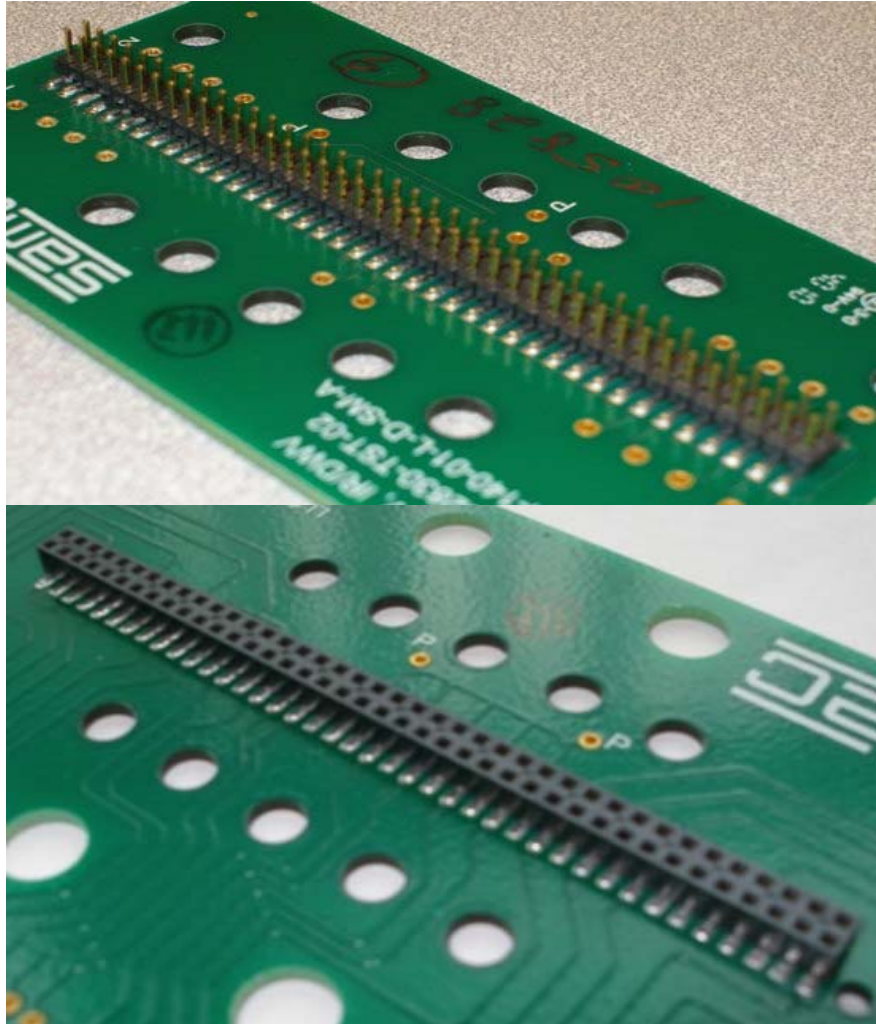




Project Number: Design Qualification Test Report		Tracking Code: 105828_Report_Rev_1	
Requested by: Bryon Saylor		Date: 1/13/2011	Product Rev: 0
Part #: SMM-140-02-L-D / TMM-140-01-L-D-SM-A		Lot #: N/A	Tech: Gary Lomax Eng: Eric Mings
Part description: SMM / TMM			Qty to test: 45
Test Start: 10/25/2010	Test Completed: 11/24/2010		



Design Qualification Test Report

SMM / TMM

SMM-140-02-L-D / TMM-140-01-L-D-SM-A

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/NCSL 2540-1, as applicable.

All contents contained herein are the property of Samtec. No portion of this report, in part or in full shall be reproduced without prior written approval of Samtec.

SCOPE

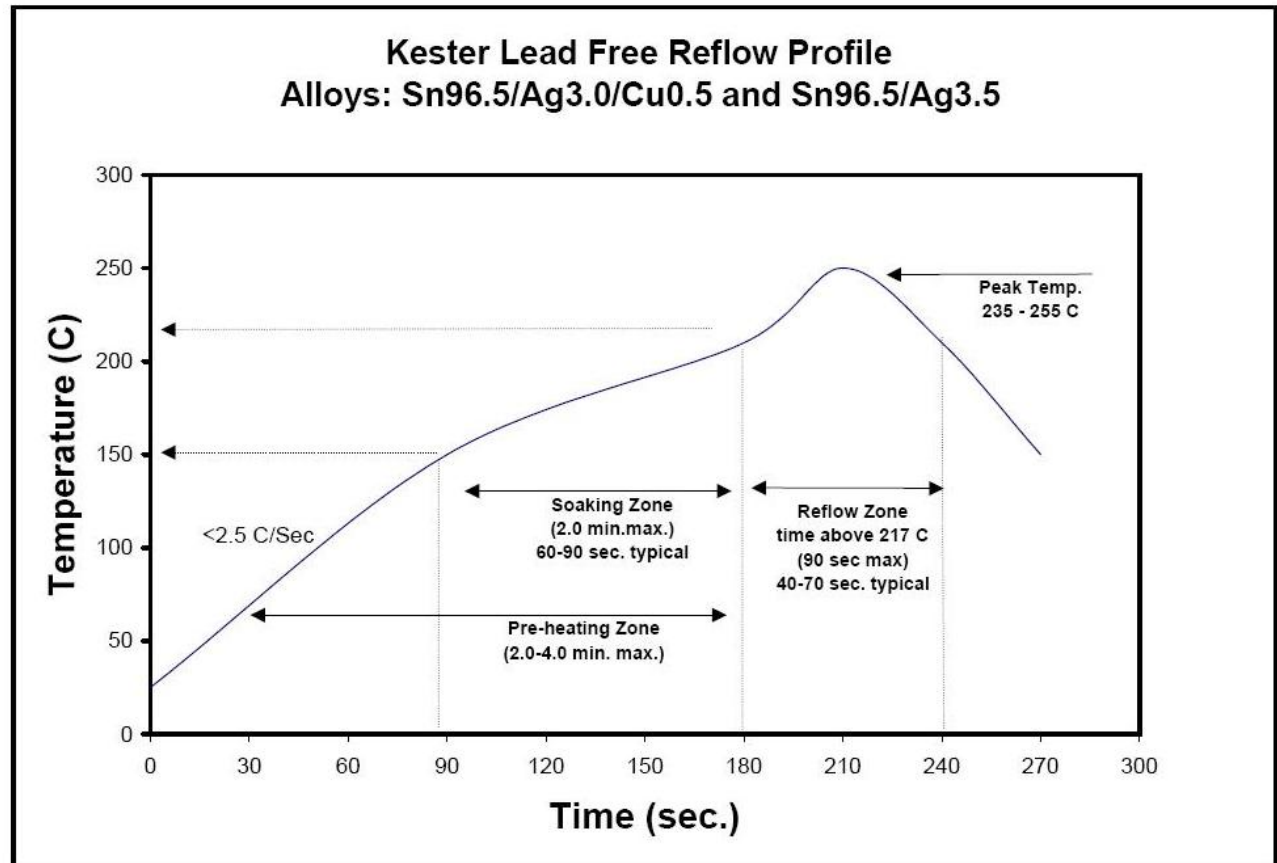
To perform the following tests: Design qualification test. Please see test plan.

APPLICABLE DOCUMENTS

Standards: EIA Publication 364

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) After soldering, the parts to be used for LLCR and DWV/IR testing were cleaned according to TLWI-0001.
- 4) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
- 5) The automated procedure is used with aqueous compatible soldering materials.
- 6) Parts not intended for testing LLCR and DWV/IR are visually inspected and cleaned if necessary.
- 7) Any additional preparation will be noted in the individual test sequences.
- 8) Solder Information: Lead free
- 9) Re-Flow Time/Temp: See accompanying profile.
- 10) Samtec Test PCBs used: PCB-102830-TST -XX

TYPICAL OVEN PROFILE (Soldering Parts to Test Boards)

FLOWCHARTS**Gas Tight**

TEST STEP	GROUP A 192 Points
01	LLCR-1
02	Gas Tight
03	LLCR-2

Gas Tight = EIA-364-36A

LLCR = EIA-364-23, LLCR

use Keithley 580 in the dry circuit mode, 10 mA Max

FLOWCHARTS Continued**Durability/Mating/Unmating/Gaps**

TEST STEP	GROUP A1 8 Boards (100 Cycles)
01	Contact Gaps
02	LLCR-1
03	Forces - Mating / Unmating
04	25 Cycles
05	Forces - Mating / Unmating
06	25 Cycles (50 Total)
09	Forces - Mating / Unmating
10	50 Cycles (100 Total)
11	Forces - Mating / Unmating
12	Clean w/Compressed Air
13	Contact Gaps
14	LLCR-2
15	Thermal Shock (Mated and Undisturbed)
16	LLCR-3
17	Cyclic Humidity (Mated and Undisturbed)
18	LLCR-4
19	Forces - Mating / Unmating

Thermal Shock = EIA-364-32, Table II, Test Condition I:

-55°C to +85°C 1/2 hour dwell, 100 cycles

Humidity = EIA-364-31, Test Condition B (240 Hours)

and Method III (+25°C to +65°C @ 90% RH to 98% RH)

ambient pre-condition and delete steps 7a and 7b

Mating / Unmating Forces = EIA-364-13

Contact Gaps / Height - No standard method. Usually measured optically.

Gaps to be taken on a minimum of 20% of each part tested

LLCR = EIA-364-23, LLCR

20 mV Max, 100 mA Max

Use Keithley 580 or 3706 in 4 wire dry circuit mode

FLOWCHARTS Continued**Mechanical Shock / Vibration / LLCR**

TEST STEP	GROUP A1 192 Points
01	LLCR-1
02	Shock
03	Vibration
04	LLCR-2

Mechanical Shock = EIA 364-27 Half Sine,

100 g's, 6 milliSeconds (Condition "C") each axis

Vibration = EIA 364-28, Random Vibration

7.56 g RMS, Condition VB --- 2 hours/axis

LLCR = EIA-364-23, LLCR

20 mV Max, 100 mA Max

Use Keithley 580 or 3706 in 4 wire dry circuit mode

Shock / Vibration / nanoSecond Event Detection

TEST STEP	GROUP A1 60 Points
01	Event Detection, Shock
02	Event Detection, Vibration

Mechanical Shock = EIA 364-27 Half Sine,

100 g's, 6 milliSeconds (Condition "C") each axis

Vibration = EIA 364-28, Random Vibration

7.56 g RMS, Condition VB --- 2 hours/axis

Event detection requirement during Shock / Vibration is 50 nanoseconds minimum

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

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: 100
- 5) All test samples are pre-conditioned at ambient.
- 6) 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 B, 240 Hours.
- 3) Method III, +25° C to + 65° C, 90% to 98% Relative Humidity excluding sub-cycles 7a and 7b.
- 4) All samples are pre-conditioned at ambient.
- 5) All test samples are exposed to environmental stressing in the mated condition.

CONTACT GAPS:

- 1) Gaps above the surrounding plastic surface were measured before and after stressing the contacts (e.g. thermal aging, mechanical cycling, etc.).
- 2) Typically, all contacts on the connector are measured.

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.

MECHANICAL SHOCK (Specified Pulse):

- 1) Reference document: EIA-364-27, *Mechanical Shock Test Procedure for Electrical Connectors*
- 2) Test Condition C
- 3) Peak Value: 100 G
- 4) Duration: 6 Milliseconds
- 5) Wave Form: Half Sine
- 6) Velocity: 12.3 ft/s
- 7) Number of Shocks: 3 Shocks / Direction, 3 Axis (18 Total)

VIBRATION:

- 1) Reference document: EIA-364-28, *Vibration Test Procedure for Electrical Connectors*
- 2) Test Condition V, Letter B
- 3) Power Spectral Density: 0.04 G² / Hz
- 4) G ‘RMS’: 7.56
- 5) Frequency: 50 to 2000 Hz
- 6) Duration: 2.0 Hours per axis (3 axis total)

NANOSECOND-EVENT DETECTION:

- 1) Reference document: EIA-364-87, *Nanosecond-Event Detection for Electrical Connectors*
- 2) Prior to test, the samples were characterized to assure the low nanosecond event being monitored will trigger the detector.
- 3) After characterization it was determined the test samples could be monitored for 50 nanosecond events

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) The following guidelines are used to categorize the changes in LLCR as a result from stressing
 - a. $\leq +5.0$ mOhms: ----- Stable
 - b. $+5.1$ to $+10.0$ mOhms: ----- Minor
 - c. $+10.1$ to $+15.0$ mOhms: ----- Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: ----- Marginal
 - e. $+50.1$ to $+2000$ mOhms: ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

GAS TIGHT:

To provide method for evaluating the ability of the contacting surfaces in preventing penetration of harsh vapors which might lead to oxide formation that may degrade the electrical performance of the contact system.

- 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) The following guidelines are used to categorize the changes in LLCR as a result from stressing
 - a. $\leq +5.0$ mOhms: ----- Stable
 - b. $+5.1$ to $+10.0$ mOhms: ----- Minor
 - c. $+10.1$ to $+15.0$ mOhms: ----- Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: ----- Marginal
 - e. $+50.1$ to $+2000$ mOhms: ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure
- 4) Procedure:
 - a. Reference document: EIA-364-36, *Test Procedure for Determination of Gas-Tight Characteristics for Electrical Connectors, Sockets and/or Contact Systems*.
 - b. Test Conditions:
 - i. Class II--- Mated pairs of contacts assembled to their plastic housings.
 - ii. Reagent grade Nitric Acid shall be used of sufficient volume to saturate the test chamber
 - iii. The ratio of the volume of the test chamber to the surface area of the acid shall be 10:1.
 - iv. The chamber shall be saturated with the vapor for at least 15 minutes before samples are added.
 - v. Exposure time, 55 to 65 minutes.
 - vi. The samples shall be no closer to the chamber walls than 1 inches and no closer to the surface of the acid than 3 inches.
 - vii. The samples shall be dried after exposure for a minimum of 1 hour.
 - viii. Drying temperature 50°C
 - ix. The final LLCR shall be conducted within 1 hour after drying.

RESULTS

Contact Gaps

- **Initial**
 - **Min**-----0.0098 Inch
 - **Max**-----0.0150 Inch
- **After 100 Cycles**
 - **Min**-----0.0114 Inch
 - **Max**-----0.0178 Inch

Mating – Unmating Forces

- **Initial**
 - **Mating**
 - **Min**-----7.42 Lbs
 - **Max**-----11.37 Lbs
 - **Unmating**
 - **Min**-----5.45 Lbs
 - **Max**-----8.72 Lbs
- **After 25 Cycles**
 - **Mating**
 - **Min**-----8.28 Lbs
 - **Max**-----12.17 Lbs
 - **Unmating**
 - **Min**-----7.28 Lbs
 - **Max**-----9.62 Lbs
- **After 50 Cycles**
 - **Mating**
 - **Min**-----8.90 Lbs
 - **Max**-----12.40 Lbs
 - **Unmating**
 - **Min**-----7.59 Lbs
 - **Max**-----10.47 Lbs
- **After 100 Cycles**
 - **Mating**
 - **Min**-----8.94 Lbs
 - **Max**-----12.77 Lbs
 - **Unmating**
 - **Min**-----8.37 Lbs
 - **Max**-----11.78 Lb
- **After Humidity**
 - **Mating**
 - **Min**-----9.72 Lbs
 - **Max**-----11.15 Lbs
 - **Unmating**
 - **Min**-----7.33 Lbs
 - **Max**-----9.29 Lbs

LLCR Durability (192 LLCR test points)

- **Initial** ----- 11.9 mOhms Max
- **After 100 Cycles**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- **After thermal shock**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure
- **After humidity**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure

LLCR Gas Tight (192 LLCR test points)

- **Initial** ----- 10.5 mOhms Max
- **Gas-Tight**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure

LLCR Mechanical Shock & Random Vibration (192 LLCR test points)

- **Initial** ----- 10.5 mOhms Max
- **Shock & Vibration**
 - o <= +5.0 mOhms ----- 192 Points ----- Stable
 - o +5.1 to +10.0 mOhms ----- 0 Points ----- Minor
 - o +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - o +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - o +50.1 to +2000 mOhms ----- 0 Points ----- Unstable
 - o >+2000 mOhms ----- 0 Points ----- Open Failure

Mechanical Shock & Random Vibration:

- o **Shock**
 - No Damage ----- Passed
 - 50 Nanoseconds ----- Passed
- o **Vibration**
 - No Damage ----- Passed
 - 50 Nanoseconds ----- Passed

DATA SUMMARIES**CONTACT GAPS:**

Initial		After 100 Cycles	
Units:	inches	Units:	inches
<i>Minimum</i>	0.0098	<i>Minimum</i>	0.0114
<i>Maximum</i>	0.0150	<i>Maximum</i>	0.0178
<i>Average</i>	0.0136	<i>Average</i>	0.0142
<i>St. Dev.</i>	0.0008	<i>St. Dev.</i>	0.0009
<i>Count</i>	256	<i>Count</i>	256

MATING/UNMATING:

	Initial				After 25 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	32.99	7.42	24.24	5.45	36.82	8.28	32.36	7.28
Maximum	50.56	11.37	38.77	8.72	54.11	12.17	42.79	9.62
Average	45.16	10.15	34.58	7.77	47.99	10.79	38.80	8.72
St Dev	5.38	1.21	4.59	1.03	5.02	1.13	3.11	0.70
Count	8	8	8	8	8	8	8	8
	After 50 Cycles				After 100 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	39.56	8.90	33.76	7.59	39.77	8.94	37.23	8.37
Maximum	55.16	12.40	46.56	10.47	56.78	12.77	52.39	11.78
Average	49.77	11.19	41.64	9.36	51.83	11.65	46.85	10.53
St Dev	4.58	1.03	3.85	0.87	5.28	1.19	4.49	1.01
Count	8	8	8	8	8	8	8	8
	After Humidity							
	Mating		Unmating					
	Newtons	Force (Lbs)	Newtons	Force (Lbs)				
Minimum	43.23	9.72	32.60	7.33				
Maximum	49.60	11.15	41.32	9.29				
Average	46.41	10.44	37.95	8.53				
St Dev	2.11	0.47	2.55	0.57				
Count	8	8	8	8				

DATA SUMMARIES Continued**LLCR Durability:**

- 1) A total of 192 points were measured.
- 2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
 - a. $\leq +5.0$ mOhms: ----- Stable
 - b. $+5.1$ to $+10.0$ mOhms: ----- Minor
 - c. $+10.1$ to $+15.0$ mOhms: ----- Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: ----- Marginal
 - e. $+50.1$ to $+2000$ mOhms: ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

Date	10/25/2010	11/1/2010	11/8/2010	11/22/2010
Room Temp C	23	23	23	24
RH	45%	27%	27%	42%
Name	Tony Wagoner	Tony Wagoner	Tony Wagoner	Tony Wagoner
mOhm values	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
Average	9.4	-0.1	-0.2	-0.1
St. Dev.	0.8	0.7	0.7	0.7
Min	4.6	-3.6	-3.1	-2.9
Max	11.9	2.7	3.7	4.0
Count	192	192	192	192

How many samples are being tested? 8

How many contacts are on each board? 24

	Stable	Minor	Acceptable	Marginal	Unstable	Open
100 Cycles	192	0	0	0	0	0
Thermal	192	0	0	0	0	0
Humidity	192	0	0	0	0	0

DATA SUMMARIES Continued**GAS TIGHT:**

- 1) A total of 192 points were measured.
- 2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
 - a. $\leq +5.0$ mOhms: ----- Stable
 - b. $+5.1$ to $+10.0$ mOhms: ----- Minor
 - c. $+10.1$ to $+15.0$ mOhms: ----- Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: ----- Marginal
 - e. $+50.1$ to $+2000$ mOhms: ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

Date	10/20/2010	10/20/2010
Room Temp C	23	23
RH	30%	28%
Name	Tony Wagoner	Tony Wagoner
mOhm values	Actual Initial	Delta Gas Tight
Average	9.2	0.2
St. Dev.	0.5	0.2
Min	6.5	-0.1
Max	10.5	1.9
Count	192	192

How many samples are being tested?

8

How many contacts are on each board?

24

	Stable	Minor	Acceptable	Marginal	Unstable	Open
Gas Tight	192	0	0	0	0	0

DATA SUMMARIES Continued**LLCR Shock/Vibration:**

- 1) A total of 192 points were measured.
- 2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
 - a. $\leq +5.0$ mOhms: ----- Stable
 - b. $+5.1$ to $+10.0$ mOhms: ----- Minor
 - c. $+10.1$ to $+15.0$ mOhms: ----- Acceptable
 - d. $+15.1$ to $+50.0$ mOhms: ----- Marginal
 - e. $+50.1$ to $+2000$ mOhms ----- Unstable
 - f. $>+2000$ mOhms: ----- Open Failure

Date	10/27/2010	11/2/2010
Room Temp C	23	23
RH	37%	27%
Name	Tony Wagoner	Tony Wagoner
mOhm values	Actual Initial	Delta Shock & Vib
Average	9.3	0.1
St. Dev.	0.6	0.4
Min	5.1	-1.0
Max	10.5	2.1
Count	192	192

How many samples are being tested?**8****How many contacts are on each board?****24**

	Stable	Minor	Acceptable	Marginal	Unstable	Open
Shock & Vib	192	0	0	0	0	0

Nanosecond Event Detection:

Shock and Vibration Event Detection Summary	
Contacts tested	60
Test Condition	C, 100g's, 6ms, Half-Sine
Shock Events	0
Test Condition	V-B, 7.56 rms g
Vibration Events	0
Total Events	0

DATA**CONTACT GAPS**

Initial								
Units: inches								
Pos.#	B1	B2	B3	B4	B5	B6	B7	B8
1	0.01444	0.01432	0.01432	0.01428	0.01397	0.01424	0.01401	0.01448
2	0.01311	0.01331	0.01307	0.01319	0.01288	0.01288	0.01315	0.01331
3	0.01480	0.01491	0.01476	0.01424	0.01468	0.01440	0.01464	0.01397
4	0.01335	0.01351	0.01311	0.01296	0.01311	0.01343	0.01307	0.01201
5	0.01424	0.01436	0.01420	0.01436	0.01417	0.01385	0.01432	0.01440
6	0.01288	0.01335	0.01280	0.01347	0.01296	0.01268	0.01304	0.01304
7	0.01456	0.01424	0.01432	0.01432	0.01397	0.01435	0.01417	0.01460
8	0.01300	0.01264	0.01307	0.01319	0.01300	0.01264	0.01335	0.01150
9	0.01393	0.01441	0.01370	0.01437	0.01370	0.01421	0.01413	0.01456
10	0.01307	0.01315	0.01272	0.01307	0.01181	0.01307	0.01264	0.01331
11	0.01476	0.01448	0.01401	0.01393	0.01405	0.01437	0.01472	0.01433
12	0.01170	0.01335	0.01327	0.01284	0.01256	0.01292	0.01323	0.01315
13	0.01413	0.01425	0.01433	0.01401	0.01397	0.01421	0.01366	0.01429
14	0.01272	0.01276	0.01248	0.01335	0.01268	0.01323	0.00985	0.01311
15	0.01429	0.01429	0.01425	0.01460	0.01433	0.01409	0.01433	0.01441
16	0.01284	0.01323	0.01296	0.01331	0.01347	0.01276	0.01311	0.01304
17	0.01437	0.01441	0.01437	0.01456	0.01405	0.01409	0.01389	0.01437
18	0.01331	0.01280	0.01311	0.01339	0.01221	0.01244	0.01327	0.01170
19	0.01413	0.01405	0.01417	0.01405	0.01429	0.01397	0.01405	0.01425
20	0.01288	0.01284	0.01331	0.01300	0.01304	0.01296	0.01327	0.01359
21	0.01448	0.01421	0.01429	0.01421	0.01397	0.01448	0.01398	0.01433
22	0.01276	0.01311	0.01268	0.01264	0.01359	0.01252	0.01315	0.01292
23	0.01425	0.01425	0.01441	0.01464	0.01421	0.01433	0.01393	0.01437
24	0.01213	0.01351	0.01280	0.01209	0.01280	0.01347	0.01276	0.01260
25	0.01425	0.01425	0.01457	0.01425	0.01504	0.01421	0.01221	0.01449
26	0.01339	0.01319	0.01296	0.01280	0.01056	0.01256	0.01311	0.01323
27	0.01425	0.01449	0.01437	0.01417	0.01441	0.01417	0.01422	0.01441
28	0.01280	0.01300	0.01300	0.01304	0.01288	0.01304	0.01276	0.01331
29	0.01421	0.01429	0.01457	0.01445	0.01461	0.01453	0.01402	0.01433
30	0.01311	0.01311	0.01181	0.01280	0.01248	0.01315	0.01284	0.01323
31	0.01417	0.01437	0.01469	0.01449	0.01469	0.01425	0.01221	0.01453
32	0.01319	0.01327	0.01335	0.01315	0.01307	0.01327	0.01296	0.01280
After 100 cycles								
Units: inches								
Pos.#	B1	B2	B3	B4	B5	B6	B7	B8
1	0.01572	0.01469	0.01493	0.01501	0.01446	0.01465	0.01631	0.01505
2	0.01374	0.01393	0.01386	0.01421	0.01476	0.01334	0.01409	0.01397
3	0.01520	0.01520	0.01489	0.01493	0.01485	0.01461	0.01702	0.01450
4	0.01370	0.01390	0.01389	0.01338	0.01350	0.01393	0.01370	0.01342
5	0.01784	0.01497	0.01493	0.01524	0.01481	0.01438	0.01642	0.01485
6	0.01362	0.01382	0.01370	0.01386	0.01417	0.01370	0.01378	0.01397
7	0.01757	0.01481	0.01485	0.01619	0.01449	0.01477	0.01579	0.01489
8	0.01397	0.01334	0.01374	0.01358	0.01338	0.01393	0.01358	0.01240
9	0.01437	0.01473	0.01433	0.01500	0.01433	0.01441	0.01485	0.01492

10	0.01354	0.01354	0.01334	0.01370	0.01319	0.01275	0.01323	0.01354
11	0.01520	0.01481	0.01449	0.01465	0.01457	0.01465	0.01492	0.01481
12	0.01248	0.01374	0.01386	0.01327	0.01319	0.01327	0.01378	0.01382
13	0.01469	0.01473	0.01465	0.01496	0.01457	0.01481	0.01453	0.01453
14	0.01342	0.01366	0.01307	0.01366	0.01291	0.01358	0.01142	0.01315
15	0.01477	0.01504	0.01461	0.01473	0.01473	0.01485	0.01445	0.01477
16	0.01350	0.01386	0.01338	0.01342	0.01358	0.01354	0.01315	0.01358
17	0.01457	0.01477	0.01461	0.01492	0.01437	0.01473	0.01500	0.01465
18	0.01382	0.01315	0.01358	0.01342	0.01260	0.01315	0.01323	0.01201
19	0.01445	0.01465	0.01465	0.01484	0.01473	0.01461	0.01425	0.01488
20	0.01319	0.01323	0.01386	0.01311	0.01354	0.01354	0.01342	0.01393
21	0.01488	0.01477	0.01492	0.01453	0.01473	0.01504	0.01469	0.01453
22	0.01350	0.01350	0.01330	0.01346	0.01350	0.01291	0.01330	0.01334
23	0.01449	0.01473	0.01469	0.01488	0.01449	0.01465	0.01461	0.01504
24	0.01303	0.01382	0.01350	0.01283	0.01374	0.01362	0.01299	0.01315
25	0.01492	0.01606	0.01532	0.01480	0.01535	0.01488	0.01484	0.01713
26	0.01409	0.01393	0.01374	0.01327	0.01165	0.01319	0.01358	0.01417
27	0.01480	0.01646	0.01500	0.01484	0.01457	0.01504	0.01469	0.01740
28	0.01358	0.01362	0.01354	0.01370	0.01327	0.01346	0.01319	0.01397
29	0.01472	0.01516	0.01524	0.01484	0.01520	0.01484	0.01453	0.01520
30	0.01378	0.01405	0.01279	0.01378	0.01307	0.01362	0.01350	0.01362
31	0.01465	0.01681	0.01484	0.01535	0.01465	0.01500	0.01476	0.01539
32	0.01374	0.01386	0.01382	0.01390	0.01358	0.01358	0.01366	0.01354

DATA Continued**MATING/UNMATING:**

<u>Sample#</u>	Initial		After 25 Cycles		After 50 Cycles		After 100 Cycles	
	<u>Mating</u>	<u>Unmating</u>	<u>Mating</u>	<u>Unmating</u>	<u>Mating</u>	<u>Unmating</u>	<u>Mating</u>	<u>Unmating</u>
1	10.51	8.38	10.74	8.80	11.01	9.38	11.36	10.51
2	10.21	7.87	10.64	8.82	11.26	9.14	11.73	10.57
3	10.65	8.06	11.17	8.55	11.24	9.22	11.77	10.68
4	11.37	8.53	12.17	9.36	12.40	10.47	12.58	11.78
5	10.27	7.79	11.15	8.85	11.37	9.56	12.10	11.03
6	7.42	5.45	8.28	7.28	8.90	7.59	8.94	8.37
7	9.78	7.41	10.76	8.50	11.95	9.32	12.77	10.12
8	11.03	8.72	11.42	9.62	11.40	10.24	11.97	11.20

<u>Sample#</u>	After Humidity	
	<u>Mating</u>	<u>Unmating</u>
1	9.90	7.33
2	9.72	8.80
3	10.38	8.73
4	10.40	8.61
5	10.73	8.44
6	10.84	8.24
7	10.36	8.81
8	11.15	9.29

DATA Continued**LLCR Durability:**

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	100 Cycles	Thermal	Humidity
1	P1	9.3	0.1	-0.3	-0.2
1	P2	7.5	1.7	1.4	1.5
1	P3	9.5	-0.1	-0.3	-0.2
1	P4	9.5	-0.1	-0.1	0.0
1	P5	9.3	0.2	0.1	0.4
1	P6	9.3	0.1	0.2	0.2
1	P7	9.3	-0.2	-0.4	-0.2
1	P8	9.1	0.1	-0.3	-0.2
1	P9	9.1	0.2	-0.3	-0.2
1	P10	9.1	0.1	-0.3	-0.2
1	P11	9.1	-0.2	-0.4	-0.3
1	P12	9.1	0.1	-0.3	-0.3
1	P13	9.3	0.0	-0.4	-0.3
1	P14	9.2	0.1	-0.5	-0.4
1	P15	9.2	0.1	-0.4	-0.4
1	P16	9.1	0.2	-0.3	-0.2
1	P17	9.1	0.2	-0.4	-0.3
1	P18	9.2	0.1	-0.4	-0.3
1	P19	9.2	0.4	-0.4	-0.4
1	P20	9.3	0.2	-0.4	-0.4
1	P21	9.4	0.1	-0.2	-0.3
1	P22	9.5	-2.6	-0.3	-0.3
1	P23	9.5	-0.5	-0.4	-0.4
1	P24	9.7	-0.1	-0.7	-0.6
2	P1	9.5	-0.3	-0.4	-0.2
2	P2	7.8	0.8	1.6	1.8
2	P3	6.8	2.7	2.6	2.8
2	P4	9.9	-0.1	-0.2	-0.1
2	P5	9.9	0.0	0.0	0.0
2	P6	9.5	0.3	0.1	0.3
2	P7	10.1	-0.2	-0.7	-0.5
2	P8	9.9	-0.2	-0.5	-0.3
2	P9	9.7	-0.1	-0.4	-0.2
2	P10	9.6	-0.2	-0.3	-0.2
2	P11	9.6	-0.1	-0.3	-0.2
2	P12	9.7	-0.1	-0.3	-0.2
2	P13	9.8	0.0	-0.3	-0.3
2	P14	9.4	0.2	-0.2	-0.1
2	P15	9.3	0.4	-0.1	-0.1
2	P16	9.5	0.1	-0.3	-0.1
2	P17	9.8	0.1	-0.4	-0.3
2	P18	9.6	0.2	-0.2	-0.1
2	P19	9.7	0.6	-0.2	0.0

2	P20	9.9	0.4	0.0	0.2
2	P21	9.8	0.3	0.0	0.2
2	P22	9.9	-0.2	0.2	0.2
2	P23	9.9	-0.6	-0.1	-0.2
2	P24	9.9	0.1	-0.1	-0.1
3	P1	9.3	0.1	-0.2	0.0
3	P2	9.3	0.1	-0.2	0.0
3	P3	9.5	0.0	-0.2	-0.1
3	P4	9.7	0.1	-0.2	-0.1
3	P5	9.7	0.1	-0.2	-0.2
3	P6	9.6	0.1	0.0	0.1
3	P7	9.7	-0.1	-0.3	0.0
3	P8	9.5	0.1	-0.3	0.0
3	P9	9.5	0.0	-0.2	0.0
3	P10	9.7	-0.1	-0.4	-0.2
3	P11	9.5	-0.1	-0.4	-0.1
3	P12	9.5	0.0	-0.2	-0.1
3	P13	9.7	0.1	-0.3	-0.2
3	P14	9.5	0.0	-0.3	-0.2
3	P15	9.5	0.1	-0.2	-0.1
3	P16	9.5	-0.1	-0.3	-0.2
3	P17	9.5	0.2	-0.2	-0.1
3	P18	9.5	0.1	-0.3	-0.2
3	P19	9.5	0.2	-0.2	0.0
3	P20	9.7	0.4	-0.2	-0.2
3	P21	9.8	0.3	-0.2	-0.1
3	P22	9.4	0.2	-0.1	0.0
3	P23	9.5	0.1	-0.2	0.0
3	P24	9.5	0.1	-0.2	-0.1
4	P1	9.1	0.0	-0.3	-0.1
4	P2	9.2	0.0	-0.3	-0.1
4	P3	9.4	0.4	-0.3	-0.2
4	P4	9.3	0.1	-0.1	0.0
4	P5	6.6	0.3	0.0	-0.1
4	P6	9.4	0.6	0.2	0.3
4	P7	9.3	0.1	-0.2	-0.1
4	P8	9.1	0.0	-0.2	0.0
4	P9	9.2	0.0	-0.2	0.0
4	P10	9.1	0.1	-0.1	-0.1
4	P11	7.6	-0.2	1.4	1.5
4	P12	7.0	0.0	1.6	1.9
4	P13	7.4	1.5	1.4	1.5
4	P14	8.9	0.1	-0.2	-0.2
4	P15	8.9	0.2	-0.2	-0.2
4	P16	8.9	0.2	-0.3	-0.2
4	P17	9.0	-1.1	-0.2	-0.1
4	P18	8.7	0.3	0.0	0.0
4	P19	9.0	-2.7	-0.2	-0.1
4	P20	9.4	-0.1	-0.1	-0.1
4	P21	9.5	0.3	0.0	0.3

4	P22	9.6	-1.4	-2.2	-2.2
4	P23	9.3	0.1	-0.1	0.0
4	P24	9.4	0.2	-0.2	-0.1
5	P1	10.3	-0.6	-0.8	-0.7
5	P2	9.9	-0.1	-0.3	-0.2
5	P3	9.8	-0.1	-0.3	-0.1
5	P4	9.9	0.0	-0.2	-0.1
5	P5	9.8	-0.1	-0.2	0.0
5	P6	9.6	0.2	0.0	0.1
5	P7	9.7	0.0	-0.2	-0.2
5	P8	9.6	-0.1	-0.3	-0.2
5	P9	9.6	-0.1	-0.2	-0.1
5	P10	9.6	-0.1	-0.3	-0.3
5	P11	9.6	0.0	-0.2	-0.2
5	P12	9.4	0.1	-0.2	-0.1
5	P13	9.7	0.0	-0.2	-0.2
5	P14	9.6	0.0	-0.2	-0.2
5	P15	9.6	0.0	-0.3	-0.2
5	P16	9.6	-0.1	-0.3	-0.2
5	P17	9.9	-0.1	-0.3	-0.2
5	P18	9.6	-0.1	-0.2	-0.2
5	P19	9.8	-0.2	-0.3	-0.2
5	P20	10.0	0.2	-0.3	-0.3
5	P21	8.1	-0.5	1.6	0.3
5	P22	9.7	0.1	0.0	0.1
5	P23	9.9	0.0	-0.2	-0.2
5	P24	9.8	-0.1	-0.4	-0.2
6	P1	11.9	-2.8	-3.1	-2.9
6	P2	9.9	-0.8	-1.1	-1.0
6	P3	10.0	-0.7	-1.0	-0.9
6	P4	9.0	0.3	0.1	0.2
6	P5	8.1	0.9	0.8	0.9
6	P6	9.2	0.0	0.0	0.0
6	P7	10.5	-1.1	-1.5	-1.3
6	P8	10.5	-1.2	-1.6	-1.5
6	P9	9.7	-0.3	-0.8	-0.7
6	P10	11.0	-1.6	-2.0	-1.9
6	P11	10.1	-0.8	-1.2	-1.1
6	P12	7.7	0.9	1.2	1.3
6	P13	8.3	-0.5	0.5	0.6
6	P14	10.7	-1.3	-1.8	-1.8
6	P15	4.6	0.4	3.7	4.0
6	P16	5.2	0.3	3.6	3.8
6	P17	9.7	-0.6	-0.9	-0.8
6	P18	10.2	-0.3	-1.2	-1.1
6	P19	9.8	-0.4	-0.9	-0.8
6	P20	10.0	-0.8	-1.1	-1.1
6	P21	9.6	0.0	-0.1	0.1
6	P22	9.6	-0.1	-0.3	-0.3
6	P23	10.2	-0.9	-1.2	-1.1

6	P24	9.8	-0.7	-1.1	-1.0
7	P1	9.7	0.0	-0.3	0.0
7	P2	9.7	0.1	-0.4	-0.1
7	P3	9.9	0.1	-0.3	-0.1
7	P4	9.7	0.2	-0.1	0.0
7	P5	9.7	0.3	0.3	0.5
7	P6	9.2	0.3	0.1	0.5
7	P7	9.4	0.2	-0.3	-0.2
7	P8	9.4	-0.1	-0.3	-0.1
7	P9	9.3	0.2	-0.3	-0.2
7	P10	9.5	-0.2	-0.4	-0.2
7	P11	9.3	0.0	-0.3	-0.2
7	P12	9.4	0.0	-0.4	-0.2
7	P13	9.4	-0.1	-0.3	-0.2
7	P14	9.6	0.0	-0.6	-0.5
7	P15	9.4	0.0	-0.4	-0.3
7	P16	9.5	0.1	-0.3	-0.2
7	P17	9.4	0.1	-0.4	-0.1
7	P18	9.5	0.0	-0.4	-0.2
7	P19	9.4	0.0	-0.3	-0.1
7	P20	9.5	0.0	-0.3	-0.2
7	P21	9.6	0.1	-0.1	0.1
7	P22	9.9	0.1	0.1	0.1
7	P23	9.9	0.0	-0.4	-0.3
7	P24	10.0	-0.1	-0.4	-0.3
8	P1	8.8	0.5	0.4	0.4
8	P2	9.5	0.0	-0.2	-0.1
8	P3	9.5	0.0	-0.2	-0.1
8	P4	9.6	-0.2	-0.2	-0.2
8	P5	9.6	0.0	-0.1	-0.1
8	P6	9.6	-0.2	-0.1	0.0
8	P7	9.6	-1.1	-0.3	-0.1
8	P8	9.3	-0.8	-0.2	-0.1
8	P9	9.5	-0.1	-0.3	-0.2
8	P10	9.4	-0.1	-0.3	-0.2
8	P11	9.4	-1.6	-0.2	-0.2
8	P12	9.3	-0.1	-0.3	-0.2
8	P13	9.5	-1.7	-0.3	-0.3
8	P14	9.4	-1.8	-0.3	-0.2
8	P15	9.4	-0.2	-0.4	-0.3
8	P16	7.6	0.1	1.4	1.5
8	P17	9.5	-0.2	-0.4	-0.2
8	P18	9.4	-0.2	-0.4	-0.3
8	P19	7.6	1.8	1.5	1.7
8	P20	8.2	1.6	1.2	1.3
8	P21	9.8	-0.5	0.0	0.0
8	P22	9.5	-3.6	-0.9	-0.2
8	P23	9.6	-0.2	-0.4	-0.4
8	P24	9.6	-0.2	-0.5	-0.4

DATA Continued**LLCR Gas Tight**

	mOhm values	Actual	Delta
Board	Position	Initial	Gas Tight
1	P1	9.0	0.2
1	P2	7.9	1.2
1	P3	9.3	0.2
1	P4	9.4	0.2
1	P5	6.5	0.1
1	P6	9.1	0.2
1	P7	8.9	0.2
1	P8	8.9	0.2
1	P9	8.7	0.3
1	P10	8.9	0.2
1	P11	8.7	0.2
1	P12	8.8	0.2
1	P13	8.8	0.2
1	P14	8.6	0.2
1	P15	8.7	0.2
1	P16	8.7	0.2
1	P17	8.8	0.2
1	P18	8.9	0.2
1	P19	7.3	1.7
1	P20	9.0	0.3
1	P21	9.3	0.1
1	P22	9.4	0.2
1	P23	9.5	0.2
1	P24	9.3	0.2
2	P1	8.8	0.2
2	P2	8.9	0.2
2	P3	9.0	0.2
2	P4	9.3	0.2
2	P5	9.2	0.2
2	P6	9.3	0.2
2	P7	9.3	0.2
2	P8	9.1	0.2
2	P9	9.1	0.2
2	P10	9.0	0.2
2	P11	8.9	0.2
2	P12	8.9	0.2
2	P13	9.1	0.2
2	P14	9.1	0.2
2	P15	9.0	0.2
2	P16	9.1	0.2
2	P17	9.1	0.2
2	P18	9.1	0.2
2	P19	7.8	1.5
2	P20	9.2	0.2

2	P21	8.0	0.5
2	P22	9.5	0.2
2	P23	9.1	0.2
2	P24	9.2	0.2
3	P1	9.1	0.2
3	P2	9.4	0.2
3	P3	9.3	0.3
3	P4	9.4	0.3
3	P5	9.3	0.2
3	P6	9.3	0.2
3	P7	9.6	0.2
3	P8	9.4	0.2
3	P9	9.5	0.2
3	P10	9.3	0.3
3	P11	9.4	0.2
3	P12	9.3	0.2
3	P13	9.6	0.2
3	P14	9.4	0.2
3	P15	9.2	0.2
3	P16	9.3	0.2
3	P17	9.3	0.2
3	P18	9.2	0.2
3	P19	9.5	0.3
3	P20	9.6	0.2
3	P21	7.1	0.1
3	P22	8.4	-0.1
3	P23	9.3	0.2
3	P24	9.2	0.4
4	P1	9.1	0.1
4	P2	9.5	0.2
4	P3	9.4	0.2
4	P4	9.2	0.2
4	P5	9.1	0.2
4	P6	9.5	0.2
4	P7	10.0	0.2
4	P8	9.6	0.1
4	P9	10.2	0.2
4	P10	9.5	0.2
4	P11	9.4	0.2
4	P12	9.7	0.2
4	P13	9.8	0.1
4	P14	10.5	0.2
4	P15	9.6	0.1
4	P16	9.8	0.1
4	P17	9.9	0.1
4	P18	9.7	0.2
4	P19	9.5	0.2
4	P20	8.0	1.9
4	P21	9.8	0.3
4	P22	9.4	0.2

4	P23	9.9	0.3
4	P24	9.4	0.2
5	P1	9.3	0.2
5	P2	8.9	0.6
5	P3	9.4	0.2
5	P4	9.4	0.2
5	P5	9.4	0.1
5	P6	9.6	0.2
5	P7	9.3	0.1
5	P8	9.3	0.2
5	P9	9.2	0.2
5	P10	9.3	0.2
5	P11	9.2	0.2
5	P12	9.2	0.2
5	P13	9.3	0.2
5	P14	9.2	0.2
5	P15	9.1	0.2
5	P16	9.4	0.2
5	P17	9.2	0.2
5	P18	9.2	0.2
5	P19	9.1	0.2
5	P20	9.5	0.2
5	P21	9.3	0.2
5	P22	9.8	0.1
5	P23	10.2	0.2
5	P24	9.5	0.2
6	P1	9.3	0.2
6	P2	9.3	0.2
6	P3	9.3	0.2
6	P4	9.6	0.3
6	P5	7.6	0.7
6	P6	9.4	0.0
6	P7	9.2	0.2
6	P8	9.0	0.2
6	P9	9.1	0.2
6	P10	9.2	0.2
6	P11	9.2	0.2
6	P12	9.1	0.2
6	P13	9.1	0.2
6	P14	9.2	0.2
6	P15	9.1	0.2
6	P16	9.1	0.2
6	P17	9.1	0.2
6	P18	9.0	0.2
6	P19	9.1	0.2
6	P20	9.2	0.2
6	P21	9.3	0.1
6	P22	9.5	0.1
6	P23	9.6	0.2
6	P24	9.5	0.1

7	P1	9.5	0.1
7	P2	9.5	0.2
7	P3	9.6	0.1
7	P4	9.6	0.2
7	P5	9.4	0.1
7	P6	9.7	0.1
7	P7	9.7	0.1
7	P8	9.6	0.2
7	P9	9.5	0.2
7	P10	9.5	0.2
7	P11	9.5	0.2
7	P12	9.6	0.1
7	P13	9.5	0.1
7	P14	9.6	0.1
7	P15	9.4	0.1
7	P16	9.7	0.2
7	P17	9.4	0.1
7	P18	9.4	0.2
7	P19	9.4	0.2
7	P20	9.5	0.2
7	P21	9.5	0.1
7	P22	9.7	0.2
7	P23	9.8	0.2
7	P24	9.5	0.1
8	P1	7.2	0.2
8	P2	9.3	0.2
8	P3	9.5	0.2
8	P4	9.7	0.2
8	P5	9.5	0.1
8	P6	9.2	0.2
8	P7	9.1	0.2
8	P8	9.0	0.2
8	P9	9.1	0.2
8	P10	9.0	0.2
8	P11	8.9	0.2
8	P12	8.9	0.2
8	P13	9.0	0.2
8	P14	8.9	0.2
8	P15	8.9	0.2
8	P16	8.9	0.2
8	P17	6.8	0.1
8	P18	8.9	0.2
8	P19	9.0	0.2
8	P20	9.2	0.2
8	P21	9.3	0.2
8	P22	9.6	0.2
8	P23	9.5	0.2
8	P24	9.7	0.2

DATA Continued**LLCR Shock/Vibration:**

	mOhm values	Actual	Delta
Board	Position	Initial	Shock/Vib
1	P1	9.2	0.0
1	P2	9.1	0.0
1	P3	9.5	-0.1
1	P4	9.5	-0.1
1	P5	9.1	0.2
1	P6	9.4	0.7
1	P7	9.6	-0.1
1	P8	9.3	0.0
1	P9	9.3	-0.1
1	P10	9.3	0.0
1	P11	9.3	0.0
1	P12	9.2	0.0
1	P13	9.4	0.0
1	P14	9.3	0.1
1	P15	9.3	0.0
1	P16	9.2	0.0
1	P17	9.3	0.0
1	P18	9.3	0.1
1	P19	9.3	0.1
1	P20	9.6	-0.1
1	P21	9.2	0.6
1	P22	9.0	0.0
1	P23	9.3	0.0
1	P24	9.3	0.0
2	P1	9.4	0.0
2	P2	9.5	0.0
2	P3	9.5	0.1
2	P4	9.4	0.0
2	P5	9.4	0.3
2	P6	8.0	1.5
2	P7	9.2	0.1
2	P8	9.2	0.1
2	P9	9.0	0.1
2	P10	9.2	0.1
2	P11	9.2	0.0
2	P12	9.2	0.0
2	P13	9.4	0.0
2	P14	9.2	0.3
2	P15	5.1	0.6
2	P16	9.2	0.3
2	P17	9.4	0.2
2	P18	9.4	0.2
2	P19	9.4	0.0
2	P20	9.5	0.0

2	P21	9.7	0.1
2	P22	9.6	0.1
2	P23	9.6	-0.1
2	P24	9.4	0.0
3	P1	7.4	1.8
3	P2	9.2	0.0
3	P3	9.4	0.0
3	P4	9.4	0.0
3	P5	9.2	0.2
3	P6	9.3	0.2
3	P7	9.4	-0.1
3	P8	9.2	-0.1
3	P9	9.3	0.0
3	P10	9.2	-0.1
3	P11	9.1	0.0
3	P12	9.1	-0.1
3	P13	9.2	0.0
3	P14	9.1	-0.1
3	P15	9.3	-0.1
3	P16	9.3	0.0
3	P17	9.3	-0.1
3	P18	9.3	-0.1
3	P19	9.4	-0.1
3	P20	9.4	0.0
3	P21	9.4	0.7
3	P22	9.6	0.0
3	P23	9.1	0.4
3	P24	9.4	0.2
4	P1	9.4	0.2
4	P2	9.6	0.0
4	P3	9.6	-0.1
4	P4	9.5	0.0
4	P5	9.5	-0.1
4	P6	9.6	-0.2
4	P7	9.7	-0.1
4	P8	9.5	-0.1
4	P9	9.6	-0.1
4	P10	9.5	0.0
4	P11	9.6	0.0
4	P12	9.7	0.0
4	P13	9.8	0.0
4	P14	9.4	0.0
4	P15	9.5	-0.1
4	P16	9.5	0.0
4	P17	9.5	0.0
4	P18	9.6	0.0
4	P19	9.6	-0.1
4	P20	9.8	-0.1
4	P21	9.9	0.7
4	P22	9.8	0.1

4	P23	9.8	-0.1
4	P24	10.1	-0.1
5	P1	9.4	0.1
5	P2	9.6	0.0
5	P3	8.1	1.5
5	P4	9.6	0.0
5	P5	9.6	0.6
5	P6	9.5	-0.1
5	P7	9.4	0.1
5	P8	9.4	0.1
5	P9	9.4	0.0
5	P10	9.4	0.1
5	P11	9.2	0.0
5	P12	9.5	0.0
5	P13	9.4	0.1
5	P14	9.4	0.0
5	P15	9.4	0.0
5	P16	9.4	0.0
5	P17	9.2	0.1
5	P18	9.3	0.0
5	P19	9.3	-0.2
5	P20	9.4	0.0
5	P21	9.5	2.1
5	P22	9.7	0.3
5	P23	9.7	-0.2
5	P24	9.7	-0.1
6	P1	10.0	-0.5
6	P2	9.8	-0.3
6	P3	10.1	-0.4
6	P4	10.1	-0.2
6	P5	9.9	0.4
6	P6	9.6	1.0
6	P7	9.7	-0.2
6	P8	10.3	-0.7
6	P9	9.9	-0.6
6	P10	10.4	-1.0
6	P11	9.7	-0.4
6	P12	9.8	-0.6
6	P13	10.0	-0.5
6	P14	9.5	-0.2
6	P15	10.0	-0.6
6	P16	7.7	0.8
6	P17	10.2	-0.6
6	P18	9.6	-0.2
6	P19	10.0	-0.6
6	P20	9.7	-0.5
6	P21	9.4	-0.2
6	P22	9.6	-0.3
6	P23	10.0	-0.3
6	P24	10.5	-0.9

7	P1	9.3	0.0
7	P2	9.2	0.0
7	P3	9.3	0.0
7	P4	9.4	0.0
7	P5	9.4	0.4
7	P6	9.4	0.5
7	P7	9.4	-0.1
7	P8	9.2	0.0
7	P9	9.4	0.0
7	P10	8.3	0.9
7	P11	9.1	0.0
7	P12	8.0	1.3
7	P13	7.8	1.5
7	P14	7.7	1.5
7	P15	9.1	0.0
7	P16	9.3	0.0
7	P17	7.1	0.6
7	P18	9.2	0.0
7	P19	8.0	1.2
7	P20	8.1	1.3
7	P21	9.4	-0.2
7	P22	9.4	-0.2
7	P23	9.5	-0.2
7	P24	9.5	0.0
8	P1	9.4	-0.1
8	P2	9.3	0.0
8	P3	8.1	1.4
8	P4	9.5	-0.1
8	P5	9.4	0.8
8	P6	9.4	0.5
8	P7	9.6	0.0
8	P8	9.4	0.0
8	P9	9.3	0.0
8	P10	9.4	0.1
8	P11	9.3	0.1
8	P12	9.5	0.0
8	P13	9.5	0.0
8	P14	9.3	0.0
8	P15	9.5	0.0
8	P16	9.4	0.0
8	P17	9.4	0.0
8	P18	9.6	0.0
8	P19	9.4	-0.1
8	P20	9.5	-0.1
8	P21	9.9	-0.2
8	P22	9.8	-0.2
8	P23	9.8	-0.2
8	P24	9.6	-0.1

EQUIPMENT AND CALIBRATION SCHEDULES**Equipment #:** TSC-01**Description:** Vertical Thermal Shock Chamber**Manufacturer:** Cincinnati Sub Zero**Model:** VTS-3-6-6-SC/AC**Serial #:** 10-VT14993**Accuracy:** See Manual

... Last Cal: 05/18/2010, Next Cal: 05/18/2011

Equipment #: THC-05**Description:** Temperature/Humidity Chamber (Chamber Room)**Manufacturer:** Thermotron**Model:** SM-8-3800**Serial #:** 05 23 00 02**Accuracy:** See Manual

... Last Cal: 02/03/2010, Next Cal: 02/03/2011

Equipment #: MO-11**Description:** Switch/Multimeter**Manufacturer:** Keithley**Model:** 3706**Serial #:** 120169**Accuracy:** See Manual See Manual

... Last Cal: 08/21/2009, Next Cal: 08/21/2010

Equipment #: TCT-07**Description:** Automated Test Stand**Manufacturer:** Chatillon/Lloyd**Model:** LF Plus**Serial #:** LF1310**Accuracy:** See Manual

... Last Cal: 07/15/2010, Next Cal: 07/15/2011

Equipment #: TCT-04**Description:** Dillon Quantrol TC21 25-1000 mm/min series test stand**Manufacturer:** Dillon Quantrol**Model:** TC2 I series test stand**Serial #:** 04-1041-04**Accuracy:** Speed Accuracy: +/- 5% of indicated speed; Speed Accuracy: +/- 5% of indicated speed;

... Last Cal: 05/21/2010, Next Cal: 05/21/2011

Equipment #: SVC-01**Description:** Shock & Vibration Table**Manufacturer:** Data Physics**Model:** LE-DSA-10-20K**Serial #:** 10037**Accuracy:** See Manual

... Last Cal: 11/31/2009, Next Cal: 11/31/2010

Equipment #: ACLM-01**Description:** Accelerometer**Manufacturer:** PCB Piezotronics**Model:** 352C03**Serial #:** 115819**Accuracy:** See Manual

... Last Cal: 07/09/2010, Next Cal: 07/09/2011

Equipment #: ED-03**Description:** Event Detector**Manufacturer:** Analysis Tech**Model:** 32EHD**Serial #:** 1100604**Accuracy:** See Manual

... Last Cal: 06/04/2010, Next Cal: 06/04/2011