
4.	LLCR (2) Max Delta = 10 mOhm	4.	LLCR (2) Max Delta = 10 mOhm	4.	LLCR (2) Max Delta = 10 mOhm	4.	LLCR (2) Max Delta = 10 mOhm
5.	Mating/Unmating Force (3)	5.	Mating/Unmating Force (3)	5.	Mating/Unmating Force (3)	5.	Mating/Unmating Force (3)
6.	Mating/Unmating Force (3)	6.	Mating/Unmating Force (3)	6.	Mating/Unmating Force (3)	6.	Mating/Unmating Force (3)
7.	Mating/Unmating Force (3)	7.	Mating/Unmating Force (3)	7.	Mating/Unmating Force (3)	7.	Mating/Unmating Force (3)
8.	Cycles Total Quantity = 100 Cycles	8.	Cycles Total Quantity = 100 Cycles	8.	Cycles Total Quantity = 100 Cycles	8.	Cycles Total Quantity = 100 Cycles
9.	LLCR (2) Max Delta = 10 mOhm	9.	LLCR (2) Max Delta = 10 mOhm	9.	LLCR (2) Max Delta = 10 mOhm	9.	LLCR (2) Max Delta = 10 mOhm
10.	Dust Dwell = 60 min Note: Test unmated Note: EIA-364-91: dust composition 1 (benign)	10.	Dust Dwell = 60 min Note: Test unmated Note: EIA-364-91: dust composition 1 (benign)	10.	Dust Dwell = 60 min Note: Test unmated Note: EIA-364-91: dust composition 1 (benign)	10.	Dust Dwell = 60 min Note: Test unmated Note: EIA-364-91: dust composition 1 (benign)
11.	LLCR (2) Max Delta = 10 mOhm	11.	LLCR (2) Max Delta = 10 mOhm	11.	LLCR (2) Max Delta = 10 mOhm	11.	LLCR (2) Max Delta = 10 mOhm
12.	Humidity (1) - Non Standard	12.	Humidity (1) - Non Standard	12.	Humidity (1) - Non Standard	12.	Humidity (1) - Non Standard
13.	LLCR (2) Max Delta = 10 mOhm	13.	LLCR (2) Max Delta = 10 mOhm	13.	LLCR (2) Max Delta = 10 mOhm	13.	LLCR (2) Max Delta = 10 mOhm
14.	Visual Inspection	14.	Visual Inspection	14.	Visual Inspection	14.	Visual Inspection

(1) Humidity = Other

Test Condition = C (50 cycles of 10 hour duration for a total of 500 Hours) A cycle consists of the following steps: a) 2 hour ramp from 25°C at 80%-98% RH to 65°C at 90%-98% RH; b) 4 hour dwell at 65°C at 90%-98% RH; c) 2 hour ramp down to 25°C at 80%-98% RH; d) 2 hour dwell at 25°C at 80%-98% RH
Test Method = III (+25°C to +65°C @ 90% RH to 98% RH)
Profile to meet Telcordia GR-1217

(2) LLCR = EIA-364-23

Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max

(3) Mating/Unmating Force = EIA-364-13

(4) Thermal Shock = Other

Exposure Time at Temperature Extremes = 1/2 Hour
Method A, Test Condition = I (-55°C to +85°C)
Test Duration = A (5 Cycles)
EIA-364-32

IR/DWV

Note: Insulation resistance shall be $\geq 1,000$ MOhms

Note: DWV leakage current shall be ≤ 0.5 mA

Pin-to-Pin

Group 1		Group 3		Group 5		Group 7	
EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (40 Contacts) Note: Test Location A		10126366-101LF (AFCI VH) 10126363-101LF (AFCI RAR) 4 Assemblies (40 Contacts) Note: Test Location A		10126363-101LF (AFCI RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (40 Contacts) Note: Test Location A		EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) 10126366-101LF (AFCI VH) 4 Assemblies (40 Contacts) Note: Test Location A	
Step	Description	Step	Description	Step	Description	Step	Description
1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection
2.	IR (3) - Non Standard	2.	IR (3) - Non Standard	2.	IR (3) - Non Standard	2.	IR (3) - Non Standard
3.	DWV at Test Voltage (1) - Non Standard	3.	DWV at Test Voltage (1) - Non Standard	3.	DWV at Test Voltage (1) - Non Standard	3.	DWV at Test Voltage (1) - Non Standard
4.	Thermal Shock (4) - Non Standard	4.	Thermal Shock (4) - Non Standard	4.	Thermal Shock (4) - Non Standard	4.	Thermal Shock (4) - Non Standard
5.	IR (3) - Non Standard	5.	IR (3) - Non Standard	5.	IR (3) - Non Standard	5.	IR (3) - Non Standard
6.	DWV at Test Voltage (1) - Non Standard	6.	DWV at Test Voltage (1) - Non Standard	6.	DWV at Test Voltage (1) - Non Standard	6.	DWV at Test Voltage (1) - Non Standard
7.	Humidity (2) - Non Standard	7.	Humidity (2) - Non Standard	7.	Humidity (2) - Non Standard	7.	Humidity (2) - Non Standard
8.	IR (3) - Non Standard	8.	IR (3) - Non Standard	8.	IR (3) - Non Standard	8.	IR (3) - Non Standard
9.	DWV at Test Voltage (1) - Non Standard	9.	DWV at Test Voltage (1) - Non Standard	9.	DWV at Test Voltage (1) - Non Standard	9.	DWV at Test Voltage (1) - Non Standard
10.	Visual Inspection	10.	Visual Inspection	10.	Visual Inspection	10.	Visual Inspection

Pin-to-Ground

Group 2		Group 4		Group 6		Group 8	
EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (40 Contacts) Note: Test Location A		10126366-101LF (AFCI VH) 10126363-101LF (AFCI RAR) 4 Assemblies (40 Contacts) Note: Test Location A		10126363-101LF (AFCI RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (40 Contacts) Note: Test Location A		EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) 10126366-101LF (AFCI VH) 4 Assemblies (40 Contacts) Note: Test Location A	
Step	Description	Step	Description	Step	Description	Step	Description
1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection
2.	IR (3) - Non Standard	2.	IR (3) - Non Standard	2.	IR (3) - Non Standard	2.	IR (3) - Non Standard
3.	DWV at Test Voltage (1) - Non Standard	3.	DWV at Test Voltage (1) - Non Standard	3.	DWV at Test Voltage (1) - Non Standard	3.	DWV at Test Voltage (1) - Non Standard
4.	Thermal Shock (4) - Non Standard	4.	Thermal Shock (4) - Non Standard	4.	Thermal Shock (4) - Non Standard	4.	Thermal Shock (4) - Non Standard
5.	IR (3) - Non Standard	5.	IR (3) - Non Standard	5.	IR (3) - Non Standard	5.	IR (3) - Non Standard
6.	DWV at Test Voltage (1) - Non Standard	6.	DWV at Test Voltage (1) - Non Standard	6.	DWV at Test Voltage (1) - Non Standard	6.	DWV at Test Voltage (1) - Non Standard
7.	Humidity (2) - Non Standard	7.	Humidity (2) - Non Standard	7.	Humidity (2) - Non Standard	7.	Humidity (2) - Non Standard
8.	IR (3) - Non Standard	8.	IR (3) - Non Standard	8.	IR (3) - Non Standard	8.	IR (3) - Non Standard
9.	DWV at Test Voltage (1) - Non Standard	9.	DWV at Test Voltage (1) - Non Standard	9.	DWV at Test Voltage (1) - Non Standard	9.	DWV at Test Voltage (1) - Non Standard
10.	Visual Inspection	10.	Visual Inspection	10.	Visual Inspection	10.	Visual Inspection

- (1) DWV at Test Voltage = Other
EIA-364-20; Test Condition = 1 (Sea Level)
DWV Test Voltage = 500 VDC
Test voltage applied for 60 seconds
- (2) Humidity = Other
Test Condition = C (50 cycles of 10 hour duration for a total of 500 Hours) A cycle consists of the following steps: a) 2 hour ramp from 25°C at 80%-98% RH to 65°C at 90%-98% RH;
b) 4 hour dwell at 65°C at 90%-98% RH; c) 2 hour ramp down to 25°C at 80%-98% RH; d) 2 hour dwell at 25°C at 80%-98% RH
Profile to meet Telcordia GR-1217
- (3) IR = Other
Test Condition = 500 Vdc, 60 Seconds
EIA-364-21
- (4) Thermal Shock = Other
Exposure Time at Temperature Extremes = 1/2 Hour
Method A, Test Condition = I (-55°C to +85°C)
Test Duration = A (5 Cycles)
EIA 364-32

Mixed Flowing Gas

Note: Initial LLCR shall be <= 60 mOhms

Group 1		Group 2		Group 3		Group 4	
EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (560 LLCR Points) Note: Test Location C		10126366-101LF (AFCI VH) 10126363-101LF (AFCI RAR) 4 Assemblies (560 LLCR Points) Note: Test Location B		10126363-101LF (AFCI RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 4 Assemblies (560 LLCR Points) Note: Test Location B		EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) 10126366-101LF (AFCI VH) 4 Assemblies (560 LLCR Points) Note: Test Location B	
Step	Description	Step	Description	Step	Description	Step	Description
1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection
2.	LLCR (1)	2.	LLCR (1)	2.	LLCR (1)	2.	LLCR (1)
3.	Cycles Quantity = 100 Cycles	3.	Cycles Quantity = 100 Cycles	3.	Cycles Quantity = 100 Cycles	3.	Cycles Quantity = 100 Cycles
4.	LLCR (1) Max Delta = 10 mOhm	4.	LLCR (1) Max Delta = 10 mOhm	4.	LLCR (1) Max Delta = 10 mOhm	4.	LLCR (1) Max Delta = 10 mOhm
5.	Mixed Flowing Gas Unmated (3) Duration = 10 Days Note: Expose backplane vertical header only	5.	Mixed Flowing Gas Unmated (3) Duration = 10 Days Note: Expose backplane vertical header only	5.	Mixed Flowing Gas Unmated (3) Duration = 10 Days Note: Expose backplane vertical header only	5.	Mixed Flowing Gas Unmated (3) Duration = 10 Days Note: Expose backplane vertical header only
6.	LLCR (1) Max Delta = 10 mOhm	6.	LLCR (1) Max Delta = 10 mOhm	6.	LLCR (1) Max Delta = 10 mOhm	6.	LLCR (1) Max Delta = 10 mOhm
7.	Mixed Flowing Gas Mated (2) Duration = 10 Days	7.	Mixed Flowing Gas Mated (2) Duration = 10 Days	7.	Mixed Flowing Gas Mated (2) Duration = 10 Days	7.	Mixed Flowing Gas Mated (2) Duration = 10 Days
8.	LLCR (1) Max Delta = 10 mOhm	8.	LLCR (1) Max Delta = 10 mOhm	8.	LLCR (1) Max Delta = 10 mOhm	8.	LLCR (1) Max Delta = 10 mOhm
9.	Disturb Disturb = 0.10 mm Note: Perform in accordance with Telecordia GR-1217-CORE, November 1995, section 9.1.3.3 paragraph 7.	9.	Disturb Disturb = 0.10 mm Note: Perform in accordance with Telecordia GR-1217-CORE, November 1995, section 9.1.3.3 paragraph 7.	9.	Disturb Disturb = 0.10 mm Note: Perform in accordance with Telecordia GR-1217-CORE, November 1995, section 9.1.3.3 paragraph 7.	9.	Disturb Disturb = 0.10 mm Note: Perform in accordance with Telecordia GR-1217-CORE, November 1995, section 9.1.3.3 paragraph 7.
10.	LLCR (1) Max Delta = 10 mOhm	10.	LLCR (1) Max Delta = 10 mOhm	10.	LLCR (1) Max Delta = 10 mOhm	10.	LLCR (1) Max Delta = 10 mOhm
11.	Cycles Quantity = 100 Cycles	11.	Cycles Quantity = 100 Cycles	11.	Cycles Quantity = 100 Cycles	11.	Cycles Quantity = 100 Cycles
12.	LLCR (1) Max Delta = 10 mOhm	12.	LLCR (1) Max Delta = 10 mOhm	12.	LLCR (1) Max Delta = 10 mOhm	12.	LLCR (1) Max Delta = 10 mOhm
13.	Visual Inspection	13.	Visual Inspection	13.	Visual Inspection	13.	Visual Inspection

(1) LLCR = EIA-364-23
Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max

(2) Mixed Flowing Gas Mated = EIA-364-65
Environmental Conditions = Class IIA

(3) Mixed Flowing Gas Unmated = EIA-364-65
Environmental Conditions = Class IIA

Vibration/Mechanical Shock/LLCR

Note: Initial LLCR shall be <= 60 mOhms

Group 1		Group 2		Group 3		Group 4	
EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 3 Assemblies (420 LLCR Points) Note: Test Location B		10126366-101LF (AFCI VH) 10126363-101LF (AFCI RAR) 3 Assemblies (420 LLCR Points) Note: Test Location B		10126363-101LF (AFCI RAR) EBTM-4-10-2.0-S-VT-1 (SAMTEC VH) 3 Assemblies (420 LLCR Points) Note: Test Location B		EBTF-4-10-2.0-S-RA-1 (SAMTEC RAR) 10126366-101LF (AFCI VH) 3 Assemblies (420 LLCR Points) Note: Test Location B	
Step	Description	Step	Description	Step	Description	Step	Description
1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection	1.	Visual Inspection
2.	LLCR (1)	2.	LLCR (1)	2.	LLCR (1)	2.	LLCR (1)
3.	Cycles Quantity = 100 Cycles	3.	Cycles Quantity = 100 Cycles	3.	Cycles Quantity = 100 Cycles	3.	Cycles Quantity = 100 Cycles
4.	LLCR (1) Max Delta = 10 mOhm	4.	LLCR (1) Max Delta = 10 mOhm	4.	LLCR (1) Max Delta = 10 mOhm	4.	LLCR (1) Max Delta = 10 mOhm
5.	Dust Dwell = 60 min Note: Test unmated Note: EIA-364-91: dust composition 1 (benign)	5.	Dust Dwell = 60 min Note: Test unmated Note: EIA-364-91: dust composition 1 (benign)	5.	Dust Dwell = 60 min Note: Test unmated Note: EIA-364-91: dust composition 1 (benign)	5.	Dust Dwell = 60 min Note: Test unmated Note: EIA-364-91: dust composition 1 (benign)
6.	LLCR (1) Max Delta = 10 mOhm	6.	LLCR (1) Max Delta = 10 mOhm	6.	LLCR (1) Max Delta = 10 mOhm	6.	LLCR (1) Max Delta = 10 mOhm
7.	Vibration Note: EIA-364-28, Test Condition = 2 (Amplitude=10G, Frequency Range = 10-500-10 Hz, 15 Minutes/Sweep, 8 Hours/Axis; 24 Hours Total)	7.	Vibration Note: EIA-364-28, Test Condition = 2 (Amplitude=10G, Frequency Range = 10-500-10 Hz, 15 Minutes/Sweep, 8 Hours/Axis; 24 Hours Total)	7.	Vibration Note: EIA-364-28, Test Condition = 2 (Amplitude=10G, Frequency Range = 10-500-10 Hz, 15 Minutes/Sweep, 8 Hours/Axis; 24 Hours Total)	7.	Vibration Note: EIA-364-28, Test Condition = 2 (Amplitude=10G, Frequency Range = 10-500-10 Hz, 15 Minutes/Sweep, 8 Hours/Axis; 24 Hours Total)
8.	LLCR (1) Max Delta = 10 mOhm	8.	LLCR (1) Max Delta = 10 mOhm	8.	LLCR (1) Max Delta = 10 mOhm	8.	LLCR (1) Max Delta = 10 mOhm
9.	Mechanical Shock (2) - Non Standard	9.	Mechanical Shock (2) - Non Standard	9.	Mechanical Shock (2) - Non Standard	9.	Mechanical Shock (2) - Non Standard
10.	LLCR (1) Max Delta = 10 mOhm	10.	LLCR (1) Max Delta = 10 mOhm	10.	LLCR (1) Max Delta = 10 mOhm	10.	LLCR (1) Max Delta = 10 mOhm
11.	Visual Inspection	11.	Visual Inspection	11.	Visual Inspection	11.	Visual Inspection

(1) LLCR = EIA-364-23
Open Circuit Voltage = 20 mV Max
Test Current = 100 mA Max

(2) Mechanical Shock = Other
Test Condition = H (30 G Peak, 11 milliseconds, Half Sine)
Number of Shocks = 3 Per Direction, Per Axis, 18 Total
EIA-364-27

Vibration/Mechanical Shock/Event Detection

Group 1		Group 2		Group 3		Group 4	
EBTF-4-10-2.0-S-RA-1 EBTM-4-10-2.0-S-VT-1 1 Assemblies (90 Positions; Signals Only) Note: Test Location B		10126366-101LF (FCI VT) 10126363-101LF (FCI RA) 1 Assemblies (90 Positions; Signals Only) Note: Test Location B		10126363-101LF (FCI RA) EBTM-4-10-2.0-S-VT-1 1 Assemblies (90 Positions; Signals Only) Note: Test Location B		EBTF-4-10-2.0-S-RA-1 10126366-101LF (FCI VT) 1 Assemblies (90 Positions; Signals Only) Note: Test Location B	
Step	Description	Step	Description	Step	Description	Step	Description
1.	Microsecond Event Detection (Vibration) Note: EIA-364-28: Test Condition = 2 (Amplitude=10G, Frequency Range=10-500-10 Hz, 15 Minutes/Sweep, 8 Hours/Axis; 24 Hours Total) Note: EIA-364-46: Test Condition = 1 microsecond at 10 ohms	1.	Microsecond Event Detection (Vibration) Note: EIA-364-28: Test Condition = 2 (Amplitude=10G, Frequency Range=10-500-10 Hz, 15 Minutes/Sweep, 8 Hours/Axis; 24 Hours Total) Note: EIA-364-46: Test Condition = 1 microsecond at 10 ohms	1.	Microsecond Event Detection (Vibration) Note: EIA-364-28: Test Condition = 2 (Amplitude=10G, Frequency Range=10-500-10 Hz, 15 Minutes/Sweep, 8 Hours/Axis; 24 Hours Total) Note: EIA-364-46: Test Condition = 1 microsecond at 10 ohms	1.	Microsecond Event Detection (Vibration) Note: EIA-364-28: Test Condition = 2 (Amplitude=10G, Frequency Range=10-500-10 Hz, 15 Minutes/Sweep, 8 Hours/Axis; 24 Hours Total) Note: EIA-364-46: Test Condition = 1 microsecond at 10 ohms
2.	Microsecond Event Detection (Mechanical Shock) Note: EIA-364-27: Test Condition = H (30 G Peak, 11 milliseconds, Half Sine), Number of Shocks = 3 Per Direction, Per Axis, 18 Total Note: EIA-364-46: Test Condition = 1 microsecond at 10 ohms	2.	Microsecond Event Detection (Mechanical Shock) Note: EIA-364-27: Test Condition = H (30 G Peak, 11 milliseconds, Half Sine), Number of Shocks = 3 Per Direction, Per Axis, 18 Total Note: EIA-364-46: Test Condition = 1 microsecond at 10 ohms	2.	Microsecond Event Detection (Mechanical Shock) Note: EIA-364-27: Test Condition = H (30 G Peak, 11 milliseconds, Half Sine), Number of Shocks = 3 Per Direction, Per Axis, 18 Total Note: EIA-364-46: Test Condition = 1 microsecond at 10 ohms	2.	Microsecond Event Detection (Mechanical Shock) Note: EIA-364-27: Test Condition = H (30 G Peak, 11 milliseconds, Half Sine), Number of Shocks = 3 Per Direction, Per Axis, 18 Total Note: EIA-364-46: Test Condition = 1 microsecond at 10 ohms

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

THERMAL:

- 1) EIA-364-17, *Temperature Life with or without Electrical Load Test Procedure for Electrical Connectors*.
- 2) Test Condition 3 at 85°C
- 3) Test Time Condition C for 500 hours
- 4) All test samples are exposed to environmental stressing in the mated condition.

THERMAL SHOCK:

- 1) EIA-364-32, *Thermal Shock (Temperature Cycling) Test Procedure for Electrical Connectors*.
- 2) Test Condition 1: -55°C to +85°C
- 3) Test Time: ½ hour dwell at each temperature extreme
- 4) Number of Cycles: 5
- 5) All test samples are exposed to environmental stressing in the mated condition.

HUMIDITY:

- 1) Reference document: EIA-364-31, *Humidity Test Procedure for Electrical Connectors*.
- 2) Test Condition C, 500 Hours, 50 - 10 hour cycles
- 3) Method III, +25°C to + 65°C, 90% to 98% Relative Humidity excluding sub-cycles 7a and 7b.
- 4) All test samples are exposed to environmental stressing in the mated condition.

MATING/UNMATING:

- 1) Reference document: EIA-364-13, *Mating and Unmating Forces Test Procedure for Electrical Connectors*.
- 2) The full insertion position was to within 0.003" to 0.004" of the plug bottoming out in the receptacle to prevent damage to the system under test.
- 3) One of the mating parts is secured to a floating X-Y table to prevent damage during cycling.

INSULATION RESISTANCE (IR):

To determine the resistance of insulation materials to leakage of current through or on the surface of these materials when a DC potential is applied.

- 1) PROCEDURE:
 - a. Reference document: EIA-364-21, *Insulation Resistance Test Procedure for Electrical Connectors*.
 - b. Test Conditions:
 - i. Between Signal-to-Signal and Signal-to-Ground
 - ii. Electrification Time 2.0 minutes
 - iii. Test Voltage (500 VDC) corresponds to calibration settings for measuring resistances.
- 2) MEASUREMENTS:
- 3) When the specified test voltage is applied (VDC), the insulation resistance shall not be less than 1000 MOhms.

ATTRIBUTE DEFINITIONS CONTINUED**DIELECTRIC WITHSTANDING VOLTAGE (DWV):**

To determine if the sockets can operate at its rated voltage and withstand momentary over potentials due to switching, surges, and other similar phenomenon. Separate samples are used to evaluate the effect of environmental stresses so not to influence the readings from arcing that occurs during the measurement process.

1) PROCEDURE:

- a. Reference document: EIA-364-20, *Withstanding Voltage Test Procedure for Electrical Connectors*.
- b. Test Conditions:
 - i. Between Signal-to-Signal and Signal-to-Ground
 - ii. Barometric Test Condition 1
 - iii. Rate of Application: 500 V/Sec
 - iv. Test Voltage: 500 VDC

LLCR:

- 1) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 2) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 3) Max increase allowable is 10 mΩ and the max initial measurement allowable is 60 mΩ.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing
 - a. $\leq +5.0$ mOhms
 - b. +5.1 to +10.0 mOhms
 - c. +10.1 to +15.0 mOhms
 - d. +15.1 to +50.0 mOhms
 - e. +50.1 to +1000 mOhms
 - f. $>+1000$ mOhms

RESULTS

Thermal Aging: Mating/Unmating Forces

Samtec RAR / Samtec VH

- Initial
 - Mating
 - Min-----6.66 Lbs (29.63 N)
 - Max-----6.79 Lbs (30.21 N)
 - Unmating
 - Min-----3.86 Lbs (17.16 N)
 - Max-----4.05 Lbs (18.02 N)
- After Thermal Age
 - Mating
 - Min-----4.70 Lbs (20.91 N)
 - Max-----4.80 Lbs (21.35 N)
 - Unmating
 - Min-----3.02 Lbs (13.42 N)
 - Max-----3.19 Lbs (14.19 N)

AFCI VH / AFCI RAR

- Initial
 - Mating
 - Min----- 10.89 Lbs (48.45 N)
 - Max----- 12.46 Lbs (55.40 N)
 - Unmating
 - Min-----6.15 Lbs (27.34 N)
 - Max-----6.89 Lbs (30.66 N)
- After Thermal Age
 - Mating
 - Min-----7.99 Lbs (48.45 N)
 - Max-----8.82 Lbs (39.25 N)
 - Unmating
 - Min-----4.86 Lbs (21.64 N)
 - Max-----5.38 Lbs (23.93 N)

Samtec RAR / AFCI VH

- Initial
 - Mating
 - Min----- 10.39 Lbs (46.22 N)
 - Max----- 10.89 Lbs (48.45 N)
 - Unmating
 - Min-----5.47 Lbs (24.31 N)
 - Max-----5.61 Lbs (24.95 N)
- After Thermal Age
 - Mating
 - Min-----7.17 Lbs (31.91 N)
 - Max-----7.69 Lbs (34.19 N)
 - Unmating
 - Min-----4.12 Lbs (18.33 N)
 - Max-----4.41 Lbs (19.60 N)

Test Request Number: 694874	Part #: EBTF-4-10-2.0-S-RA-1/EBTM-4-10-2.0-S-VT-1 and 10126366-101LF/1012636-101LF
Part description: High Speed Backplane	

RESULTS Continued

AFCI RAR / Samtec VH

- Initial
 - Mating
 - Min-----9.47 Lbs (42.11 N)
 - Max-----10.38 Lbs (46.18 N)
 - Unmating
 - Min-----5.03 Lbs (22.39 N)
 - Max-----5.42 Lbs (24.11 N)
- After Thermal Age
 - Mating
 - Min-----6.43 Lbs (28.58 N)
 - Max-----6.72 Lbs (29.90 N)
 - Unmating
 - Min-----3.73 Lbs (16.58 N)
 - Max-----3.98 Lbs (17.69 N)

Durability/Thermal Shock/Humidity with Temperature Cycling: Mating/Unmating Forces

Samtec RAR / Samtec VH

- Initial (First Three Cycles Recorded)
 - Mating
 - Min-----6.16 Lbs (24.70 N)
 - Max-----5.55 Lbs (27.40 N)
 - Unmating
 - Min-----3.71 Lbs (16.50 N)
 - Max-----5.13 Lbs (22.80 N)

AFCI VH / AFCI RAR

- Initial (First Three Cycles Recorded)
 - Mating
 - Min-----7.82 Lbs (34.80 N)
 - Max-----8.93 Lbs (39.70 N)
 - Unmating
 - Min-----6.16 Lbs (27.40 N)
 - Max-----7.53 Lbs (33.50 N)

AFCI RAR / Samtec VH

- Initial (First Three Cycles Recorded)
 - Mating
 - Min-----7.82 Lbs (34.80 N)
 - Max-----8.50 Lbs (37.80 N)
 - Unmating
 - Min-----4.95 Lbs (22.00 N)
 - Max-----6.56 Lbs (29.20 N)

Samtec RAR / AFCI VH

- Initial (First Three Cycles Recorded)
 - Mating
 - Min-----7.55 Lbs (33.60 N)
 - Max-----8.52 Lbs (37.90 N)
 - Unmating
 - Min-----4.83 Lbs (21.50 N)
 - Max-----6.99 Lbs (31.10 N)

RESULTS Continued

Insulation Resistance (IR), minimums

Samtec RAR / Samtec VH

- Initial
 - Mated----- 45,000 MΩ ----- Pass
- After Thermal Shock
 - Mated----- 45,000 MΩ ----- Pass
- After Humidity
 - Mated----- 45,000 MΩ ----- Pass

AFCI VH / AFCI RAR

- Initial
 - Mated----- 45,000 MΩ ----- Pass
- After Thermal Shock
 - Mated----- 45,000 MΩ ----- Pass
- After Humidity
 - Mated----- 45,000 MΩ ----- Pass

AFCI RAR / Samtec VH

- Initial
 - Mated----- 45,000 MΩ ----- Pass
- After Thermal Shock
 - Mated----- 2,300 MΩ ----- Pass
- After Humidity
 - Mated----- 2,100 MΩ ----- Pass

Samtec RAR / AFCI VH

- Initial
 - Mated----- 45,000 MΩ ----- Pass
- After Thermal Shock
 - Mated----- 45,000 MΩ ----- Pass
- After Humidity
 - Mated----- 45,000 MΩ ----- Pass

RESULTS Continued

Dielectric Withstanding Voltage (DWV), minimums

- Test Voltage ----- 500 VDC, \leq 0.5mA

Samtec RAR / Samtec VH

- Initial
 - Mated ----- <11.1 nA ----- Pass
- After Thermal Shock
 - Mated ----- <11.1 nA ----- Pass
- After Humidity
 - Mated ----- <11.1 nA ----- Pass

AFCI VH / AFCI RAR

- Initial
 - Mated ----- <11.1 nA ----- Pass
- After Thermal Shock
 - Mated ----- <11.1 nA ----- Pass
- After Humidity
 - Mated ----- <11.1 nA ----- Pass

AFCI RAR / Samtec VH

- Initial
 - Mated ----- <11.1 nA ----- Pass
- After Thermal Shock
 - Mated ----- 0.22 μ A ----- Pass
- After Humidity
 - Mated ----- 0.24 μ A ----- Pass

Samtec RAR / AFCI VH

- Initial
 - Mated ----- <11.1 nA ----- Pass
- After Thermal Shock
 - Mated ----- <11.1 nA ----- Pass
- After Humidity
 - Mated ----- <11.1 nA ----- Pass

RESULTS Continued

Thermal Aging: LLCR

Samtec RAR / Samtec VH

LLCR (560 LLCR test points)

- Initial----- 23.00 mΩ Max
- After Thermal Age
 - <= +5.0 mOhms ----- 559 Points
 - +5.1 to +10.0 mOhms ----- 1 Points
 - +10.1 to +15.0 mOhms----- 0 Points
 - +15.1 to +50.0 mOhms----- 0 Points
 - +50.1 to +1000 mOhms----- 0 Points
 - >+1000 mOhms----- 0 Points

AFCI VH / AFCI RAR

LLCR (560 LLCR test points)

- Initial----- 22.86 mΩ Max
- After Thermal Age
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms ----- 0 Points
 - +10.1 to +15.0 mOhms----- 0 Points
 - +15.1 to +50.0 mOhms----- 0 Points
 - +50.1 to +1000 mOhms----- 0 Points
 - >+1000 mOhms----- 0 Points

Samtec RAR / AFCI VH

LLCR (560 LLCR test points)

- Initial----- 24.61 mΩ Max
- After Thermal Age
 - <= +5.0 mOhms ----- 559 Points
 - +5.1 to +10.0 mOhms ----- 1 Points
 - +10.1 to +15.0 mOhms----- 0 Points
 - +15.1 to +50.0 mOhms----- 0 Points
 - +50.1 to +1000 mOhms----- 0 Points
 - >+1000 mOhms----- 0 Points

AFCI RAR / Samtec VH

LLCR (560 LLCR test points)

- Initial----- 23.41 mΩ Max
- After Thermal Age
 - <= +5.0 mOhms ----- 557 Points
 - +5.1 to +10.0 mOhms ----- 3 Points
 - +10.1 to +15.0 mOhms----- 0 Points
 - +15.1 to +50.0 mOhms----- 0 Points
 - +50.1 to +1000 mOhms----- 0 Points
 - >+1000 mOhms----- 0 Points

RESULTS Continued

Durability/Thermal Shock/Humidity with Temperature Cycling: LLCR

Samtec RAR / Samtec VH

LLCR (560 LLCR test points)

- Initial----- 24.14 mΩ Max
- After Thermal Shock
 - <= +5.0 mOhms ----- 559 Points
 - +5.1 to +10.0 mOhms ----- 1 Points
 - +10.1 to +15.0 mOhms----- 0 Points
 - +15.1 to +50.0 mOhms----- 0 Points
 - +50.1 to +1000 mOhms----- 0 Points
 - >+1000 mOhms----- 0 Points
- After Durability, 100x
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms ----- 0 Points
 - +10.1 to +15.0 mOhms----- 0 Points
 - +15.1 to +50.0 mOhms----- 0 Points
 - +50.1 to +1000 mOhms----- 0 Points
 - >+1000 mOhms----- 0 Points
- After Dust
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms ----- 0 Points
 - +10.1 to +15.0 mOhms----- 0 Points
 - +15.1 to +50.0 mOhms----- 0 Points
 - +50.1 to +1000 mOhms----- 0 Points
 - >+1000 mOhms----- 0 Points
- After Humidity
 - <= +5.0 mOhms ----- 551 Points
 - +5.1 to +10.0 mOhms ----- 9 Points
 - +10.1 to +15.0 mOhms----- 0 Points
 - +15.1 to +50.0 mOhms----- 0 Points
 - +50.1 to +1000 mOhms----- 0 Points
 - >+1000 mOhms----- 0 Points

RESULTS Continued

AFCI VH / AFCI RAR

LLCR (560 LLCR test points)

- Initial----- 23.90 mΩ Max
- After Thermal Shock
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Durability, 100x
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Dust
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Humidity
 - <= +5.0 mOhms ----- 554 Points
 - +5.1 to +10.0 mOhms -----6 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

AFCI RAR / Samtec VH

LLCR (560 LLCR test points)

- Initial----- 23.89 mΩ Max
- After Thermal Shock
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Durability, 100x
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Dust
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Humidity
 - <= +5.0 mOhms ----- 552 Points
 - +5.1 to +10.0 mOhms -----8 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

Samtec RAR / AFCI VH

LLCR (560 LLCR test points)

- Initial----- 23.22 mΩ Max
- After Thermal Shock
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Durability, 100x
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Dust
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Humidity
 - <= +5.0 mOhms ----- 559 Points
 - +5.1 to +10.0 mOhms -----1 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

Mixed Flowing Gas: LLCR

Samtec RAR / Samtec VH

LLCR (560 LLCR test points)

- Initial----- 25.67 mΩ Max
- After Durability, 100x
 - ≤ +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After 10 Days Unmated
 - ≤ +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After 10 Days Mated
 - ≤ +5.0 mOhms ----- 555 Points
 - +5.1 to +10.0 mOhms -----5 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Disturb
 - ≤ +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Durability, 100x (200x total)
 - ≤ +5.0 mOhms ----- 559 Points
 - +5.1 to +10.0 mOhms -----1 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

AFCI VH / AFCI RAR

LLCR (560 LLCR test points)

- Initial----- 21.97 mΩ Max
- After Durability, 100x
 - ≤ +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After 10 Days Unmated
 - ≤ +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After 10 Days Mated
 - ≤ +5.0 mOhms ----- 558 Points
 - +5.1 to +10.0 mOhms -----2 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Disturb
 - ≤ +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Durability, 100x (200x total)
 - ≤ +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

AFCI RAR / Samtec VH

LLCR (560 LLCR test points)

- Initial----- 21.97 mΩ Max
- After Durability, 100x
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After 10 Days Unmated
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After 10 Days Mated
 - <= +5.0 mOhms ----- 559 Points
 - +5.1 to +10.0 mOhms -----1 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Disturb
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Durability, 100x (200x total)
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

Samtec RAR / AFCI VH

LLCR (560 LLCR test points)

- Initial----- 21.48 mΩ Max
- After Durability, 100x
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After 10 Days Unmated
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After 10 Days Mated
 - <= +5.0 mOhms ----- 559 Points
 - +5.1 to +10.0 mOhms -----1 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Disturb
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Durability, 100x (200x total)
 - <= +5.0 mOhms ----- 560 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

Vibration/Mechanical Shock: LLCR

Samtec RAR / Samtec VH

LLCR (420 LLCR test points)

- Initial----- 24.06 mΩ Max
- After Durability, 100x
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Dust
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Vibration
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Mechanical Shock
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

AFCI VH / AFCI RAR

LLCR (420 LLCR test points)

- Initial----- 23.67 mΩ Max
- After Durability, 100x
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Dust
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Vibration
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Mechanical Shock
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

AFCI RAR / Samtec VH

LLCR (420 LLCR test points)

- Initial----- 23.53 mΩ Max
- After Durability, 100x
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Dust
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Vibration
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Mechanical Shock
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

RESULTS Continued

Samtec RAR / AFCI VH

LLCR (420 LLCR test points)

- Initial----- 23.40 mΩ Max
- After Durability, 100x
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Dust
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Vibration
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points
- After Mechanical Shock
 - <= +5.0 mOhms ----- 420 Points
 - +5.1 to +10.0 mOhms -----0 Points
 - +10.1 to +15.0 mOhms-----0 Points
 - +15.1 to +50.0 mOhms-----0 Points
 - +50.1 to +1000 mOhms-----0 Points
 - >+1000 mOhms-----0 Points

Test Request Number: 694874	Part #: EBTF-4-10-2.0-S-RA-1/EBTM-4-10-2.0-S-VT-1 and 10126366-101LF/1012636-101LF
Part description: High Speed Backplane	

RESULTS Continued

Vibration/Mechanical Shock: Event Detection

- **Samtec RAR / Samtec VH**
 - Vibration
 - No Damage----- Pass
 - 1 Microsecond ----- Pass
 - Mechanical Shock
 - No Damage----- Pass
 - 1 Microsecond ----- Pass

- **AFCI VH / AFCI RAR**
 - Vibration
 - No Damage----- Pass
 - 1 Microsecond ----- Pass
 - Mechanical Shock
 - No Damage----- Pass
 - 1 Microsecond ----- Pass

- **AFCI RAR / Samtec VH**
 - Vibration
 - No Damage----- Pass
 - 1 Microsecond ----- Pass
 - Mechanical Shock
 - No Damage----- Pass
 - 1 Microsecond ----- Pass

- **Samtec RAR / AFCI VH**
 - Vibration
 - No Damage----- Pass
 - 1 Microsecond ----- Pass
 - Mechanical Shock
 - No Damage----- Pass
 - 1 Microsecond ----- Pass

DATA SUMMARIES

Thermal Aging: Mating/Unmating Forces

Samtec RAR / Samtec VH

	Initial				After Thermal Age			
	Mating		Unmating		Mating		Unmating	
	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)
Minimum	29.63	6.66	17.16	3.86	20.91	4.70	13.42	3.02
Maximum	30.21	6.79	18.02	4.05	21.35	4.80	14.19	3.19
Average	29.98	6.74	17.48	3.93	21.15	4.76	13.84	3.11
St Dev	0.26	0.06	0.41	0.09	0.19	0.04	0.33	0.07
Count	4	4	4	4	4	4	4	4

AFCI VH / AFCI RAR

	Initial				After Thermal Age			
	Mating		Unmating		Mating		Unmating	
	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)
Minimum	48.45	10.89	27.34	6.15	35.55	7.99	21.64	4.86
Maximum	55.40	12.46	30.66	6.89	39.25	8.82	23.93	5.38
Average	52.29	11.76	28.73	6.46	37.65	8.46	23.00	5.17
St Dev	3.06	0.69	1.50	0.34	1.85	0.42	1.01	0.23
Count	4	4	4	4	4	4	4	4

Samtec RAR / AFCI VH

	Initial				After Thermal Age			
	Mating		Unmating		Mating		Unmating	
	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)
Minimum	46.22	10.39	24.31	5.47	31.91	7.17	18.33	4.12
Maximum	48.45	10.89	24.95	5.61	34.19	7.69	19.60	4.41
Average	46.95	10.56	24.60	5.53	32.73	7.36	18.92	4.25
St Dev	1.02	0.23	0.29	0.06	1.00	0.23	0.54	0.12
Count	4	4	4	4	4	4	4	4

AFCI RAR / Samtec VH

	Initial				After Thermal Age			
	Mating		Unmating		Mating		Unmating	
	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)	Newton's	Force (Lbs)
Minimum	42.11	9.47	22.39	5.03	28.58	6.43	16.58	3.73
Maximum	46.18	10.38	24.11	5.42	29.90	6.72	17.69	3.98
Average	44.33	9.97	23.41	5.26	29.32	6.59	17.31	3.89
St Dev	1.71	0.39	0.73	0.16	0.58	0.13	0.50	0.11
Count	4	4	4	4	4	4	4	4

DATA SUMMARIES Continued**Durability/Thermal Shock/Humidity with Temperature Cycling: Mating/Unmating Forces****Samtec RAR / Samtec VH**

	Mating		Unmating	
	(Newtons)	(Pounds)	(Newtons)	(Pounds)
Minimum	24.70	5.55	16.50	3.71
Maximum	27.40	6.16	22.80	5.12
Average	25.98	5.84	18.68	4.20
Std Dev	0.80	0.18	2.15	0.48
Count	12	12	12	12

AFCI VH / AFCI RAR

	Mating		Unmating	
	(Newtons)	(Pounds)	(Newtons)	(Pounds)
Minimum	34.80	7.82	27.40	6.16
Maximum	39.70	8.92	33.50	7.53
Average	36.66	8.24	30.03	6.75
Std Dev	1.63	0.37	1.83	0.41
Count	12	12	12	12

Samtec RAR / AFCI VH

	Mating		Unmating	
	(Newtons)	(Pounds)	(Newtons)	(Pounds)
Minimum	34.80	7.82	22.00	4.94
Maximum	37.80	8.49	29.20	6.56
Average	36.29	8.16	24.18	5.43
Std Dev	1.27	0.29	2.60	0.58
Count	12	12	12	12

AFCI RAR / Samtec VH

	Mating		Unmating	
	(Newtons)	(Pounds)	(Newtons)	(Pounds)
Minimum	33.60	7.55	21.50	4.83
Maximum	37.90	8.52	31.10	6.99
Average	36.03	8.10	24.71	5.55
Std Dev	1.31	0.29	3.61	0.81
Count	12	12	12	12

Test Request Number: 694874

Part #: EBTF-4-10-2.0-S-RA-1/EBTM-4-10-2.0-S-VT-1
and 10126366-101LF/1012636-101LF

Part description: High Speed Backplane

DATA SUMMARIES Continued**Insulation Resistance (IR):
Test Voltage = 500 VDC**

Pin-Pin				
	Initial	Post Thermal Shock	Post Humidity	Result
Samtec RAR / Samtec VH	45,000 MΩ	45,000 MΩ	45,000 MΩ	Pass
AFCI VH / AFCI RAR	45,000 MΩ	45,000 MΩ	45,000 MΩ	Pass
Samtec RAR / AFCI VH	45,000 MΩ	45,000 MΩ	45,000 MΩ	Pass
AFCI RAR / Samtec VH	45,000 MΩ	2,310 MΩ	2,100 MΩ	Pass

Pin-Ground				
	Initial	Post Thermal Shock	Post Humidity	Result
Samtec RAR / Samtec VH	45,000 MΩ	45,000 MΩ	45,000 MΩ	Pass
AFCI VH / AFCI RAR	45,000 MΩ	45,000 MΩ	45,000 MΩ	Pass
Samtec RAR / AFCI VH	45,000 MΩ	45,000 MΩ	45,000 MΩ	Pass
AFCI RAR / Samtec VH	45,000 MΩ	45,000 MΩ	45,000 MΩ	Pass

**Dielectric Withstanding Voltage (DWV):
Test Voltage = 500 VDC**

Pin-Pin				
	Initial	Post Thermal Shock	Post Humidity	Result
Samtec RAR / Samtec VH	<11.1 nA	<11.1 nA	<11.1 nA	Pass
AFCI VH / AFCI RAR	<11.1 nA	<11.1 nA	<11.1 nA	Pass
Samtec RAR / AFCI VH	<11.1 nA	<11.1 nA	<11.1 nA	Pass
AFCI RAR / Samtec VH	<11.1 nA	0.22 μA	0.24 μA	Pass

Pin-Ground				
	Initial	Post Thermal Shock	Post Humidity	Result
Samtec RAR / Samtec VH	<11.1 nA	<11.1 nA	<11.1 nA	Pass
AFCI VH / AFCI RAR	<11.1 nA	<11.1 nA	<11.1 nA	Pass
Samtec RAR / AFCI VH	<11.1 nA	<11.1 nA	<11.1 nA	Pass
AFCI RAR / Samtec VH	<11.1 nA	<11.1 nA	<11.1 nA	Pass

DATA SUMMARIES Continued

Thermal Aging: LLCR

Samtec RAR / Samtec VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	10.58	12.50	13.81	14.85	16.42	17.39	18.24	19.78	20.81	21.86	21.97	22.95	23.93	19.94	2.02
	St. Dev	0.33	0.36	0.33	0.35	0.41	0.38	0.40	0.45	0.33	0.31	0.29	0.29	0.41	0.29	0.35
	Min	10.19	11.93	13.25	14.16	15.55	16.53	17.28	18.65	20.26	21.22	21.45	22.37	23.00	19.30	0.87
	Max	11.26	13.19	14.72	15.43	17.09	18.21	18.78	20.51	21.76	22.38	22.73	23.84	24.65	20.37	2.78
Date: 12/3/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location A	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: TC																
Post Thermal Age Delta (mΩ)	Average	1.11	0.22	0.39	0.41	0.26	0.37	0.60	0.32	0.39	0.70	0.20	0.42	0.24	0.39	0.14
	St. Dev	1.93	0.65	0.62	0.59	0.61	0.85	0.44	0.50	0.63	0.90	0.36	0.53	0.53	0.61	0.42
	Min	-0.21	-1.10	-0.87	-0.55	-1.08	-1.17	-0.33	-0.67	-0.65	-0.55	-0.33	-0.62	-0.46	-0.33	-1.04
	Max	8.81	1.66	2.96	1.48	1.24	2.73	1.37	1.30	2.48	3.09	1.23	1.74	1.38	1.54	1.31
Date: 12/29/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location A	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: TC																

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
Thermal	559	1	0	0	0	0

AFCI VH / AFCI RAR

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	10.91	11.94	13.31	13.89	15.54	16.47	17.03	18.57	19.78	20.07	20.80	21.92	21.74	22.36	2.10
	St. Dev	0.43	0.29	0.39	0.24	0.48	0.49	0.37	0.49	0.45	0.40	0.45	0.46	0.35	0.27	0.37
	Min	10.35	11.29	12.45	13.49	14.77	15.45	16.24	17.10	18.77	19.31	19.98	20.86	21.01	21.74	1.25
	Max	11.93	12.41	14.88	14.40	16.67	17.43	17.80	19.08	20.62	21.10	21.53	22.75	22.52	22.86	3.06
Date: 12/3/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location A	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: TC																
Post Thermal Age Delta (mΩ)	Average	0.44	0.54	0.49	0.23	0.58	0.46	0.62	0.80	0.35	0.75	0.48	0.21	0.24	0.26	0.17
	St. Dev	0.47	0.52	0.66	0.47	0.49	0.48	0.67	0.62	0.52	0.58	0.77	0.50	0.51	0.43	0.45
	Min	-0.60	-0.67	-0.77	-1.43	-0.20	-0.79	-0.28	-0.16	-1.14	-0.84	-0.45	-1.08	-0.73	-0.41	-1.25
	Max	1.19	1.36	2.75	0.76	1.57	1.84	2.42	1.90	1.34	1.53	2.29	1.18	0.96	1.09	1.97
Date: 12/29/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location A	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: TC																

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
Thermal	560	0	0	0	0	0

DATA SUMMARIES Continued

Samtec RAR / AFCI VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	10.29	12.20	13.75	14.49	16.10	17.14	18.02	19.44	20.80	21.74	21.71	22.83	23.76	19.77	1.99
	St. Dev	0.34	0.37	0.29	0.43	0.39	0.50	0.34	0.46	0.52	0.44	0.43	0.36	0.43	0.30	0.39
	Min	9.79	11.41	13.06	13.70	15.35	15.90	17.43	18.36	19.63	21.19	21.06	21.96	23.03	19.24	1.03
Date: 12/3/2015	Max	11.22	12.96	14.47	15.18	16.87	18.17	18.73	20.47	21.71	22.97	22.81	23.54	24.61	20.57	3.16
Location A	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: TC	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Thermal Age Delta (mΩ)	Average	0.66	1.02	0.97	1.01	0.85	1.10	1.04	0.81	0.86	1.39	0.69	0.96	0.80	0.52	0.15
	St. Dev	0.52	0.89	1.08	0.87	1.11	0.74	0.87	0.77	0.87	1.01	0.53	0.95	1.23	0.55	0.42
	Min	-0.32	-0.22	-0.13	-0.31	-0.31	-0.05	-0.39	-0.13	-0.25	0.37	-0.45	-1.00	-0.74	-0.14	-1.25
Date: 12/29/2015	Max	1.39	3.64	6.06	2.71	4.16	3.93	2.91	3.36	3.84	3.44	1.95	3.56	4.40	1.62	1.33
Location A	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: TC	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
Thermal	559	1	0	0	0	0

AFCI RAR / Samtec VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	11.04	12.17	13.35	14.15	15.57	16.72	17.44	18.85	19.96	20.29	21.07	22.03	21.95	22.79	2.13
	St. Dev	0.51	0.32	0.38	0.49	0.42	0.55	0.32	0.37	0.55	0.38	0.39	0.47	0.48	0.36	0.37
	Min	10.44	11.48	12.42	13.22	14.89	15.54	16.78	17.84	18.94	19.53	20.16	21.30	21.04	22.13	1.15
Date: 12/3/2015	Max	12.79	12.68	13.99	14.90	16.46	17.84	18.00	19.40	21.03	21.15	21.66	23.49	22.80	23.41	3.13
Location A	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: TC	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Thermal Age Delta (mΩ)	Average	1.23	0.54	1.15	1.25	1.14	1.59	1.13	1.16	1.10	1.11	0.36	0.85	0.95	0.84	0.25
	St. Dev	0.97	0.69	0.96	0.90	0.84	1.83	0.85	0.79	0.84	0.93	1.29	0.68	0.78	0.86	0.37
	Min	0.25	-0.30	-0.25	-0.30	0.12	-0.71	-0.31	0.08	-0.57	-0.03	-4.01	-0.29	-0.02	-0.51	-0.76
Date: 12/29/2015	Max	3.56	2.74	4.83	3.10	3.27	8.02	2.45	3.36	3.19	2.98	3.46	2.66	3.11	2.28	1.31
Location A	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: TC	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
Thermal	557	3	0	0	0	0

DATA SUMMARIES Continued

Durability/Thermal Shock/Humidity with Temperature Cycling: LLCR

Samtec RAR / Samtec VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	10.35	12.76	13.98	14.65	16.49	17.32	18.12	20.04	20.81	21.50	22.16	23.07	23.36	20.05	2.09
	St. Dev	0.29	0.29	0.46	0.41	0.36	0.44	0.38	0.37	0.33	0.36	0.42	0.49	0.37	0.36	0.18
	Min	9.64	12.09	13.11	14.07	15.89	16.45	17.48	19.49	20.13	20.61	21.49	22.30	22.72	19.52	1.57
Date: 10/10/2015	Max	10.72	13.36	14.80	15.45	17.13	18.55	18.67	20.67	21.47	22.03	23.24	24.13	24.14	20.66	2.41
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Thermal Shock Delta (mΩ)	Average	0.63	0.69	0.69	0.54	0.74	0.77	0.52	0.59	0.52	0.50	0.44	0.50	0.45	0.34	0.01
	St. Dev	0.72	0.80	0.92	0.65	0.70	1.11	0.68	0.61	0.56	0.49	0.47	0.62	0.40	0.36	0.08
	Min	-0.03	-0.09	-0.09	-0.01	0.07	-0.29	-0.30	-0.04	-0.07	0.04	-0.34	-0.14	-0.13	-0.46	-0.14
Date: 10/14/2015	Max	2.07	2.82	4.59	2.12	2.16	5.47	2.17	1.97	1.99	1.94	1.57	2.42	1.61	1.12	0.22
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (mΩ)	Average	0.40	0.26	0.19	0.29	0.25	0.35	0.32	0.18	0.30	0.23	0.11	0.15	0.37	0.05	0.00
	St. Dev	0.30	0.28	0.26	0.22	0.29	0.51	0.32	0.39	0.42	0.31	0.33	0.36	0.40	0.40	0.05
	Min	-0.01	-0.43	-0.61	-0.06	-0.22	-0.66	-0.15	-0.65	-0.41	-0.50	-0.48	-0.44	-0.21	-0.41	-0.18
Date: 10/16/2015	Max	1.29	0.61	0.62	0.70	0.00	1.75	0.81	0.95	1.60	0.56	0.74	1.03	1.67	0.95	0.12
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Dust Delta (mΩ)	Average	0.26	-0.17	-0.06	0.30	0.10	0.20	0.47	-0.01	0.20	0.20	-0.19	-0.09	0.19	-0.26	-0.02
	St. Dev	0.21	0.23	0.32	0.43	0.24	0.38	0.49	0.32	0.37	0.44	0.32	0.52	0.35	0.27	0.08
	Min	-0.05	-0.66	-1.12	-0.52	-0.32	-0.57	-0.12	-0.94	-0.45	-0.62	-1.09	-1.03	-0.37	-0.84	-0.21
Date: 10/19/2015	Max	0.80	0.24	0.51	1.26	0.49	1.07	1.45	0.46	1.21	1.26	0.15	1.53	1.34	0.38	0.21
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Humidity Delta (mΩ)	Average	0.63	0.30	0.53	1.00	0.81	1.68	2.79	0.64	1.11	1.15	0.25	0.23	0.68	0.19	0.09
	St. Dev	0.42	0.47	0.66	0.77	0.75	1.64	3.09	0.50	1.18	1.37	0.29	0.42	0.68	0.57	0.09
	Min	0.03	-0.21	-0.48	0.14	0.05	-0.39	0.00	-0.35	-0.06	-0.09	-0.24	-0.51	-0.04	-0.68	-0.18
Date: 12/29/2015	Max	1.70	1.85	3.06	3.54	2.78	6.65	9.41	1.50	7.04	5.18	0.98	1.41	2.75	1.82	0.32
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
Thermal Shock	559	1	0	0	0	0
100x Durability	560	0	0	0	0	0
Dust	560	0	0	0	0	0
Humidity	551	9	0	0	0	0

DATA SUMMARIES Continued

AFCI VH / AFCI RAR

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	11.22	12.70	13.81	14.46	16.11	16.89	17.48	19.47	20.20	20.62	21.21	22.12	22.03	23.17	2.28
	St. Dev	0.15	0.29	0.32	0.26	0.40	0.43	0.23	0.39	0.44	0.25	0.41	0.52	0.24	0.36	0.20
	Min	10.94	12.28	13.20	14.10	15.47	16.17	17.10	18.82	19.39	20.23	20.32	21.05	21.70	22.35	1.72
Date: 10/10/2015	Max	11.46	13.21	14.80	15.12	17.25	17.77	17.93	20.09	20.96	21.15	22.03	23.22	22.63	23.90	2.64
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Thermal Shock Delta (mΩ)	Average	0.33	0.44	0.50	0.42	0.65	0.64	0.61	0.58	0.59	0.44	0.61	0.42	0.38	0.32	0.04
	St. Dev	0.19	0.24	0.37	0.24	0.44	0.53	0.28	0.58	0.42	0.22	0.46	0.39	0.22	0.26	0.07
	Min	-0.09	-0.03	-0.07	0.01	-0.01	0.11	0.28	-0.03	0.00	0.04	0.20	-0.27	0.02	-0.12	-0.09
Date: 10/14/2015	Max	0.73	0.97	1.63	0.97	1.52	2.31	1.26	2.24	2.10	0.89	1.85	2.26	0.77	0.89	0.23
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (mΩ)	Average	0.11	0.14	0.14	0.11	0.36	0.30	0.19	0.39	0.29	0.16	0.36	0.21	0.05	0.15	0.02
	St. Dev	0.26	0.44	0.29	0.22	0.39	0.42	0.29	0.44	0.43	0.26	0.29	0.46	0.21	0.27	0.06
	Min	-0.39	-0.42	-0.36	-0.27	-0.40	-0.26	-0.39	-0.25	-0.38	-0.21	-0.09	-0.60	-0.34	-0.37	-0.11
Date: 10/16/2015	Max	0.81	1.44	0.77	0.66	0.00	1.62	0.67	1.73	1.71	0.76	0.99	2.32	0.52	0.63	0.21
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Dust Delta (mΩ)	Average	0.21	0.35	0.28	0.20	0.63	0.52	0.47	0.86	0.51	0.41	0.38	0.26	0.20	-0.08	-0.04
	St. Dev	0.23	0.65	0.41	0.32	0.59	0.43	0.50	0.52	0.44	0.39	0.35	0.35	0.27	0.29	0.07
	Min	-0.27	-0.38	-0.76	-0.34	-0.15	-0.17	-0.07	-0.01	-0.39	-0.03	-0.09	-0.33	-0.22	-0.57	-0.20
Date: 10/19/2015	Max	0.70	2.20	1.42	1.04	1.81	1.51	2.08	1.70	1.91	1.33	1.20	1.48	1.01	0.44	0.27
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Humidity Delta (mΩ)	Average	0.79	0.75	0.86	0.73	1.44	1.62	1.79	2.45	1.33	0.89	1.00	0.53	0.39	0.21	0.06
	St. Dev	0.52	0.79	0.76	0.72	1.26	1.32	1.33	2.26	0.95	0.66	0.99	0.49	0.44	0.65	0.11
	Min	0.15	-0.16	-0.12	0.05	0.00	0.19	0.00	0.19	0.06	0.12	-0.07	-0.19	-0.27	-0.65	-0.14
Date: 12/29/2015	Max	1.97	2.54	2.96	2.70	4.30	4.99	5.31	9.49	4.79	2.99	3.82	1.66	1.34	2.65	0.43
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
Thermal Shock	560	0	0	0	0	0
100x Durability	560	0	0	0	0	0
Dust	560	0	0	0	0	0
Humidity	556	4	0	0	0	0

DATA SUMMARIES Continued

Samtec RAR / AFCI VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	10.90	12.12	13.35	14.22	15.74	16.75	17.47	19.01	19.98	20.43	21.06	21.94	21.98	22.68	2.22
	St. Dev	0.30	0.21	0.30	0.33	0.33	0.38	0.34	0.27	0.39	0.24	0.27	0.30	0.20	0.27	0.18
	Min	10.37	11.78	12.61	13.43	15.23	16.04	17.00	18.59	19.17	19.88	20.55	21.39	21.65	22.33	1.69
Date: 10/10/2015	Max	11.37	12.72	14.12	14.93	16.27	17.68	18.35	19.52	20.90	20.77	21.51	22.63	22.39	23.22	2.59
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Thermal Shock Delta (mΩ)	Average	0.56	0.23	0.28	0.37	0.40	0.51	0.52	0.42	0.49	0.30	0.28	0.44	0.21	0.24	0.59
	St. Dev	0.41	0.22	0.44	0.58	0.41	0.45	0.51	0.36	0.40	0.25	0.35	0.30	0.19	0.31	1.00
	Min	-0.04	-0.10	-0.56	-0.46	-0.06	-0.17	-0.41	-0.01	-0.25	-0.17	-0.16	-0.11	-0.13	-0.31	-0.16
Date: 10/14/2015	Max	1.35	0.61	1.23	2.05	1.50	1.64	1.56	1.34	1.49	0.74	0.99	1.16	0.54	0.87	2.61
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (mΩ)	Average	0.18	0.14	0.09	0.05	0.35	0.37	0.28	0.29	0.25	0.08	0.23	0.32	0.11	0.50	0.60
	St. Dev	0.23	0.27	0.42	0.26	0.48	0.56	0.36	0.34	0.50	0.17	0.44	0.30	0.21	0.45	0.97
	Min	-0.13	-0.37	-0.64	-0.35	-0.32	-0.29	-0.46	-0.15	-0.43	-0.28	-0.34	-0.19	-0.22	-0.31	-0.12
Date: 10/16/2015	Max	0.62	0.83	1.28	0.51	0.00	2.51	0.90	1.31	2.13	0.35	1.54	1.15	0.71	1.95	2.53
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Dust Delta (mΩ)	Average	0.02	-0.04	-0.05	-0.13	0.16	0.08	0.05	0.14	0.05	-0.05	0.01	-0.01	-0.13	0.15	0.51
	St. Dev	0.30	0.23	0.46	0.29	0.33	0.47	0.49	0.26	0.57	0.37	0.22	0.32	0.21	0.47	1.01
	Min	-0.40	-0.53	-0.96	-0.79	-0.46	-0.74	-1.08	-0.39	-0.88	-0.56	-0.33	-0.53	-0.47	-0.37	-0.22
Date: 10/19/2015	Max	0.87	0.55	1.63	0.26	0.98	1.21	1.09	0.70	2.10	0.73	0.37	1.01	0.35	1.60	2.59
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Humidity Delta (mΩ)	Average	0.34	0.19	0.12	0.17	0.63	0.79	0.98	0.91	0.61	0.34	0.35	0.49	0.18	0.42	0.55
	St. Dev	0.39	0.35	0.33	0.34	0.65	0.79	0.55	1.19	0.86	0.54	0.76	0.66	0.37	0.51	0.98
	Min	-0.15	-0.45	-0.81	-0.31	-0.20	-0.05	0.00	0.12	-0.45	-0.32	-0.24	-0.18	-0.41	-0.14	-0.15
Date: 12/29/2015	Max	1.30	0.86	0.80	1.22	3.06	3.67	1.90	5.75	3.87	1.51	3.15	2.22	1.06	2.11	2.55
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
Thermal Shock	560	0	0	0	0	0
100x Durability	560	0	0	0	0	0
Dust	560	0	0	0	0	0
Humidity	559	1	0	0	0	0

DATA SUMMARIES Continued

AFCI RAR / Samtec VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	10.26	12.92	14.06	14.81	16.72	17.54	18.22	20.24	20.99	21.73	22.32	22.98	23.37	19.98	2.05
	St. Dev	0.27	0.40	0.40	0.44	0.47	0.44	0.43	0.46	0.46	0.44	0.34	0.30	0.22	0.23	0.19
	Min	9.83	12.19	13.27	14.11	15.71	16.51	17.60	19.33	20.07	21.26	21.34	22.38	22.94	19.51	1.50
	Max	10.74	13.76	14.80	15.53	17.62	18.42	19.16	20.96	22.18	22.56	22.89	23.76	23.89	20.31	2.46
Date: 10/10/2015																
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Thermal Shock Delta (mΩ)	Average	0.36	0.40	0.53	0.46	0.60	0.59	0.93	0.90	1.03	1.02	0.74	0.65	0.82	0.40	0.03
	St. Dev	0.27	0.44	0.52	0.38	0.47	0.52	0.49	0.75	0.65	0.86	0.65	0.43	0.66	0.34	0.06
	Min	-0.28	-0.20	-0.26	-0.16	-0.03	-0.34	0.16	-0.05	-0.12	-0.06	-0.05	-0.06	-0.06	-0.11	-0.13
	Max	0.87	1.21	1.91	1.60	1.49	2.07	1.87	2.68	3.08	3.66	2.94	1.91	2.21	1.15	0.18
Date: 10/14/2015																
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (mΩ)	Average	0.19	-0.03	0.11	0.19	0.27	0.13	0.34	-0.06	0.19	0.34	0.00	0.17	0.38	0.05	-0.05
	St. Dev	0.21	0.24	0.28	0.26	0.99	0.34	0.55	0.21	0.49	0.68	0.22	0.52	0.60	0.17	0.06
	Min	-0.06	-0.41	-0.34	-0.25	-0.45	-0.47	-0.29	-0.46	-0.46	-0.74	-0.55	-0.58	-0.17	-0.34	-0.22
	Max	0.67	0.39	1.07	0.73	0.00	0.89	1.73	0.31	1.58	2.49	0.35	2.15	2.01	0.28	0.07
Date: 10/16/2015																
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Dust Delta (mΩ)	Average	0.57	0.20	0.31	0.47	0.41	0.49	0.64	0.26	0.57	0.68	0.12	0.38	0.54	0.17	-0.06
	St. Dev	0.36	0.41	0.29	0.36	0.33	0.46	0.32	0.38	0.50	0.40	0.29	0.51	0.64	0.29	0.06
	Min	0.20	-0.49	-0.24	-0.15	-0.06	-0.29	0.01	-0.37	-0.28	0.16	-0.42	-0.31	-0.15	-0.19	-0.21
	Max	1.75	1.02	0.83	1.10	1.01	1.68	1.33	0.95	1.96	1.68	0.72	2.12	1.87	0.81	0.10
Date: 10/19/2015																
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Humidity Delta (mΩ)	Average	0.87	0.23	0.61	0.90	1.14	1.26	1.88	0.80	1.47	1.49	0.64	1.12	1.61	0.86	0.14
	St. Dev	0.39	0.40	0.53	0.71	1.30	1.37	1.51	0.61	1.38	1.36	0.72	1.47	1.67	1.82	0.26
	Min	0.20	-0.36	-0.19	-0.19	-0.45	-0.10	0.00	-0.18	-0.07	-0.34	-0.14	-0.21	-0.18	-0.12	-0.14
	Max	1.82	0.94	2.23	2.91	5.63	7.53	5.28	1.96	7.15	5.01	2.61	8.23	6.22	8.29	1.04
Date: 12/29/2015																
Location C	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: DWR	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
Thermal Shock	560	0	0	0	0	0
100x Durability	560	0	0	0	0	0
Dust	560	0	0	0	0	0
Humidity	552	8	0	0	0	0

DATA SUMMARIES Continued

Mixed Flowing Gas: LLCR

Samtec RAR / Samtec VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	10.86	12.81	14.20	15.23	16.73	17.82	18.80	20.03	21.17	22.20	22.28	23.33	24.23	20.15	2.08
	St. Dev	0.41	0.42	0.46	0.65	0.56	0.72	0.73	0.41	0.51	0.50	0.44	0.50	0.50	0.45	0.21
	Min	10.26	12.25	13.41	14.49	15.92	16.83	18.10	19.45	20.55	21.63	21.70	22.61	23.81	19.46	1.44
	Max	11.60	13.49	15.05	16.64	17.83	19.81	20.58	20.83	22.38	23.13	23.39	24.66	25.67	21.32	2.52
Date: 11/20/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location C	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: BE																
Post 100x Durability Delta (mΩ)	Average	-0.15	-0.34	-0.36	-0.30	-0.44	-0.48	-0.48	-0.37	-0.28	-0.30	-0.34	-0.28	-0.26	-0.35	-0.01
	St. Dev	0.45	0.57	0.51	0.67	0.59	0.72	0.74	0.44	0.50	0.57	0.43	0.53	0.50	0.37	0.06
	Min	-0.76	-1.21	-1.37	-1.51	-1.29	-2.32	-2.19	-1.06	-1.26	-1.51	-1.04	-1.50	-1.37	-1.30	-0.18
	Max	0.45	0.55	0.47	0.65	0.34	0.60	0.58	0.16	0.48	0.51	0.20	0.74	0.40	0.07	0.18
Date: 11/23/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location C	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: BE																
Post 10d Unmated Delta (mΩ)	Average	0.27	-0.09	-0.11	0.28	-0.25	0.05	0.23	-0.14	0.15	0.26	-0.14	0.06	0.17	-0.20	0.06
	St. Dev	0.50	0.57	0.44	0.54	0.44	0.67	0.76	0.42	0.57	0.57	0.42	0.58	0.53	0.32	0.15
	Min	0.00	-0.97	-1.17	-0.54	-1.19	-1.33	-1.51	-1.00	-0.68	-0.73	-0.97	-1.07	-1.21	-0.95	-0.20
	Max	1.84	1.23	0.96	1.79	0.00	1.97	1.71	0.38	2.46	1.39	0.93	1.57	0.95	0.43	0.48
Date: 12/7/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location C	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: BE																
Post 10d Mated Delta (mΩ)	Average	0.54	0.29	0.03	0.43	-0.03	0.11	-0.15	0.70	0.07	-0.04	0.15	0.13	0.45	0.13	0.26
	St. Dev	1.52	0.78	1.32	1.44	0.67	1.11	0.96	2.01	0.59	0.79	0.76	0.80	1.21	0.63	0.39
	Min	-0.85	-0.74	-1.15	-1.41	-1.10	-2.36	-2.33	-0.81	-1.13	-1.40	-0.86	-1.48	-1.51	-1.33	-0.17
	Max	6.34	2.14	7.36	5.42	1.21	3.04	1.14	6.50	1.00	1.90	2.29	2.62	3.91	1.27	1.78
Date: 12/18/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location C	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: BE																
Post Disturb Delta (mΩ)	Average	-0.05	0.05	-0.19	-0.11	-0.17	-0.21	-0.30	-0.05	-0.12	-0.22	-0.04	0.04	0.00	0.08	0.16
	St. Dev	0.48	0.71	0.57	0.79	0.63	0.82	0.92	0.62	0.58	0.70	0.53	0.71	0.61	0.64	0.19
	Min	-0.78	-0.79	-1.23	-1.47	-1.10	-2.34	0.00	-1.06	-1.36	-1.46	-0.87	-1.56	-1.65	-1.45	-0.15
	Max	0.70	2.12	1.01	1.99	1.15	1.78	1.28	1.36	0.70	1.11	0.93	1.48	0.77	1.44	0.66
Date: 12/18/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location C	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: BE																
Post 100x Durability Delta (200x total) (mΩ)	Average	0.27	0.06	0.03	0.22	-0.10	0.06	0.13	0.17	0.21	0.12	0.23	0.37	0.56	0.28	0.19
	St. Dev	0.54	0.53	0.52	0.77	0.56	0.74	0.73	0.68	0.43	0.52	0.85	0.70	1.43	0.42	0.21
	Min	-0.55	-0.84	-0.90	-1.17	-1.16	-1.46	-1.60	-0.78	-0.58	-0.86	-0.51	-0.42	-0.47	0.00	-0.09
	Max	1.46	1.22	1.34	1.67	1.58	1.64	1.53	2.66	1.42	1.08	3.59	2.58	6.36	1.31	0.71
Date: 12/21/2015	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Location C	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Technician: BE																

LLCR Delta Count by Category						
mOhms	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
100x Durability	560	0	0	0	0	0
10d Unmated	560	0	0	0	0	0
10d Mated	555	5	0	0	0	0
Disturb	560	0	0	0	0	0
200x Durability	559	1	0	0	0	0

DATA SUMMARIES Continued

AFCI VH / AFCI RAR

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ) Date: 1/2/2016 Location B	Average	8.15	6.06	7.83	14.32	14.52	8.70	8.20	11.22	17.62	11.79	8.55	11.31	21.18	21.25	14.93
	St. Dev	4.86	4.63	5.62	0.36	0.50	6.41	7.35	7.63	0.34	8.06	8.00	9.32	0.39	0.31	10.62
	Min	2.24	2.26	2.18	13.77	13.86	2.29	2.23	1.87	17.11	2.12	2.06	1.95	20.60	20.55	1.62
	Max	12.68	12.01	13.82	15.34	15.77	15.78	17.34	18.11	18.60	18.92	18.34	21.41	21.97	21.70	26.07
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (mΩ) Date: 1/21/2016 Location B	Average	-0.04	-0.07	-0.17	-0.26	-0.29	-0.10	-0.12	-0.16	-0.35	-0.19	-0.10	-0.18	-0.18	-0.36	-0.14
	St. Dev	0.15	0.13	0.23	0.27	0.28	0.21	0.26	0.24	0.24	0.30	0.11	0.25	0.31	0.30	0.21
	Min	-0.31	-0.47	-0.98	-0.74	-0.84	-0.74	-0.92	-0.86	-0.89	-1.05	-0.40	-0.90	-1.12	-0.95	-1.41
	Max	0.22	0.18	0.08	0.21	0.29	0.25	0.33	0.31	0.14	0.35	0.14	0.16	0.46	0.36	0.59
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 10d Unmated Delta (mΩ) Date: 2/1/2016 Location B	Average	0.30	0.17	-0.08	-0.03	-0.12	0.10	-0.11	-0.09	-0.23	-0.09	-0.06	-0.16	-0.06	-0.24	-0.01
	St. Dev	0.47	0.47	0.22	0.34	0.30	0.47	0.26	0.23	0.36	0.33	0.11	0.23	0.56	0.35	0.30
	Min	0.00	-0.29	-0.79	-0.53	-0.68	-0.58	-0.86	-0.56	-1.12	-1.28	-0.35	-0.70	-1.43	-0.70	-1.35
	Max	1.53	1.92	0.31	0.97	0.00	2.72	0.12	0.33	0.33	0.38	0.09	0.16	1.21	0.44	2.15
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 10d Mated Delta (mΩ) Date: 2/11/2016 Location B	Average	0.68	0.37	0.13	0.29	0.37	0.42	-0.01	0.16	-0.04	0.09	0.13	0.00	0.26	0.03	0.32
	St. Dev	0.85	0.50	0.38	0.56	0.48	0.78	0.29	0.25	0.37	0.30	0.49	0.37	1.08	0.56	0.83
	Min	-0.20	-0.08	-0.48	-0.42	-0.55	-0.51	-0.76	-0.19	-0.70	-0.27	-0.31	-1.02	-0.65	-0.74	-0.90
	Max	2.57	1.50	1.48	1.62	1.29	3.86	0.43	0.82	0.80	1.08	2.13	1.67	4.53	1.80	5.30
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Disturb Delta (mΩ) Date: 2/11/2016 Location B	Average	0.47	0.29	0.06	0.09	0.19	0.25	-0.10	0.13	-0.18	-0.05	-0.01	-0.05	0.02	-0.19	0.12
	St. Dev	0.70	0.47	0.38	0.33	0.51	0.55	0.23	0.46	0.35	0.29	0.17	0.37	0.58	0.27	0.50
	Min	-0.10	-0.06	-0.59	-0.46	-0.86	-0.38	0.00	-0.38	-1.24	-0.84	-0.32	-0.68	-1.21	-0.63	-1.20
	Max	2.69	1.55	1.97	0.75	1.47	1.96	0.13	1.51	0.53	0.63	0.44	1.72	1.53	0.30	3.58
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (200x total) (mΩ) Date: 2/12/2016 Location B	Average	0.25	0.22	0.01	-0.12	0.03	0.06	-0.12	0.01	-0.20	-0.15	-0.07	-0.04	-0.11	-0.23	0.02
	St. Dev	0.47	0.35	0.45	0.35	0.47	0.39	0.27	0.27	0.40	0.25	0.15	0.49	0.50	0.34	0.39
	Min	-0.18	-0.12	-0.56	-0.63	-0.91	-0.57	-1.02	-0.30	-1.03	-0.72	-0.46	-0.73	-1.06	0.00	-0.83
	Max	1.65	1.18	2.39	0.57	1.14	1.41	0.12	0.80	0.76	0.24	0.29	2.34	1.24	0.41	2.22
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200

LLCR Delta Count by Category						
mOhms	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
100x Durability	560	0	0	0	0	0
10d Unmated	560	0	0	0	0	0
10d Mated	558	2	0	0	0	0
Disturb	560	0	0	0	0	0
200x Durability	560	0	0	0	0	0

DATA SUMMARIES Continued

Samtec RAR / AFCI VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ) Date: 1/20/2016 Location B	Average	7.19	5.48	7.77	14.08	14.18	8.49	8.04	11.11	17.14	11.54	8.37	11.13	20.68	20.75	14.27
	St. Dev	4.20	4.09	5.58	0.33	0.33	6.39	7.27	7.61	0.31	8.05	8.05	9.30	0.35	0.28	10.27
	Min	2.01	2.08	2.07	13.42	13.60	2.01	2.11	1.72	16.61	1.83	1.85	1.76	20.27	20.41	1.34
	Max	11.34	11.19	14.37	14.66	14.72	15.06	17.06	17.42	18.24	18.26	18.25	21.48	21.47	21.40	24.70
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (mΩ) Date: 1/21/2016 Location B	Average	0.00	0.00	-0.22	-0.23	-0.22	-0.06	-0.11	-0.23	-0.17	-0.07	-0.07	-0.19	-0.28	-0.29	-0.20
	St. Dev	0.20	0.11	0.26	0.29	0.27	0.15	0.15	0.24	0.28	0.20	0.08	0.24	0.28	0.33	0.26
	Min	-0.36	-0.14	-1.03	-0.94	-0.96	-0.53	-0.37	-0.79	-1.26	-0.53	-0.26	-0.86	-0.64	-0.95	-1.26
	Max	0.68	0.36	0.04	0.07	0.13	0.31	0.09	0.26	0.18	0.35	0.04	0.12	0.18	0.20	0.14
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 10d Unmated Delta (mΩ) Date: 2/1/2016 Location B	Average	0.44	0.25	0.01	0.19	0.35	0.34	0.03	0.01	0.21	0.24	0.10	-0.08	0.05	0.14	-0.02
	St. Dev	0.90	0.72	0.18	0.46	0.37	0.83	0.13	0.30	0.53	0.43	0.34	0.34	0.31	0.43	0.38
	Min	0.00	-0.16	-0.42	-0.47	-0.20	-0.11	-0.12	-0.58	-0.99	-0.13	-0.14	-1.29	-0.49	-0.45	-1.19
	Max	4.00	3.14	0.58	1.24	0.00	4.49	0.50	0.72	2.09	1.57	1.31	0.68	0.65	0.95	1.57
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 10d Mated Delta (mΩ) Date: 2/11/2016 Location B	Average	0.76	0.45	0.08	0.39	0.22	0.51	0.02	-0.07	0.20	0.36	-0.05	-0.10	0.17	-0.08	0.07
	St. Dev	1.03	0.83	0.54	0.97	0.74	1.05	0.20	0.34	0.79	0.64	0.11	0.31	0.72	0.41	0.56
	Min	-0.02	-0.09	-1.35	-0.55	-0.54	-0.32	-0.43	-0.96	-1.57	-0.48	-0.44	-0.96	-0.70	-0.83	-1.44
	Max	3.26	2.86	1.97	3.09	3.02	5.06	0.43	0.79	3.24	1.58	0.10	0.65	1.93	0.84	3.42
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Disturb Delta (mΩ) Date: 2/11/2016 Location B	Average	0.46	0.33	-0.07	0.21	0.42	0.28	-0.02	0.04	0.04	0.35	-0.01	-0.16	0.15	-0.11	-0.03
	St. Dev	0.60	0.60	0.30	0.65	0.84	0.68	0.25	0.41	0.48	0.54	0.16	0.36	0.65	0.45	0.47
	Min	-0.06	-0.08	-1.11	-0.57	-0.84	-0.42	0.00	-0.72	-1.27	-0.16	-0.44	-1.65	-0.75	-0.88	-1.58
	Max	1.78	1.98	0.81	1.81	2.84	2.78	0.55	1.36	1.51	1.79	0.46	0.78	1.74	0.97	2.94
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (200x total) (mΩ) Date: 2/12/2016 Location B	Average	0.29	0.12	-0.14	0.08	-0.08	0.07	-0.02	-0.11	-0.10	0.13	-0.09	-0.22	-0.13	-0.26	-0.18
	St. Dev	0.47	0.36	0.36	0.46	0.27	0.25	0.29	0.28	0.35	0.45	0.11	0.29	0.39	0.36	0.34
	Min	-0.08	-0.11	-1.11	-0.72	-0.64	-0.25	-0.52	-0.66	-1.20	-0.37	-0.30	-1.23	-0.74	0.00	-1.32
	Max	1.51	1.56	0.91	1.33	0.37	0.83	0.65	0.54	0.85	1.47	0.06	0.13	0.71	0.42	1.02
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
100x Durability	560	0	0	0	0	0
10d Unmated	560	0	0	0	0	0
10d Mated	559	1	0	0	0	0
Disturb	560	0	0	0	0	0
200x Durability	560	0	0	0	0	0

DATA SUMMARIES Continued

AFCI RAR / Samtec VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ) Date: 1/20/2016 Location B	Average	7.54	5.83	7.45	13.63	13.64	8.49	7.83	10.67	17.06	11.56	8.41	10.91	20.64	20.77	14.63
	St. Dev	4.34	4.39	5.23	0.31	0.26	6.22	6.94	7.16	0.34	7.88	7.93	8.95	0.35	0.45	10.39
	Min	2.26	2.21	2.16	13.07	13.17	2.18	2.15	1.81	16.44	2.00	2.00	1.95	20.13	20.21	1.64
	Max	11.68	11.56	13.50	14.25	14.07	15.15	16.47	16.63	17.87	18.63	18.45	21.54	21.68	21.97	25.47
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (mΩ) Date: 1/21/2016 Location B	Average	-0.07	-0.04	-0.10	-0.22	-0.14	-0.11	-0.07	-0.03	-0.22	-0.17	-0.10	-0.09	-0.19	-0.19	-0.09
	St. Dev	0.18	0.14	0.18	0.19	0.27	0.18	0.16	0.11	0.27	0.26	0.25	0.33	0.21	0.28	0.23
	Min	-0.40	-0.34	-0.51	-0.60	-0.90	-0.59	-0.41	-0.24	-0.84	-1.03	-0.86	-1.94	-0.81	-0.76	-1.20
	Max	0.36	0.28	0.46	0.23	0.24	0.18	0.34	0.18	0.55	0.12	0.40	0.21	0.12	0.21	0.78
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 10d Unmated Delta (mΩ) Date: 2/1/2016 Location B	Average	0.51	0.26	0.51	0.15	0.29	0.26	0.34	0.51	0.24	0.17	0.13	0.22	0.46	0.45	0.18
	St. Dev	0.77	0.38	0.72	0.33	0.56	0.56	0.47	0.50	0.31	0.30	0.16	0.49	0.34	0.60	0.37
	Min	0.00	-0.08	-0.25	-0.45	-0.85	-0.43	-0.05	0.05	-0.24	-0.58	-0.11	-1.75	-0.08	-0.26	-0.87
	Max	2.77	1.41	3.34	0.78	0.00	2.92	1.92	1.90	1.41	0.70	0.52	2.12	1.51	2.13	2.29
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 10d Mated Delta (mΩ) Date: 2/11/2016 Location B	Average	0.65	0.60	0.85	0.69	0.53	0.72	0.70	0.79	0.47	0.48	0.40	0.41	0.80	0.66	0.55
	St. Dev	0.64	0.67	0.73	0.65	0.51	1.02	0.61	0.81	0.65	0.66	0.41	0.53	0.85	0.71	0.78
	Min	-0.23	-0.01	0.06	-0.15	-0.29	-0.19	0.11	0.06	-0.51	-0.06	-0.01	-1.69	0.10	-0.26	-0.93
	Max	2.12	2.66	2.77	2.33	1.81	4.50	2.30	2.61	3.26	2.85	1.58	1.78	3.33	2.63	5.12
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post Disturb Delta (mΩ) Date: 2/11/2016 Location B	Average	0.33	0.29	0.39	0.25	0.25	0.36	0.26	0.34	0.24	0.22	0.20	0.11	0.40	0.08	0.21
	St. Dev	0.39	0.30	0.45	0.37	0.36	0.45	0.34	0.33	0.34	0.29	0.22	0.38	0.82	0.36	0.40
	Min	-0.28	-0.09	-0.28	-0.30	-0.43	-0.24	0.00	-0.01	-0.41	-0.25	-0.06	-1.84	-0.37	-0.75	-1.29
	Max	1.07	1.01	2.01	1.29	1.22	1.52	1.54	1.20	1.03	0.97	0.78	0.86	3.60	0.66	2.61
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
Post 100x Durability Delta (200x total) (mΩ) Date: 2/12/2016 Location B	Average	0.09	0.11	0.06	-0.12	0.06	0.05	-0.01	0.16	-0.02	0.00	0.01	-0.03	-0.11	-0.19	-0.02
	St. Dev	0.32	0.22	0.21	0.26	0.37	0.26	0.13	0.24	0.37	0.23	0.24	0.39	0.29	0.29	0.26
	Min	-0.38	-0.21	-0.45	-0.57	-0.72	-0.41	-0.26	-0.09	-0.70	-0.41	-0.59	-2.17	-0.88	0.00	-1.40
	Max	0.76	0.56	0.72	0.39	1.15	0.65	0.19	0.93	1.12	0.68	0.46	0.33	0.43	0.27	1.42
	Summary Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200
	Total Count	20	20	40	20	20	40	20	20	40	20	20	40	20	20	200

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
100x Durability	560	0	0	0	0	0
10d Unmated	560	0	0	0	0	0
10d Mated	559	1	0	0	0	0
Disturb	560	0	0	0	0	0
200x Durability	560	0	0	0	0	0

DATA SUMMARIES Continued

Vibration/Mechanical Shock: LLCR

Samtec RAR / Samtec VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ)	Average	10.54	12.81	13.93	14.69	16.46	17.41	18.31	20.10	20.86	21.67	22.03	22.96	23.45	19.89	2.10
	St. Dev	0.38	0.29	0.43	0.31	0.32	0.45	0.48	0.49	0.48	0.45	0.27	0.28	0.29	0.17	0.23
Date: 10/8/2015 Location B	Min	9.99	12.34	13.06	14.05	15.88	16.59	17.42	19.13	20.15	20.82	21.40	22.39	22.97	19.69	1.51
	Max	11.71	13.43	15.16	15.15	17.01	18.13	19.13	20.83	21.74	22.46	22.38	23.75	24.06	20.25	2.64
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post 100x Durability Delta (mΩ)	Average	0.01	-0.08	-0.08	0.02	-0.06	-0.19	-0.11	-0.24	-0.13	-0.07	-0.21	-0.14	0.02	-0.08	-0.02
	St. Dev	0.28	0.21	0.19	0.09	0.08	0.34	0.28	0.31	0.28	0.33	0.27	0.33	0.25	0.23	0.04
Date: 10/8/2015 Location B	Min	-0.94	-0.53	-0.74	-0.08	-0.20	-0.81	-0.62	-0.80	-0.75	-0.66	-0.74	-0.70	-0.41	-0.63	-0.11
	Max	0.32	0.24	0.31	0.18	0.07	0.46	0.27	0.14	0.39	0.49	0.15	0.58	0.42	0.33	0.07
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Dust Delta (mΩ)	Average	0.14	-0.25	-0.13	0.06	-0.13	-0.21	-0.04	-0.27	-0.13	0.00	-0.26	-0.21	-0.09	-0.09	-0.01
	St. Dev	0.29	0.29	0.30	0.16	0.14	0.32	0.23	0.28	0.29	0.31	0.28	0.32	0.18	0.18	0.05
Date: 10/9/2015 Location B	Min	-0.65	-0.88	-1.07	0.00	-0.32	-0.83	-0.43	-0.85	-0.64	-0.59	-0.72	-0.79	-0.39	-0.39	-0.15
	Max	0.43	0.24	0.00	0.39	0.13	0.49	0.30	0.06	0.32	0.63	0.27	0.55	0.23	0.23	0.16
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Vibration Delta (mΩ)	Average	0.14	-0.17	-0.16	0.02	-0.12	-0.25	-0.05	-0.26	-0.14	0.02	-0.22	-0.18	-0.03	-0.13	-0.03
	St. Dev	0.31	0.44	0.29	0.26	0.13	0.31	0.37	0.25	0.27	0.40	0.21	0.26	0.26	0.12	0.04
Date: 10/26/2015 Location B	Min	-0.79	-0.95	-1.12	-0.28	-0.41	-0.83	-0.64	-0.68	-0.70	-0.62	-0.51	-0.73	-0.39	-0.39	-0.14
	Max	0.54	0.98	0.40	0.77	0.03	0.35	0.89	0.09	0.18	1.07	0.12	0.26	0.60	0.03	0.10
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Shock Delta (mΩ)	Average	0.02	-0.26	-0.23	-0.10	-0.18	-0.33	-0.22	-0.36	-0.26	-0.17	-0.38	-0.35	-0.20	-0.33	-0.05
	St. Dev	0.26	0.41	0.25	0.16	0.16	0.29	0.26	0.27	0.31	0.39	0.26	0.29	0.27	0.20	0.04
Date: 10/26/2015 Location B	Min	-0.81	-1.01	-1.09	-0.34	-0.51	-0.89	-0.72	-0.79	-0.97	-0.83	-0.81	-0.85	-0.67	-0.68	-0.15
	Max	0.32	0.82	0.24	0.24	0.04	0.15	0.10	0.06	0.11	0.81	0.09	0.10	0.37	-0.05	0.08
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
100x Durability	420	0	0	0	0	0
Dust	420	0	0	0	0	0
Vibration	420	0	0	0	0	0
Shock	420	0	0	0	0	0

DATA SUMMARIES Continued

AFCI VH / AFCI RAR

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ) Date: 10/8/2015 Location B	Average	10.84	12.31	13.31	13.96	15.64	16.49	17.02	19.07	19.82	20.26	21.03	21.97	21.76	23.14	2.21
	St. Dev	0.20	0.33	0.29	0.32	0.35	0.38	0.26	0.36	0.43	0.31	0.41	0.44	0.22	0.32	0.19
	Min	10.45	11.77	12.68	13.58	15.11	15.74	16.41	18.60	19.01	19.67	20.41	21.16	21.26	22.55	1.68
	Max	11.18	13.18	13.92	14.71	16.41	17.12	17.42	19.96	20.54	20.88	22.23	22.64	22.10	23.67	2.61
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post 100x Durability Delta (mΩ) Date: 10/8/2015 Location B	Average	-0.08	-0.09	-0.09	-0.18	-0.07	-0.15	-0.19	-0.14	-0.21	-0.18	-0.16	-0.19	-0.17	-0.16	-0.02
	St. Dev	0.15	0.24	0.20	0.19	0.17	0.10	0.12	0.19	0.21	0.16	0.25	0.26	0.17	0.26	0.04
	Min	-0.38	-0.74	-0.69	-0.58	-0.39	-0.43	-0.43	-0.51	-0.68	-0.44	-0.59	-0.53	-0.46	-0.50	-0.13
	Max	0.27	0.18	0.27	0.13	0.26	0.02	0.02	0.19	0.18	0.15	0.39	0.80	0.24	0.23	0.07
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Dust Delta (mΩ) Date: 10/9/2015 Location B	Average	0.48	0.16	0.16	0.16	0.34	0.10	0.03	0.13	-0.02	-0.01	-0.11	-0.09	-0.10	-0.10	-0.04
	St. Dev	0.43	0.41	0.42	0.24	0.73	0.33	0.35	0.32	0.28	0.28	0.27	0.34	0.18	0.18	0.05
	Min	-0.16	-0.97	-0.29	0.00	-0.36	-0.37	-0.39	-0.31	-0.64	-0.55	-0.63	-0.48	-0.35	-0.35	-0.17
	Max	1.36	0.65	0.00	0.52	2.22	1.21	0.94	0.65	0.80	0.63	0.44	1.15	0.34	0.34	0.12
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Vibration Delta (mΩ) Date: 10/26/2015 Location B	Average	-0.14	-0.24	-0.31	-0.33	-0.05	-0.29	-0.35	-0.23	-0.34	-0.36	-0.43	-0.45	-0.37	-0.20	-0.10
	St. Dev	0.22	0.33	0.27	0.21	0.64	0.32	0.27	0.25	0.24	0.28	0.27	0.25	0.18	0.19	0.05
	Min	-0.50	-1.23	-0.85	-0.74	-0.52	-0.85	-0.80	-0.60	-0.80	-0.92	-1.04	-0.89	-0.66	-0.64	-0.22
	Max	0.34	0.21	0.36	0.03	2.17	0.88	0.29	0.21	0.08	0.15	0.21	0.35	-0.03	0.03	0.04
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Shock Delta (mΩ) Date: 10/26/2015 Location B	Average	-0.07	-0.18	-0.26	-0.28	-0.15	-0.27	-0.31	-0.17	-0.31	-0.34	-0.39	-0.41	-0.37	-0.23	-0.10
	St. Dev	0.17	0.31	0.28	0.24	0.19	0.27	0.30	0.25	0.25	0.27	0.27	0.26	0.17	0.19	0.05
	Min	-0.34	-1.01	-0.83	-0.77	-0.51	-0.87	-0.79	-0.50	-0.78	-0.90	-0.87	-0.84	-0.58	-0.59	-0.21
	Max	0.30	0.22	0.33	0.04	0.09	0.30	0.29	0.41	0.05	0.14	0.25	0.39	-0.02	0.06	0.05
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
100x Durability	420	0	0	0	0	0
Dust	420	0	0	0	0	0
Vibration	420	0	0	0	0	0
Shock	420	0	0	0	0	0

DATA SUMMARIES Continued

Samtec RAR / AFCI VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ) Date: 10/8/2015 Location B	Average	10.09	12.51	13.61	14.34	16.04	16.91	17.84	19.48	20.39	21.25	21.75	22.60	23.17	19.92	2.01
	St. Dev	0.17	0.38	0.27	0.31	0.33	0.31	0.35	0.29	0.34	0.22	0.30	0.28	0.17	0.27	0.20
	Min	9.80	11.86	13.06	13.84	15.56	16.24	17.51	19.02	19.90	20.96	21.29	22.15	22.84	19.31	1.44
	Max	10.38	13.11	14.42	15.08	16.60	17.47	18.81	19.90	20.91	21.60	22.39	23.22	23.40	20.41	2.38
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post 100x Durability Delta (mΩ) Date: 10/8/2015 Location B	Average	0.06	-0.15	-0.02	0.02	-0.07	-0.03	0.04	-0.01	0.00	0.01	-0.05	-0.07	0.07	-0.13	-0.01
	St. Dev	0.15	0.31	0.17	0.17	0.21	0.18	0.29	0.18	0.21	0.19	0.20	0.14	0.16	0.17	0.04
	Min	-0.32	-0.56	-0.38	-0.29	-0.38	-0.44	-0.75	-0.31	-0.31	-0.31	-0.40	-0.34	-0.22	-0.34	-0.15
	Max	0.24	0.81	0.37	0.42	0.43	0.56	0.37	0.35	0.48	0.38	0.24	0.27	0.36	0.14	0.08
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Dust Delta (mΩ) Date: 10/9/2015 Location B	Average	0.58	0.15	0.20	0.32	0.18	0.26	0.26	0.15	0.24	0.22	0.02	0.15	0.08	0.08	0.00
	St. Dev	0.29	0.34	0.25	0.22	0.26	0.27	0.29	0.16	0.32	0.22	0.26	0.23	0.19	0.19	0.05
	Min	0.14	-0.90	-0.34	0.00	-0.06	-0.24	-0.55	-0.06	-0.33	-0.23	-0.27	-0.49	-0.29	-0.29	-0.21
	Max	1.08	0.61	0.00	0.68	0.87	0.69	0.75	0.43	1.01	0.50	0.68	0.70	0.63	0.63	0.14
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Vibration Delta (mΩ) Date: 10/26/2015 Location B	Average	0.39	-0.23	0.02	0.24	-0.12	0.05	0.32	-0.01	0.14	0.28	-0.07	0.05	0.11	-0.03	-0.02
	St. Dev	0.23	0.36	0.30	0.25	0.20	0.29	0.44	0.22	0.31	0.30	0.23	0.32	0.22	0.27	0.04
	Min	0.08	-0.91	-0.51	-0.32	-0.42	-0.47	-0.77	-0.38	-0.46	-0.17	-0.43	-0.45	-0.22	-0.27	-0.14
	Max	0.88	0.26	0.60	0.72	0.26	0.75	0.98	0.32	0.95	1.00	0.62	1.20	0.64	0.58	0.11
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Shock Delta (mΩ) Date: 10/26/2015 Location B	Average	0.38	-0.24	0.00	0.22	-0.12	0.04	0.30	-0.01	0.12	0.25	-0.09	0.04	0.12	-0.04	-0.02
	St. Dev	0.21	0.33	0.30	0.24	0.21	0.28	0.45	0.23	0.33	0.32	0.24	0.33	0.21	0.29	0.05
	Min	-0.02	-0.84	-0.48	-0.24	-0.42	-0.54	-0.73	-0.41	-0.52	-0.20	-0.44	-0.44	-0.23	-0.37	-0.16
	Max	0.80	0.25	0.58	0.69	0.28	0.78	0.99	0.31	0.95	1.05	0.60	1.17	0.61	0.60	0.13
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
100x Durability	420	0	0	0	0	0
Dust	420	0	0	0	0	0
Vibration	420	0	0	0	0	0
Shock	420	0	0	0	0	0

DATA SUMMARIES Continued

AFCI RAR / Samtec VH

		Row A	Row B	Row C	Row D	Row E	Row F	Row G	Row H	Row I	Row J	Row K	Row L	Row M	Row N	Ground
Initial (mΩ) Date: 10/8/2015 Location B	Average	11.06	12.24	13.34	14.07	15.71	16.69	17.28	19.05	19.93	20.36	21.15	22.06	22.21	22.77	2.14
	St. Dev	0.30	0.30	0.40	0.39	0.38	0.43	0.28	0.45	0.42	0.26	0.42	0.43	0.41	0.36	0.17
	Min	10.62	11.67	12.77	13.49	15.22	15.76	16.79	18.22	19.01	19.89	20.34	21.19	21.68	22.27	1.62
	Max	11.68	12.65	14.14	14.83	16.24	17.33	17.67	19.94	20.76	20.72	21.84	23.15	23.00	23.53	2.45
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post 100x Durability Delta (mΩ) Date: 10/8/2015 Location B	Average	-0.15	-0.11	-0.16	-0.15	-0.08	-0.16	-0.13	-0.12	-0.19	-0.15	-0.15	-0.17	-0.23	-0.14	-0.03
	St. Dev	0.31	0.19	0.22	0.22	0.12	0.21	0.17	0.13	0.21	0.12	0.16	0.23	0.24	0.19	0.05
	Min	-0.71	-0.43	-0.68	-0.59	-0.33	-0.54	-0.58	-0.44	-0.74	-0.30	-0.54	-0.71	-0.73	-0.50	-0.21
	Max	0.35	0.17	0.26	0.15	0.11	0.16	0.07	0.05	0.19	0.12	0.09	0.26	0.05	0.15	0.11
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Dust Delta (mΩ) Date: 10/9/2015 Location B	Average	-0.25	-0.19	-0.21	-0.18	-0.11	-0.19	-0.15	-0.10	-0.21	-0.16	-0.20	-0.28	-0.31	-0.31	-0.08
	St. Dev	0.23	0.21	0.23	0.29	0.15	0.21	0.09	0.20	0.27	0.17	0.22	0.25	0.22	0.22	0.05
	Min	-0.77	-0.48	-0.75	0.00	-0.36	-0.60	-0.28	-0.45	-0.80	-0.51	-0.45	-0.69	-0.73	-0.73	-0.19
	Max	0.06	0.27	0.00	0.43	0.14	0.23	0.05	0.29	0.34	0.14	0.46	0.30	-0.03	-0.03	0.09
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Vibration Delta (mΩ) Date: 10/26/2015 Location B	Average	-0.33	-0.15	-0.26	-0.27	-0.15	-0.25	-0.21	-0.16	-0.24	-0.20	-0.21	-0.29	-0.33	-0.18	-0.09
	St. Dev	0.24	0.25	0.24	0.24	0.15	0.18	0.11	0.16	0.22	0.12	0.16	0.23	0.24	0.24	0.04
	Min	-0.87	-0.58	-0.79	-0.69	-0.44	-0.64	-0.44	-0.59	-0.81	-0.48	-0.54	-0.77	-0.85	-0.56	-0.21
	Max	0.13	0.19	0.09	0.17	0.12	0.07	-0.10	0.05	0.11	-0.02	0.02	0.19	0.07	0.23	0.03
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
Post Shock Delta (mΩ) Date: 10/26/2015 Location B	Average	-0.29	-0.09	-0.22	-0.20	-0.12	-0.21	-0.18	-0.14	-0.20	-0.19	-0.18	-0.24	-0.29	-0.11	-0.09
	St. Dev	0.24	0.21	0.21	0.28	0.17	0.19	0.13	0.17	0.24	0.13	0.15	0.22	0.24	0.22	0.04
	Min	-0.81	-0.43	-0.72	-0.65	-0.43	-0.61	-0.46	-0.64	-0.88	-0.43	-0.51	-0.71	-0.71	-0.48	-0.18
	Max	0.15	0.20	0.07	0.46	0.22	0.06	0.01	0.02	0.19	0.05	0.07	0.35	0.22	0.25	0.02
	Summary Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150
	Total Count	15	15	30	15	15	30	15	15	30	15	15	30	15	15	150

LLCR Delta Count by Category						
mΩ	≤5	>5&≤10	>10&≤15	>15&≤50	>50&≤1000	>1000
100x Durability	420	0	0	0	0	0
Dust	420	0	0	0	0	0
Vibration	420	0	0	0	0	0
Shock	420	0	0	0	0	0

Test Request Number: 694874	Part #: EBTF-4-10-2.0-S-RA-1/EBTM-4-10-2.0-S-VT-1 and 10126366-101LF/1012636-101LF
Part description: High Speed Backplane	

DATA SUMMARIES Continued

Vibration/Mechanical Shock: Event Detection

Samtec RAR / Samtec VH

Shock and Vibration Event Detection Summary	
Test Condition	H, 30g's, 11ms, Half-Sine
Shock Events	0
Test Condition	2, sinusoidal,10g,10-500Hz,15min cyc
Vibration Events	0
Total Events	0

AFCI VH / AFCI RAR

Shock and Vibration Event Detection Summary	
Test Condition	H, 30g's, 11ms, Half-Sine
Shock Events	0
Test Condition	2, sinusoidal,10g,10-500Hz,15min cyc
Vibration Events	0
Total Events	0

Samtec RAR / AFCI VH

Shock and Vibration Event Detection Summary	
Test Condition	H, 30g's, 11ms, Half-Sine
Shock Events	0
Test Condition	2, sinusoidal,10g,10-500Hz,15min cyc
Vibration Events	0
Total Events	0

AFCI RAR / Samtec VH

Shock and Vibration Event Detection Summary	
Test Condition	H, 30g's, 11ms, Half-Sine
Shock Events	0
Test Condition	2, sinusoidal,10g,10-500Hz,15min cyc
Vibration Events	0
Total Events	0