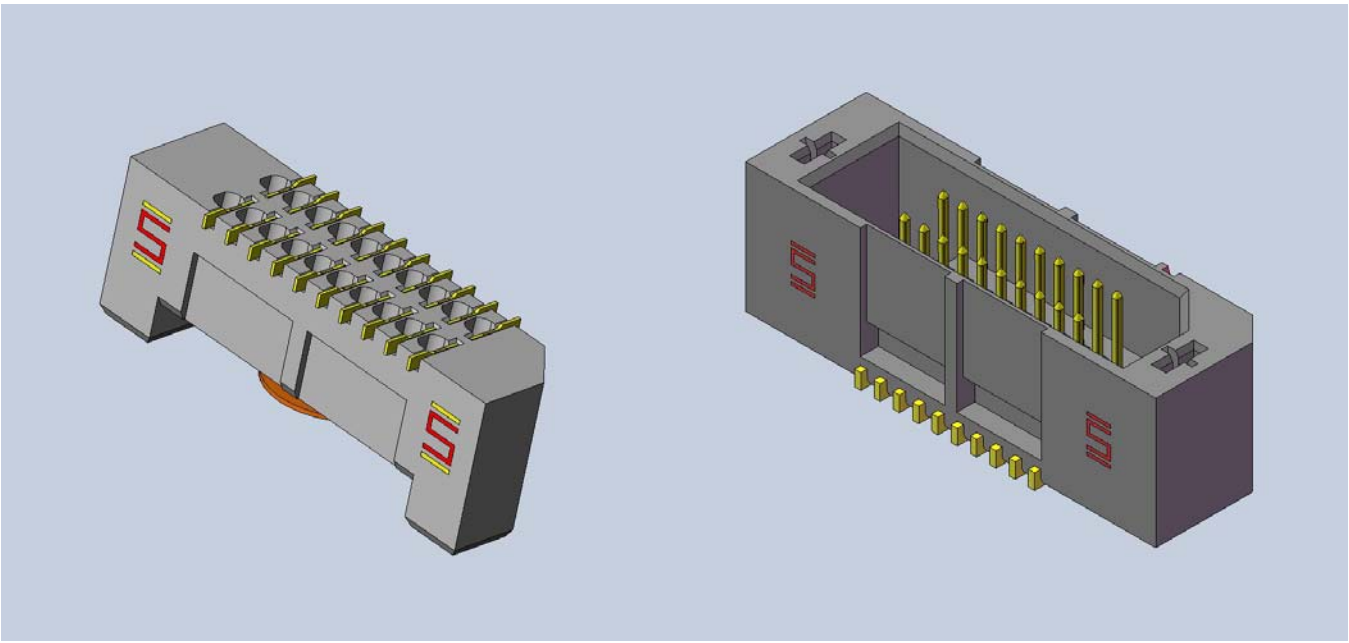
Project Number:	Tracking Code: TC088--1593		
Requested by: Brandon Harpenau	Date: 6/16/2008	Product Rev: 1	
Part #: SEM-125-02-03.0-H-D-WT/ TEM-125-02-03.0-H-D-WT	Lot #: 0	Tech: Rodney Riley, Gary Lomax	Eng: Troy Cook
Part description: TEM/SEM			Qty to test: 32
Test Start: 02/20/2008	Test Completed: 3/24/2008		



EXTENDED LIFE PRODUCTS REPORT

PART DESCRIPTION

SEM-125-02-03.0-H-D-WT/ TEM-125-02-03.0-H-D-WT

CERTIFICATION

All instruments and measuring equipment were calibrated to National Institute for Standards and Technology (NIST) traceable standards according to IS0 10012-1 and ANSI/NCSL 2540-1, as applicable.

SCOPE

To perform the following tests: Durability Cycling

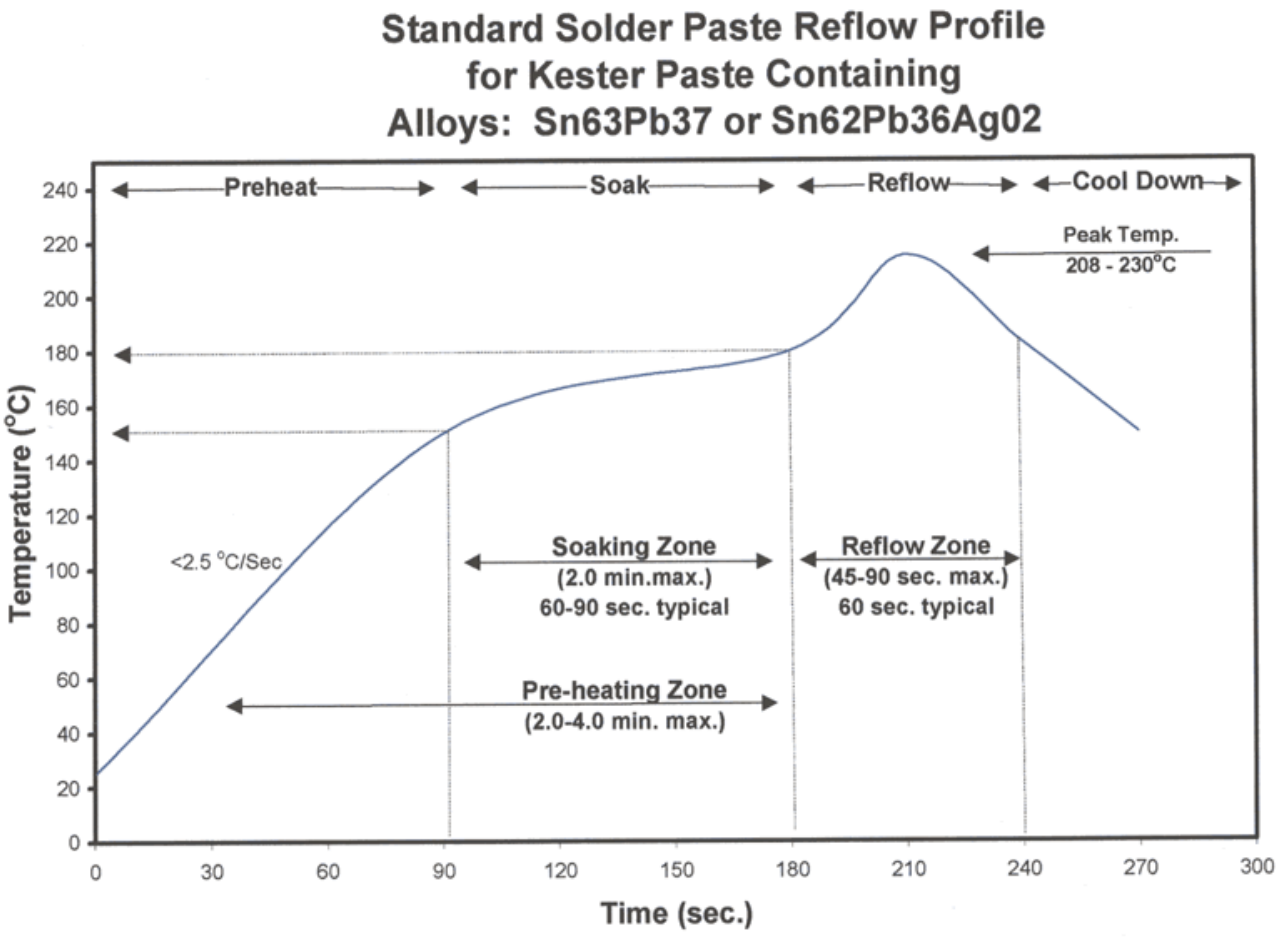
APPLICABLE DOCUMENTS

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-100970-TST-XX

TYPICAL OVEN PROFILE (Soldering Parts to Test Boards)



FLOWCHARTS

Durability

TEST STEP	GROUP A 200 Points - 8 Samples 100 Cycles
01	LLCR-1
02	100 Cycles
03	LLCR-2
04	Data Review
05	Thermals
06	LLCR-3
07	Data Review
08	Humidity
09	LLCR-4

LLCR = EIA-364-23, LLCR
use Keithley 580 in the dry circuit mode, 10 mA Max
Cycling Rate = 500 +/- 50 per hour
Pass Criteria for LLCR = Less than 15 m-Ohm change in resistance.
Thermal Aging = EIA-364-17, Test Condition 4, 105 deg C;
Time Condition 'B' (250 hours)
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

Durability

TEST STEP	GROUP A 200 Points - 8 Samples 250 Cycles
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02	250 Cycles
03	LLCR-2
04	Data Review
05	Thermals
06	LLCR-3
07	Data Review
08	Humidity
09	LLCR-4

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TEST STEP	GROUP A 200 Points - 8 Samples 500 Cycles
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03	LLCR-2
04	Data Review
05	Thermals
06	LLCR-3
07	Data Review
08	Humidity
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Humidity =EIA-364-31, Test Condition B (240 Hours)
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Time Condition 'B' (250 hours)
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

Durability

TEST STEP	GROUP A 200 Points - 8 Samples 2500 Cycles
01	LLCR-1
02	2500 Cycles
03	LLCR-2
04	Data Review
05	Thermals
06	LLCR-3
07	Data Review
08	Humidity
09	LLCR-4

LLCR = EIA-364-23, LLCR
use Keithley 580 in the dry circuit mode, 10 mA Max
Cycling Rate = 500 +/- 50 per hour
Pass Criteria for LLCR = Less than 15 m-Ohm change in resistance.
Thermal Aging = EIA-364-17, Test Condition 4, 105 deg C;
Time Condition 'B' (250 hours)
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

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 4 at 105° C.
3) Test Time Condition B for 250 hours.
4) All test samples are pre-conditioned at ambient.
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 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.

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. <= +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

RESULTS

LLCR Durability (200 LLCR test points)

- **Initial ---------- 10.7 mOhms Max**
- **Durability, 100 Cycles**
  - **<= +5.0 mOhms ---------- 198 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 2 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
- **Thermal**
  - **<= +5.0 mOhms ---------- 199 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 1 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
  -
- **Humidity**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

LLCR Durability (200 LLCR test points)

- **Initial ---------- 10.3 mOhms Max**
- **Durability, 250 Cycles**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
- **Thermal**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
  -
- **Humidity**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

LLCR Durability (200 LLCR test points)

- **Initial ---------- 10.2 mOhms Max**
- **Durability, 500 Cycles**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
- **Thermal**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
  -
- **Humidity**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

LLCR Durability (200 LLCR test points)

- **Initial ---------- 11.0 mOhms Max**
- **Durability, 1000 Cycles**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
- **Thermal**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
  -
- **Humidity**
  - **<= +5.0 mOhms ---------- 199 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 1 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

LLCR Durability (200 LLCR test points)

- **Initial ---------- 13.5 mOhms Max**
- **Durability, 2500 Cycles**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
- **Thermal**
  - **<= +5.0 mOhms ---------- 200 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 0 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**
  -
- **Humidity**
  - **<= +5.0 mOhms ---------- 191 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 7 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 0 Points ---------- Acceptable**
  - **+15.1 to +50.0 mOhms ---------- 2 Points ---------- Marginal**
  - **+50.1 to +2000 mOhms ---------- 0 Points ---------- Unstable**
  - **>+2000 mOhms ---------- 0 Points ---------- Open Failure**

DATA SUMMARIES

LLCR:

1) A total of 200 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. <= +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

mOhm values	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
Average	9.1	0.2	0.0	0.7
St. Dev.	0.4	0.8	0.8	0.8
Min	8.2	-1.1	-2.3	-0.7
Max	10.7	5.7	6.0	3.8
Count	200	200	200	200

mOhm values	Actual Initial	Delta 250 Cycles	Delta Thermal	Delta Humidity
Average	9.2	0.2	-0.1	0.4
St. Dev.	0.4	0.5	0.6	0.7
Min	8.4	-0.8	-1.8	-1.0
Max	10.3	2.1	1.7	3.9
Count	200	200	200	200

mOhm values	Actual Initial	Delta 500 Cycles	Delta Thermal	Delta Humidity
Average	9.2	0.0	0.3	0.4
St. Dev.	0.4	0.5	0.6	0.8
Min	8.4	-1.2	-0.7	-0.7
Max	10.2	2.8	3.2	4.6
Count	200	200	200	200

mOhm values	Actual Initial	Delta 1000 Cycles	Delta Thermal	Delta Humidity
Average	9.5	0.0	0.0	0.5
St. Dev.	0.6	0.5	0.7	2.0
Min	8.5	-1.8	-1.6	-1.1
Max	11.0	1.8	2.3	25.8
Count	200	200	200	200

mOhm values	Actual Initial	Delta 2500 Cycles	Delta Thermal	Delta Humidity
Average	9.4	-0.1	0.1	1.3
St. Dev.	0.5	0.6	0.8	2.4
Min	8.2	-3.1	-3.5	-2.8
Max	13.5	2.9	4.6	19.2
Count	200	200	200	200

DATA

LLCR:

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	100 Cycles	Thermal	Humidity
1	P1	9.2	-0.6	-0.5	-0.1
1	P2	9.4	-0.2	-0.4	0.2
1	P3	9.6	-0.6	-0.7	0.2
1	P4	9.8	-0.7	-0.6	-0.1
1	P5	9.9	-0.7	-0.3	-0.1
1	P6	9.3	-0.5	0.0	0.1
1	P7	8.8	0.0	0.2	0.0
1	P8	8.9	0.2	-0.2	0.1
1	P9	8.9	0.4	-0.4	0.0
1	P10	9.2	0.0	-0.5	-0.4
1	P11	9.2	-0.4	-0.3	-0.1
1	P12	9.1	-0.1	-0.2	0.1
1	P13	9.2	0.0	-0.1	0.1
1	P14	9.2	0.3	-0.4	1.3
1	P15	9.5	0.2	-0.8	1.3
1	P16	9.1	0.3	-0.6	1.4
1	P17	9.2	1.0	-0.7	0.4
1	P18	9.0	0.7	-0.8	1.9
1	P19	9.0	1.1	-0.6	0.7
1	P20	10.1	0.0	-0.8	-0.3
1	P21	9.4	0.2	-0.5	0.5
1	P22	9.7	-0.1	-0.4	-0.2
1	P23	9.6	-0.1	-0.7	-0.7
1	P24	9.8	-0.3	-0.8	-0.4
1	P25	9.1	0.8	-0.2	0.9
2	P1	8.5	0.6	1.3	0.6
2	P2	9.0	0.1	0.9	0.6
2	P3	9.0	0.0	0.7	1.0
2	P4	9.2	0.1	0.2	0.3
2	P5	9.1	0.3	0.4	0.7
2	P6	8.8	0.4	0.5	0.5
2	P7	8.7	0.0	0.7	0.6
2	P8	8.5	0.3	1.1	0.5
2	P9	9.0	-0.4	0.6	0.4
2	P10	9.0	0.0	0.7	0.3
2	P11	8.8	0.0	0.4	0.4
2	P12	8.6	0.5	0.6	1.0
2	P13	8.9	0.5	0.1	0.6
2	P14	9.7	-0.8	-0.7	3.0
2	P15	9.6	-0.7	0.3	2.8

2	P16	9.2	-0.5	-0.2	1.1
2	P17	9.2	-0.2	-0.5	1.1
2	P18	9.5	-0.8	-0.8	0.3
2	P19	9.8	-1.1	-1.1	0.5
2	P20	10.0	-0.5	-1.1	-0.4
2	P21	9.3	-0.2	0.1	2.1
2	P22	9.3	0.1	0.0	1.1
2	P23	9.2	0.0	0.0	1.4
2	P24	8.9	0.5	0.4	0.8
2	P25	8.9	-0.1	-0.2	2.8
3	P1	8.8	0.1	0.1	0.8
3	P2	8.9	0.1	0.6	0.9
3	P3	9.1	0.2	0.7	1.0
3	P4	9.1	0.2	0.7	0.8
3	P5	9.1	0.1	0.5	1.1
3	P6	9.2	0.1	0.3	0.3
3	P7	8.6	0.3	1.1	1.5
3	P8	8.7	0.2	1.2	0.4
3	P9	8.7	0.2	0.9	0.8
3	P10	9.1	0.1	-0.2	0.6
3	P11	9.0	0.0	0.5	0.5
3	P12	9.2	-0.1	1.0	0.1
3	P13	9.1	0.2	0.1	0.4
3	P14	9.2	0.1	-0.4	-0.3
3	P15	9.6	0.3	-0.5	-0.3
3	P16	9.3	0.1	-0.1	-0.2
3	P17	9.3	0.3	-0.4	0.9
3	P18	9.4	0.5	-0.4	1.4
3	P19	9.1	0.2	-0.2	1.0
3	P20	9.8	-0.4	-0.6	-0.3
3	P21	9.1	0.0	0.6	0.0
3	P22	9.4	-0.1	0.1	-0.2
3	P23	9.1	0.0	0.5	0.6
3	P24	9.4	0.0	-0.1	3.8
3	P25	9.4	-0.5	-0.5	-0.3
4	P1	8.8	0.4	0.2	0.3
4	P2	9.1	0.2	0.4	0.7
4	P3	9.2	0.5	0.9	0.4
4	P4	9.0	0.6	1.5	0.6
4	P5	9.0	0.4	0.5	1.0
4	P6	9.0	0.6	0.9	0.5
4	P7	8.4	0.4	1.1	1.2
4	P8	8.6	0.5	0.6	0.7
4	P9	8.9	0.0	0.4	0.1
4	P10	8.9	0.7	1.1	0.4
4	P11	8.9	0.4	0.6	0.4
4	P12	8.9	0.3	0.3	0.3
4	P13	9.0	0.5	0.2	1.0

4	P14	8.8	0.5	0.1	1.1
4	P15	9.0	0.6	-0.3	1.1
4	P16	8.7	0.6	-0.1	2.4
4	P17	8.7	0.6	-0.1	3.1
4	P18	8.7	0.7	-0.1	2.0
4	P19	8.7	0.4	0.1	1.2
4	P20	9.0	0.8	0.4	2.8
4	P21	8.9	0.4	0.3	0.2
4	P22	8.8	0.7	0.2	0.6
4	P23	8.9	0.5	0.2	0.3
4	P24	8.7	0.4	0.6	0.1
4	P25	8.3	0.8	0.5	1.1
5	P1	9.3	-0.2	-0.3	0.3
5	P2	8.9	-0.3	0.1	0.2
5	P3	10.7	-1.1	-1.2	-0.2
5	P4	9.3	-0.3	0.0	-0.3
5	P5	9.0	-0.2	0.1	0.2
5	P6	9.3	-0.3	0.1	0.1
5	P7	9.2	-0.6	-0.4	0.1
5	P8	8.8	-0.1	0.4	0.8
5	P9	9.4	-0.4	-0.5	0.8
5	P10	8.9	0.2	0.3	0.8
5	P11	8.9	-0.2	1.0	0.6
5	P12	9.1	0.0	0.2	1.0
5	P13	9.1	0.2	0.0	0.4
5	P14	10.1	-0.2	-1.0	0.4
5	P15	10.6	-0.1	-2.3	0.7
5	P16	9.3	0.1	-0.8	0.9
5	P17	9.4	-0.3	-0.7	0.2
5	P18	9.4	-0.2	-0.8	3.1
5	P19	9.5	0.3	-0.9	1.2
5	P20	9.7	-0.1	-1.0	0.8
5	P21	9.8	-0.2	-1.2	0.2
5	P22	9.9	-0.1	-1.5	0.8
5	P23	9.4	0.2	0.2	0.3
5	P24	9.2	-0.3	-0.3	1.6
5	P25	9.2	-0.1	-0.2	1.4
6	P1	9.4	0.6	0.0	-0.4
6	P2	8.8	0.3	0.5	0.0
6	P3	8.9	0.0	0.2	0.2
6	P4	9.3	-0.2	0.5	0.4
6	P5	8.9	0.3	0.6	0.0
6	P6	9.3	-0.4	0.9	-0.3
6	P7	9.6	1.2	-0.7	0.3
6	P8	9.4	-0.1	-0.3	-0.4
6	P9	8.7	0.0	0.1	0.0
6	P10	8.6	0.2	0.5	0.0
6	P11	8.6	0.1	1.0	0.1

6	P12	8.7	0.0	0.6	0.4
6	P13	9.0	0.0	-0.3	-0.4
6	P14	9.4	-0.4	-0.4	0.3
6	P15	9.0	0.2	0.0	1.4
6	P16	9.0	0.1	-0.6	1.0
6	P17	8.8	0.2	0.1	0.8
6	P18	8.5	0.2	1.0	2.2
6	P19	8.7	0.7	0.6	1.1
6	P20	9.5	0.5	-0.8	0.7
6	P21	9.1	0.4	-0.3	0.8
6	P22	9.2	0.4	0.1	0.7
6	P23	9.1	0.2	0.1	0.2
6	P24	8.6	0.4	0.0	0.6
6	P25	8.7	0.2	0.2	0.7
7	P1	8.4	0.3	6.0	3.1
7	P2	8.7	0.3	0.9	3.2
7	P3	8.7	0.2	2.1	0.7
7	P4	9.6	-0.1	-0.3	0.0
7	P5	8.9	-0.1	0.5	1.4
7	P6	9.1	-0.2	0.0	0.3
7	P7	8.2	0.4	0.9	0.5
7	P8	8.7	0.1	0.3	0.7
7	P9	8.4	0.0	0.4	1.8
7	P10	8.5	0.3	1.2	0.2
7	P11	8.7	0.3	0.9	1.8
7	P12	8.5	0.2	1.2	0.8
7	P13	8.7	-0.1	0.0	1.0
7	P14	9.2	-0.4	-0.4	0.1
7	P15	9.2	-0.1	-0.1	0.6
7	P16	9.1	0.6	-0.2	0.5
7	P17	9.0	2.2	-0.4	0.9
7	P18	9.0	1.9	-0.5	1.3
7	P19	9.1	4.5	-0.5	3.4
7	P20	9.3	0.3	-0.3	2.1
7	P21	9.2	1.1	-0.5	0.8
7	P22	9.3	3.1	-0.4	1.2
7	P23	9.3	5.7	-0.5	1.0
7	P24	9.0	4.7	-0.2	1.3
7	P25	8.9	5.5	-0.3	2.4
8	P1	8.6	0.0	0.5	0.7
8	P2	9.0	-0.1	0.0	0.5
8	P3	9.1	-0.2	-0.1	0.3
8	P4	9.2	-0.2	0.2	0.2
8	P5	9.2	0.0	-0.1	0.3
8	P6	9.4	-0.2	0.2	0.5
8	P7	8.4	-0.1	1.1	1.0
8	P8	8.6	-0.1	0.2	0.8
8	P9	8.6	-0.4	0.9	1.0

8	P10	8.7	-0.1	0.6	0.5
8	P11	9.1	0.0	0.6	0.3
8	P12	9.0	-0.2	0.3	0.2
8	P13	8.8	0.1	0.6	0.4
8	P14	9.3	0.1	-0.6	1.6
8	P15	9.7	-0.2	-0.8	2.1
8	P16	9.4	-0.3	-0.9	0.8
8	P17	9.2	-0.3	-0.9	1.2
8	P18	8.9	0.0	-0.6	2.9
8	P19	9.2	0.1	-0.6	0.4
8	P20	9.8	-0.3	-0.6	-0.1
8	P21	9.3	-0.1	-0.1	0.2
8	P22	9.5	0.2	-0.4	0.1
8	P23	9.5	0.0	-0.7	0.1
8	P24	9.0	0.0	0.0	0.2
8	P25	9.1	0.0	-0.7	0.7

	mOhm values	**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**250 Cycles**	**Thermal**	**Humidity**
1	P1	9.1	0.2	0.2	0.0
1	P2	9.3	-0.2	0.0	-0.1
1	P3	9.1	0.0	0.3	0.0
1	P4	9.3	-0.3	-0.2	-0.6
1	P5	9.2	0.0	0.2	-0.1
1	P6	9.0	-0.1	1.1	-0.5
1	P7	8.7	-0.1	1.0	3.9
1	P8	8.9	0.3	0.2	0.5
1	P9	9.2	0.1	0.1	-0.6
1	P10	8.8	0.2	0.2	0.1
1	P11	8.8	0.5	0.5	0.0
1	P12	9.0	0.1	0.6	0.7
1	P13	9.1	0.3	0.3	1.3
1	P14	9.7	0.3	-1.2	-0.2
1	P15	9.8	0.4	-1.5	-0.3
1	P16	9.7	0.1	-1.3	0.0
1	P17	9.6	0.8	-1.1	-0.5
1	P18	9.8	0.9	-1.2	-0.6
1	P19	9.6	0.3	-0.1	-0.4
1	P20	10.1	0.4	-1.8	-0.1
1	P21	9.4	0.0	-0.5	0.2
1	P22	10.1	0.0	-1.3	-0.7
1	P23	10.0	-0.5	-1.1	-0.5
1	P24	9.4	0.2	-0.5	-0.4
1	P25	9.7	0.2	-1.2	-0.4
2	P1	9.1	0.7	0.3	0.1
2	P2	9.0	1.4	1.0	0.0
2	P3	9.3	0.7	0.4	0.0

2	P4	9.7	0.2	-0.4	0.2
2	P5	9.5	1.1	-0.1	0.4
2	P6	9.6	2.1	0.2	0.5
2	P7	8.6	0.9	0.2	-0.2
2	P8	8.7	1.0	0.8	0.0
2	P9	9.0	0.6	0.1	-0.1
2	P10	9.1	0.7	0.0	0.1
2	P11	9.2	0.6	-0.1	-0.1
2	P12	9.0	1.1	0.3	0.5
2	P13	9.1	0.9	-0.3	1.1
2	P14	8.9	0.7	0.1	0.7
2	P15	9.0	0.4	0.2	1.7
2	P16	8.8	0.8	0.2	0.4
2	P17	9.0	0.9	0.3	0.7
2	P18	9.1	1.3	0.0	1.4
2	P19	8.7	1.2	0.1	0.5
2	P20	9.6	0.4	0.1	0.4
2	P21	9.4	0.2	0.0	0.2
2	P22	9.5	0.4	-0.1	0.1
2	P23	9.3	0.5	0.2	0.1
2	P24	9.2	1.1	0.1	2.0
2	P25	8.8	1.4	0.4	0.8
3	P1	8.7	0.1	0.3	1.1
3	P2	8.8	0.5	0.2	1.0
3	P3	8.9	0.5	0.2	0.7
3	P4	9.2	0.1	-0.3	0.6
3	P5	9.0	0.1	-0.2	0.7
3	P6	9.5	0.6	0.3	0.0
3	P7	8.6	0.2	0.4	1.3
3	P8	8.6	0.7	1.7	1.7
3	P9	8.6	0.4	0.3	1.0
3	P10	9.3	0.5	0.7	1.4
3	P11	9.5	0.6	-0.4	0.2
3	P12	9.3	1.3	0.0	0.9
3	P13	8.8	0.9	0.0	0.8
3	P14	9.1	0.1	-0.1	1.7
3	P15	9.1	0.7	-0.4	3.0
3	P16	8.9	0.9	0.2	2.0
3	P17	8.8	0.4	-0.1	1.3
3	P18	8.7	0.2	0.1	1.5
3	P19	9.2	-0.1	-0.4	1.8
3	P20	9.7	0.0	-0.8	0.0
3	P21	9.3	-0.3	-0.2	0.5
3	P22	9.0	-0.3	0.3	1.3
3	P23	9.1	-0.3	-0.2	0.9
3	P24	9.2	0.2	0.0	1.0
3	P25	8.7	0.1	0.2	1.1
4	P1	8.9	0.4	0.3	0.8

4	P2	8.9	0.2	0.0	0.5
4	P3	9.4	0.5	1.0	0.3
4	P4	9.0	0.3	0.5	0.2
4	P5	8.9	0.3	0.7	0.7
4	P6	9.3	0.0	0.6	0.7
4	P7	8.8	0.3	0.8	0.4
4	P8	8.9	0.0	0.6	0.1
4	P9	8.8	0.6	0.8	0.4
4	P10	9.2	0.3	0.3	0.1
4	P11	8.7	0.6	1.2	0.3
4	P12	8.9	0.1	0.8	0.3
4	P13	9.1	0.6	0.0	0.9
4	P14	9.4	0.5	-0.5	0.8
4	P15	9.9	0.1	-1.0	1.0
4	P16	9.6	0.4	-0.8	0.8
4	P17	9.5	0.9	-0.3	1.6
4	P18	9.2	0.9	-0.2	0.5
4	P19	9.5	0.5	-0.8	1.0
4	P20	9.7	1.2	0.1	0.5
4	P21	9.2	0.6	-0.1	0.8
4	P22	9.6	0.6	-0.2	0.4
4	P23	10.2	1.0	-0.4	0.2
4	P24	9.6	0.4	-0.4	0.7
4	P25	9.1	0.4	0.1	0.6
5	P1	9.3	-0.4	-0.5	-0.1
5	P2	9.0	-0.3	1.0	0.0
5	P3	9.5	-0.6	1.7	0.5
5	P4	9.6	-0.5	0.6	-0.1
5	P5	9.5	-0.5	-0.2	0.9
5	P6	9.7	-0.8	-0.1	-0.4
5	P7	8.9	-0.2	0.1	0.3
5	P8	8.8	-0.1	1.0	-0.1
5	P9	8.9	-0.4	0.8	0.3
5	P10	9.0	-0.1	-0.1	1.7
5	P11	9.5	-0.4	-0.3	1.1
5	P12	8.9	-0.2	1.2	0.7
5	P13	9.5	-0.1	0.5	1.4
5	P14	9.2	0.1	-0.3	0.3
5	P15	9.0	0.2	0.5	2.8
5	P16	9.1	-0.1	-0.1	0.0
5	P17	9.5	0.3	-0.6	0.3
5	P18	8.8	0.5	0.2	0.3
5	P19	8.4	0.7	0.6	0.2
5	P20	9.8	0.1	-0.7	-0.4
5	P21	9.3	0.1	0.1	-0.3
5	P22	9.0	0.3	0.0	2.9
5	P23	9.2	0.8	0.0	1.6
5	P24	8.9	1.1	0.0	2.3

5	P25	8.7	-0.2	0.5	-0.2
6	P1	8.7	0.8	0.2	-0.1
6	P2	8.8	0.3	0.1	0.2
6	P3	9.0	0.6	-0.3	0.4
6	P4	9.0	0.1	0.3	0.2
6	P5	9.0	0.4	-0.1	-0.1
6	P6	9.3	0.4	0.4	1.1
6	P7	8.8	0.4	-0.2	0.1
6	P8	8.8	0.1	-0.1	0.0
6	P9	8.8	0.6	-0.1	0.2
6	P10	9.4	-0.2	-0.4	0.0
6	P11	9.2	0.4	0.0	-0.4
6	P12	8.9	0.8	0.8	0.6
6	P13	8.9	0.9	0.3	0.4
6	P14	9.1	0.2	-0.1	1.2
6	P15	9.1	0.0	-0.5	0.1
6	P16	9.0	-0.3	-0.1	0.6
6	P17	9.1	-0.5	0.0	-0.2
6	P18	8.7	-0.2	0.2	0.6
6	P19	8.7	0.5	-0.2	0.0
6	P20	9.4	-0.1	0.5	-0.2
6	P21	9.0	-0.1	0.4	-0.1
6	P22	9.1	0.0	0.1	-0.2
6	P23	9.0	0.2	0.3	-0.2
6	P24	8.7	0.4	0.2	0.6
6	P25	8.7	0.1	0.1	0.3
7	P1	9.0	0.5	0.3	0.3
7	P2	9.4	-0.2	-0.2	-0.2
7	P3	9.3	0.1	-0.6	0.2
7	P4	9.4	0.1	-0.2	0.9
7	P5	9.7	-0.4	-0.5	-0.6
7	P6	9.8	-0.5	-0.4	-0.6
7	P7	9.1	-0.1	-0.3	0.0
7	P8	9.0	-0.4	0.3	-0.2
7	P9	9.0	-0.4	-0.2	-0.3
7	P10	9.2	0.0	-0.2	0.4
7	P11	9.1	-0.1	-0.2	0.3
7	P12	9.0	0.1	0.3	0.5
7	P13	9.3	-0.1	-0.8	-0.4
7	P14	9.3	-0.1	-0.8	0.6
7	P15	9.3	-0.2	-0.8	-0.1
7	P16	9.1	-0.1	-0.6	0.5
7	P17	8.9	0.3	-0.5	0.3
7	P18	9.3	0.1	-0.9	0.3
7	P19	9.5	-0.2	-0.8	-0.1
7	P20	9.6	0.0	-0.4	0.0
7	P21	9.4	-0.3	-0.5	-0.2
7	P22	9.1	0.1	0.6	0.3

7	P23	9.2	-0.3	0.2	-0.2
7	P24	9.1	-0.2	-0.2	-0.1
7	P25	8.9	-0.4	-0.3	0.0
8	P1	8.9	0.5	0.3	0.2
8	P2	9.0	0.1	-0.3	0.9
8	P3	9.4	-0.6	-0.3	0.0
8	P4	9.7	-0.4	-0.5	-0.4
8	P5	9.7	-0.4	-0.5	-0.3
8	P6	9.9	-0.7	-0.2	-0.4
8	P7	8.9	0.0	1.0	1.4
8	P8	9.0	0.1	0.2	1.0
8	P9	8.9	0.6	0.7	1.0
8	P10	9.1	0.0	0.0	0.0
8	P11	9.2	-0.1	0.3	0.1
8	P12	9.2	-0.2	0.2	0.1
8	P13	9.8	-0.1	-1.1	-1.0
8	P14	9.6	0.4	-1.2	1.4
8	P15	9.9	-0.1	-1.4	-0.6
8	P16	9.4	0.8	-1.0	-0.1
8	P17	9.4	0.9	-1.2	0.7
8	P18	9.2	0.0	-1.0	0.3
8	P19	9.3	1.0	-0.2	-0.1
8	P20	10.0	0.4	-0.8	0.4
8	P21	10.3	-0.4	-1.1	-0.7
8	P22	9.7	0.2	-0.5	0.5
8	P23	9.8	0.0	-1.0	-0.3
8	P24	9.2	-0.2	-0.2	-0.1
8	P25	9.5	0.0	-0.6	0.1

	mOhm values	**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**500 Cycles**	**Thermal**	**Humidity**
1	P1	9.5	0.9	1.4	1.4
1	P2	9.6	0.6	-0.4	0.5
1	P3	9.8	0.0	-0.6	-0.6
1	P4	9.8	0.1	-0.2	-0.1
1	P5	9.7	0.7	0.0	-0.1
1	P6	9.9	0.2	-0.2	0.1
1	P7	8.9	-0.2	0.0	-0.2
1	P8	9.0	0.1	0.2	-0.1
1	P9	9.3	0.1	-0.5	-0.6
1	P10	9.3	0.1	-0.5	-0.2
1	P11	9.1	-0.2	-0.1	-0.5
1	P12	9.2	0.1	0.2	-0.2
1	P13	9.2	0.1	0.0	-0.3
1	P14	9.4	-0.2	0.2	0.0
1	P15	9.5	-0.2	-0.3	0.2
1	P16	9.1	0.1	0.5	0.2

1	P17	9.2	-0.2	-0.4	0.2
1	P18	9.5	-0.5	-0.1	-0.3
1	P19	9.4	-0.3	0.0	0.0
1	P20	10.1	-0.3	-0.2	0.2
1	P21	9.8	0.3	0.1	0.9
1	P22	9.8	-0.2	-0.2	0.3
1	P23	9.5	-0.1	0.4	0.7
1	P24	9.5	-0.1	0.5	0.6
1	P25	9.4	-0.2	0.2	-0.2
2	P1	8.7	-0.2	1.0	0.6
2	P2	9.3	-0.3	0.5	-0.7
2	P3	9.2	0.4	0.7	-0.1
2	P4	9.1	0.4	0.6	-0.3
2	P5	9.4	0.1	-0.2	-0.4
2	P6	9.1	-0.1	0.6	-0.3
2	P7	8.5	0.3	1.3	0.1
2	P8	8.8	0.0	0.3	-0.3
2	P9	8.7	0.0	0.9	0.0
2	P10	8.8	0.4	0.9	0.2
2	P11	9.0	0.0	0.5	0.4
2	P12	9.2	-0.3	0.3	0.0
2	P13	9.0	0.4	-0.3	0.0
2	P14	9.5	0.2	0.1	0.1
2	P15	9.1	0.8	0.1	0.2
2	P16	8.7	0.8	0.0	0.6
2	P17	8.7	0.8	-0.2	0.2
2	P18	8.6	0.6	0.6	1.0
2	P19	8.5	1.0	0.1	0.8
2	P20	9.4	0.1	-0.3	0.0
2	P21	9.0	0.0	-0.2	0.0
2	P22	8.8	0.6	-0.3	-0.1
2	P23	8.9	1.5	1.7	3.8
2	P24	8.7	0.5	1.7	4.2
2	P25	8.6	0.0	-0.3	0.1
3	P1	8.8	0.3	0.1	0.2
3	P2	8.7	0.0	0.3	0.9
3	P3	9.1	0.2	0.0	0.0
3	P4	8.9	0.0	0.5	0.1
3	P5	8.8	-0.3	-0.1	0.7
3	P6	8.8	0.1	-0.3	2.1
3	P7	8.4	0.2	0.5	0.2
3	P8	8.6	0.2	0.5	0.0
3	P9	8.6	-0.1	0.1	-0.1
3	P10	8.4	0.1	0.1	0.1
3	P11	8.5	0.1	0.0	0.0
3	P12	8.4	0.0	-0.1	1.4
3	P13	8.8	0.0	0.1	0.1
3	P14	8.7	0.5	0.3	1.1

3	P15	9.0	0.0	-0.1	0.5
3	P16	8.8	0.5	0.2	0.6
3	P17	9.3	-0.2	-0.5	-0.3
3	P18	9.0	0.3	0.0	0.2
3	P19	8.7	0.3	0.5	0.5
3	P20	9.6	-0.5	0.1	-0.1
3	P21	9.4	0.2	0.4	0.1
3	P22	9.1	0.2	0.2	0.1
3	P23	9.0	0.2	0.5	0.1
3	P24	9.1	-0.2	0.5	-0.1
3	P25	9.1	0.3	0.2	0.0
4	P1	8.9	-0.3	1.1	1.1
4	P2	8.9	-0.3	0.5	0.5
4	P3	9.3	-0.5	0.8	0.9
4	P4	9.0	-0.2	0.1	0.4
4	P5	8.7	0.5	1.0	0.7
4	P6	9.2	0.1	0.6	2.1
4	P7	8.6	0.4	0.4	1.6
4	P8	8.4	0.4	0.8	1.1
4	P9	8.8	0.1	0.5	1.4
4	P10	8.7	0.2	0.4	1.4
4	P11	8.6	0.3	1.0	1.6
4	P12	8.6	1.2	1.4	2.5
4	P13	8.7	0.6	0.4	2.2
4	P14	9.1	-0.1	0.5	0.4
4	P15	9.3	0.2	0.2	0.3
4	P16	9.2	0.3	0.0	0.5
4	P17	9.3	0.4	0.0	0.3
4	P18	9.1	0.2	0.2	1.0
4	P19	9.1	0.2	0.4	0.6
4	P20	9.9	-0.4	1.0	0.9
4	P21	9.5	0.0	0.4	0.6
4	P22	9.4	0.4	2.1	2.1
4	P23	9.7	-0.2	0.3	1.4
4	P24	9.3	0.1	0.8	0.9
4	P25	9.4	-0.4	0.0	0.4
5	P1	8.7	0.2	0.2	0.2
5	P2	8.9	0.1	0.2	0.2
5	P3	9.2	-0.3	-0.1	0.0
5	P4	9.1	-0.1	-0.1	-0.3
5	P5	9.1	-0.1	0.0	0.6
5	P6	9.3	-0.1	-0.5	-0.3
5	P7	8.8	-0.1	-0.2	-0.3
5	P8	8.7	0.3	0.3	0.1
5	P9	8.8	0.0	0.0	-0.1
5	P10	8.7	0.3	0.4	-0.1
5	P11	9.0	-0.3	-0.1	0.1
5	P12	8.8	-0.1	-0.2	-0.2

5	P13	8.9	0.2	0.0	0.0
5	P14	9.2	0.1	0.7	0.0
5	P15	9.2	0.1	0.9	-0.1
5	P16	9.3	-0.2	0.3	0.8
5	P17	9.0	0.3	-0.3	-0.1
5	P18	9.1	-0.2	-0.3	-0.2
5	P19	9.1	-0.2	0.3	0.0
5	P20	9.6	0.1	1.6	1.1
5	P21	9.0	0.0	0.5	2.3
5	P22	9.4	-0.4	-0.1	0.2
5	P23	9.3	-0.1	0.1	0.9
5	P24	9.3	-0.2	0.3	1.7
5	P25	9.6	-0.5	-0.3	-0.4
6	P1	9.6	-0.1	-0.4	-0.2
6	P2	9.4	-0.9	-0.2	0.4
6	P3	9.8	-0.7	0.3	0.3
6	P4	9.7	-0.7	0.5	0.7
6	P5	10.2	-0.9	-0.5	-0.5
6	P6	9.3	-0.2	0.2	0.5
6	P7	9.5	-0.4	0.2	0.4
6	P8	8.9	0.2	-0.2	0.0
6	P9	8.7	-0.2	0.2	0.1
6	P10	9.1	0.2	0.3	0.4
6	P11	9.2	-0.1	-0.2	-0.1
6	P12	9.3	0.1	0.0	0.5
6	P13	9.6	0.0	-0.1	0.3
6	P14	9.5	-0.6	-0.2	-0.3
6	P15	9.4	-0.3	-0.1	-0.1
6	P16	9.3	-0.5	-0.4	-0.4
6	P17	9.4	-0.3	-0.2	0.1
6	P18	9.1	-0.1	0.3	0.6
6	P19	9.3	0.0	0.2	-0.3
6	P20	9.8	-0.2	0.0	0.8
6	P21	9.3	-0.2	0.5	0.6
6	P22	9.2	2.8	3.2	3.6
6	P23	9.4	0.1	1.2	1.3
6	P24	9.1	0.7	1.3	4.6
6	P25	8.9	0.1	0.5	0.4
7	P1	9.2	-0.1	0.5	0.0
7	P2	9.6	0.0	0.0	0.1
7	P3	9.7	-0.1	-0.3	-0.4
7	P4	9.5	-0.3	0.5	0.7
7	P5	9.6	-0.2	1.6	1.5
7	P6	9.7	-0.1	1.2	0.9
7	P7	9.0	0.0	0.4	0.1
7	P8	9.2	0.2	0.3	-0.1
7	P9	9.1	1.8	0.4	0.2
7	P10	9.0	0.2	0.2	0.1

7	P11	9.0	0.1	0.1	0.0
7	P12	9.2	-0.1	0.6	0.1
7	P13	9.4	0.0	0.7	-0.2
7	P14	9.4	0.0	0.5	0.2
7	P15	9.6	-0.2	0.3	0.1
7	P16	9.5	-0.4	-0.1	-0.3
7	P17	9.1	0.2	0.1	0.7
7	P18	9.6	0.1	0.0	1.1
7	P19	9.3	0.5	1.3	1.9
7	P20	10.0	-0.2	0.7	0.1
7	P21	9.7	-0.2	-0.3	-0.1
7	P22	9.3	0.5	0.6	0.6
7	P23	9.7	-0.2	0.0	-0.1
7	P24	9.3	-0.1	0.4	-0.2
7	P25	9.1	0.1	0.8	0.4
8	P1	10.1	-1.2	0.0	-0.6
8	P2	10.1	-1.0	0.0	-0.5
8	P3	9.8	-0.8	0.3	-0.5
8	P4	9.9	-0.6	0.9	-0.3
8	P5	9.6	-0.6	0.2	-0.1
8	P6	10.1	-1.1	0.4	-0.3
8	P7	9.1	-0.2	0.8	0.6
8	P8	9.3	-0.4	0.6	1.9
8	P9	9.2	-0.2	0.8	0.0
8	P10	9.3	-0.5	0.3	0.3
8	P11	9.6	-0.6	1.1	-0.3
8	P12	9.6	-0.7	1.4	-0.3
8	P13	9.7	-0.5	1.3	-0.5
8	P14	9.5	-0.4	1.5	0.2
8	P15	9.1	0.1	1.9	0.9
8	P16	9.5	-0.2	1.2	-0.1
8	P17	9.2	-0.5	0.0	0.0
8	P18	9.2	-0.4	-0.1	0.4
8	P19	9.2	-0.4	-0.1	0.2
8	P20	10.0	-0.9	-0.7	-0.4
8	P21	9.3	-0.5	0.5	-0.3
8	P22	9.6	-0.7	-0.1	-0.2
8	P23	9.2	-0.4	-0.2	0.0
8	P24	9.1	-0.3	0.3	0.3
8	P25	8.9	-0.5	0.0	0.2

	mOhm values	**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**1000 Cycles**	**Thermal**	**Humidity**
1	P1	9.3	-0.6	-0.6	-0.3
1	P2	9.5	-0.3	-0.9	-0.6
1	P3	9.6	-0.4	-0.7	-0.3
1	P4	9.3	-0.1	-0.1	-0.2

1	P5	9.3	0.3	0.3	0.8
1	P6	9.2	0.2	-0.1	0.4
1	P7	9.0	-0.1	-0.5	-0.2
1	P8	9.1	0.1	-0.5	-0.3
1	P9	9.1	-0.2	-0.1	0.7
1	P10	9.1	-0.1	-0.2	0.0
1	P11	8.9	0.6	0.0	0.4
1	P12	9.5	-0.1	-0.3	0.1
1	P13	9.0	0.0	0.2	0.3
1	P14	8.8	0.4	-0.1	0.8
1	P15	8.8	0.5	0.4	0.4
1	P16	8.8	0.3	-0.2	-0.1
1	P17	8.6	0.3	0.4	0.4
1	P18	9.0	-0.3	-0.4	-0.1
1	P19	8.6	0.4	0.6	0.5
1	P20	9.1	0.3	0.0	-0.2
1	P21	8.8	0.6	1.7	2.3
1	P22	8.8	0.4	1.1	4.1
1	P23	8.9	0.6	1.6	3.9
1	P24	8.5	0.7	1.3	3.7
1	P25	8.7	0.1	1.2	3.8
2	P1	9.4	-0.4	-0.3	0.5
2	P2	9.0	-0.4	-0.3	0.5
2	P3	8.9	-0.3	-0.3	-0.1
2	P4	9.1	-0.2	-0.1	1.3
2	P5	9.2	-0.4	0.1	0.7
2	P6	9.3	-0.5	-0.5	-0.1
2	P7	8.7	0.0	1.5	25.8
2	P8	8.7	0.2	0.0	1.4
2	P9	8.9	0.1	-0.4	0.1
2	P10	8.9	0.5	-0.1	-0.1
2	P11	8.9	0.2	-0.4	0.2
2	P12	9.5	-0.4	-0.5	-0.5
2	P13	8.9	0.3	0.0	0.5
2	P14	9.2	0.1	-0.2	0.3
2	P15	8.8	0.1	0.4	1.1
2	P16	9.2	-0.1	0.2	1.0
2	P17	9.8	-0.2	-0.5	-0.1
2	P18	9.6	0.1	-0.1	0.4
2	P19	9.7	-0.5	-0.2	0.6
2	P20	9.8	-0.4	-0.1	0.3
2	P21	9.2	0.0	-0.2	0.4
2	P22	9.5	0.1	-0.6	-0.2
2	P23	9.7	0.2	-0.3	0.0
2	P24	9.5	0.1	0.2	0.1
2	P25	9.3	-0.1	0.0	0.8
3	P1	9.4	0.0	-0.1	0.0
3	P2	9.3	-0.4	-0.1	-0.2

3	P3	9.4	-0.4	-0.3	-0.1
3	P4	9.6	-0.2	-0.3	0.2
3	P5	9.6	0.0	0.5	0.2
3	P6	9.4	-0.2	0.0	0.6
3	P7	9.0	0.2	-0.2	-0.2
3	P8	9.2	0.8	0.3	0.1
3	P9	9.1	0.6	0.2	0.3
3	P10	9.1	0.2	0.0	0.1
3	P11	9.4	0.2	0.0	-0.3
3	P12	9.2	0.2	0.4	0.3
3	P13	10.4	-0.8	-0.9	-0.8
3	P14	10.1	-0.3	0.2	-0.1
3	P15	10.0	0.4	-0.4	-0.6
3	P16	10.0	1.1	0.1	0.0
3	P17	10.1	0.0	-0.4	0.0
3	P18	10.5	-0.7	-1.5	-0.9
3	P19	10.0	0.3	-0.7	-0.1
3	P20	11.0	-0.3	-0.4	-0.4
3	P21	10.6	0.1	0.4	0.3
3	P22	10.7	-1.2	-1.4	-0.7
3	P23	10.5	-0.6	-0.9	-1.1
3	P24	10.0	-0.6	-0.3	-0.3
3	P25	9.7	0.1	-0.4	-0.1
4	P1	8.9	-0.1	-0.1	1.2
4	P2	9.0	-0.4	0.0	0.2
4	P3	9.0	-0.2	0.4	1.0
4	P4	9.1	0.1	0.5	0.8
4	P5	9.1	-0.2	0.4	1.2
4	P6	9.4	0.1	1.9	2.9
4	P7	8.5	0.2	0.1	0.5
4	P8	8.6	0.3	0.6	0.6
4	P9	8.9	-0.1	0.0	0.0
4	P10	8.7	0.8	1.4	1.2
4	P11	8.7	0.3	0.7	1.4
4	P12	8.9	-0.1	0.6	0.8
4	P13	8.8	0.2	0.2	0.2
4	P14	9.5	0.0	0.0	0.5
4	P15	9.4	0.5	0.1	0.5
4	P16	9.5	0.5	0.2	0.6
4	P17	9.3	0.1	0.4	0.7
4	P18	9.4	0.8	0.1	0.1
4	P19	9.5	0.3	0.0	0.0
4	P20	9.8	0.2	0.2	0.7
4	P21	9.5	-0.5	-0.4	0.1
4	P22	9.7	-0.4	-0.8	-0.4
4	P23	9.1	0.1	-0.2	0.8
4	P24	9.2	-0.3	-0.2	0.4
4	P25	9.4	-0.2	-0.3	0.1

5	P1	9.2	1.3	0.1	0.1
5	P2	9.3	-0.4	0.3	0.0
5	P3	9.7	-0.4	0.8	0.1
5	P4	9.6	-0.1	-0.4	-0.1
5	P5	10.0	-0.6	-0.6	0.4
5	P6	9.5	0.1	-0.2	0.2
5	P7	9.2	0.2	0.0	0.9
5	P8	9.2	0.2	0.4	0.3
5	P9	9.2	0.7	0.4	0.4
5	P10	9.2	0.4	0.2	0.6
5	P11	9.4	0.6	-0.1	0.5
5	P12	9.3	0.3	-0.7	-0.3
5	P13	9.2	1.0	0.5	0.3
5	P14	9.8	0.9	0.3	0.0
5	P15	9.8	0.6	0.6	0.4
5	P16	9.5	0.4	0.0	0.3
5	P17	9.8	0.4	-0.6	0.0
5	P18	9.5	0.4	0.0	0.0
5	P19	9.5	0.4	0.4	0.3
5	P20	10.4	0.2	-0.4	-0.1
5	P21	9.6	0.5	-0.2	0.1
5	P22	10.2	0.8	0.1	0.2
5	P23	9.8	1.0	2.3	2.4
5	P24	9.9	1.5	1.3	3.5
5	P25	9.7	0.2	-0.6	-0.1
6	P1	10.4	-1.3	-0.1	2.7
6	P2	10.5	-0.9	-1.3	-0.4
6	P3	10.2	-0.3	-0.9	0.9
6	P4	11.0	-1.3	-1.6	0.2
6	P5	10.9	-1.8	-1.6	1.3
6	P6	9.9	-0.9	-0.4	0.7
6	P7	9.9	-0.1	-0.3	1.7
6	P8	9.9	-0.3	-0.7	1.8
6	P9	9.5	0.6	0.1	2.0
6	P10	10.2	-0.7	-0.9	0.6
6	P11	10.0	-0.5	-0.5	-0.6
6	P12	10.6	-1.0	-0.2	0.1
6	P13	9.8	0.0	0.7	0.6
6	P14	10.8	-0.4	-0.7	-0.8
6	P15	10.7	-1.1	-0.9	-0.7
6	P16	10.2	-0.5	-0.4	-0.5
6	P17	10.4	0.1	-0.5	0.4
6	P18	10.2	0.6	-0.3	0.3
6	P19	10.5	1.5	1.1	0.1
6	P20	10.2	-0.2	0.5	0.1
6	P21	10.7	0.1	-0.3	-0.3
6	P22	11.0	-0.8	-0.2	-0.5
6	P23	10.8	0.0	-0.2	-0.6

6	P24	10.2	-0.2	0.3	0.1
6	P25	10.1	1.0	1.4	0.4
7	P1	9.0	0.5	0.0	0.3
7	P2	9.1	-0.2	0.1	0.5
7	P3	9.3	0.6	1.1	2.5
7	P4	8.9	0.1	0.6	0.6
7	P5	9.1	1.8	2.3	3.4
7	P6	9.3	1.2	1.9	3.6
7	P7	8.7	0.6	0.6	0.5
7	P8	8.8	0.3	0.4	0.2
7	P9	9.0	0.1	0.3	0.9
7	P10	8.7	0.4	0.5	0.8
7	P11	8.8	0.3	0.4	0.6
7	P12	9.0	0.3	0.6	1.8
7	P13	9.0	0.1	0.5	0.5
7	P14	9.2	1.0	1.7	0.4
7	P15	9.1	0.7	0.5	0.2
7	P16	9.1	0.3	1.3	0.7
7	P17	8.9	0.5	1.4	0.8
7	P18	8.9	0.6	1.1	0.7
7	P19	9.0	0.6	1.3	0.5
7	P20	9.8	0.3	0.4	0.0
7	P21	9.2	0.3	0.8	0.5
7	P22	9.3	0.5	0.5	0.2
7	P23	9.4	-0.4	0.3	-0.1
7	P24	9.0	-0.1	0.6	0.5
7	P25	8.8	0.0	0.7	0.2
8	P1	9.2	-0.3	-0.5	-0.7
8	P2	9.4	0.1	-0.7	-0.3
8	P3	9.6	-0.7	-1.0	-1.0
8	P4	9.8	0.0	-1.1	-0.7
8	P5	9.4	-0.3	-0.3	-0.3
8	P6	9.5	-0.4	-0.7	-0.6
8	P7	9.3	-0.6	-0.6	-0.2
8	P8	9.5	-0.8	-0.7	-0.8
8	P9	9.8	-0.9	-0.3	-0.9
8	P10	9.8	-0.7	-0.7	-1.1
8	P11	9.5	-0.5	-0.5	-0.4
8	P12	9.5	-0.4	-0.4	-0.3
8	P13	9.3	-0.2	-0.1	0.1
8	P14	10.6	-1.0	-1.2	-1.0
8	P15	9.4	-0.4	0.3	-0.1
8	P16	9.5	-0.4	-0.7	0.2
8	P17	9.1	0.0	0.1	0.5
8	P18	9.0	0.0	0.0	0.3
8	P19	9.0	0.5	0.4	0.3
8	P20	9.7	-0.7	0.2	0.2
8	P21	9.2	0.1	0.0	0.4

8	P22	9.3	0.4	-0.3	-0.1
8	P23	9.4	-0.2	-0.4	0.0
8	P24	9.1	-0.2	0.5	0.6
8	P25	8.8	0.3	0.0	0.5

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	2500 Cycles	Thermal	Humidity
1	P1	9.0	0.2	0.6	0.5
1	P2	9.5	-0.5	0.0	0.2
1	P3	9.2	0.0	0.4	0.6
1	P4	9.1	-0.1	0.1	0.3
1	P5	9.1	-0.2	0.8	0.7
1	P6	9.6	-0.6	0.1	0.2
1	P7	9.0	0.1	0.5	2.5
1	P8	8.7	0.5	0.5	0.6
1	P9	9.1	0.1	0.4	1.5
1	P10	9.1	0.2	0.4	2.3
1	P11	9.1	-0.2	0.1	0.1
1	P12	8.7	0.6	0.6	1.4
1	P13	8.9	0.3	0.6	2.0
1	P14	9.9	-0.4	-0.2	-0.2
1	P15	10.0	-0.7	-0.4	-0.3
1	P16	9.5	-0.4	0.4	1.2
1	P17	10.4	0.2	2.4	1.2
1	P18	10.4	0.4	0.3	0.4
1	P19	9.5	0.5	0.5	1.5
1	P20	10.1	-0.2	0.2	0.2
1	P21	9.7	0.0	0.1	1.3
1	P22	9.9	-0.2	0.6	0.5
1	P23	10.3	0.4	1.4	2.9
1	P24	10.0	0.2	0.0	1.7
1	P25	9.8	0.0	0.8	0.8
2	P1	9.4	-0.7	-0.6	0.2
2	P2	8.9	0.0	-0.1	0.0
2	P3	9.6	0.0	-0.4	-0.4
2	P4	9.4	-0.2	-0.4	-0.3
2	P5	9.5	-0.5	-0.5	-0.4
2	P6	9.6	-0.6	-0.5	-0.1
2	P7	9.0	-0.3	-0.3	0.0
2	P8	9.1	-0.6	-0.6	-0.4
2	P9	9.3	-0.4	-0.3	-0.4
2	P10	9.5	-0.2	-0.6	-0.8
2	P11	9.0	-0.5	-0.1	-0.1
2	P12	9.2	-0.4	-0.6	-0.5
2	P13	9.3	-0.2	-0.1	-0.1
2	P14	9.3	-0.3	0.3	0.2

2	P15	9.6	-0.5	0.0	0.3
2	P16	9.7	-0.5	3.9	19.2
2	P17	9.1	0.3	0.7	0.9
2	P18	9.4	-0.1	0.0	0.6
2	P19	9.4	-0.2	-0.4	-0.1
2	P20	9.8	-0.2	0.1	-0.3
2	P21	9.4	-0.2	0.5	0.5
2	P22	9.5	0.7	2.9	3.3
2	P23	9.7	-0.5	-0.5	-0.1
2	P24	9.4	-0.4	1.3	2.3
2	P25	9.1	-0.3	-0.4	0.0
3	P1	9.3	0.2	0.1	0.5
3	P2	9.4	0.3	-0.3	0.3
3	P3	9.9	-0.2	-0.3	0.8
3	P4	10.1	-0.4	0.0	0.5
3	P5	9.8	0.0	0.0	1.5
3	P6	9.9	0.1	-0.2	3.4
3	P7	9.2	0.2	-0.3	0.4
3	P8	9.2	0.5	0.1	1.6
3	P9	9.1	0.2	0.4	0.4
3	P10	10.0	-0.4	-0.9	0.0
3	P11	9.3	0.1	0.2	1.8
3	P12	9.3	0.1	0.5	2.0
3	P13	9.3	0.4	0.3	1.3
3	P14	9.1	0.1	0.3	0.6
3	P15	9.3	0.2	0.2	0.3
3	P16	9.0	0.1	0.3	0.4
3	P17	9.1	0.3	0.1	0.6
3	P18	9.3	-0.1	-0.2	0.5
3	P19	8.9	1.0	0.4	0.8
3	P20	9.7	0.2	0.2	1.4
3	P21	9.6	-0.4	-0.3	0.5
3	P22	9.5	-0.2	-0.2	0.5
3	P23	9.6	0.1	0.2	0.5
3	P24	9.7	-0.1	0.3	1.6
3	P25	9.3	0.2	0.8	1.4
4	P1	9.3	-0.4	-0.5	0.1
4	P2	9.5	-0.5	-0.8	-0.5
4	P3	10.3	0.0	-0.9	-0.7
4	P4	9.6	0.5	-0.5	0.2
4	P5	9.4	0.3	0.0	1.3
4	P6	9.1	0.2	0.1	0.6
4	P7	9.7	-0.1	-0.8	-0.3
4	P8	9.6	0.0	-0.7	-0.2
4	P9	9.9	0.1	-1.2	-1.0
4	P10	9.8	0.0	-0.8	-0.3
4	P11	9.5	-0.1	-0.3	-0.2
4	P12	8.9	0.9	-0.4	0.6

4	P13	9.8	-0.2	-0.7	-0.4
4	P14	9.4	0.6	0.6	0.6
4	P15	10.0	0.6	0.0	0.6
4	P16	9.4	0.1	0.5	0.7
4	P17	9.7	0.4	0.2	0.8
4	P18	9.4	0.5	0.4	0.6
4	P19	10.0	0.1	0.5	0.3
4	P20	13.5	-3.1	-3.5	-2.8
4	P21	9.5	-0.1	0.1	0.8
4	P22	9.6	2.9	0.5	1.4
4	P23	10.1	-0.5	0.1	0.4
4	P24	9.8	-0.1	-0.3	0.1
4	P25	9.5	0.5	0.4	0.9
5	P1	8.7	0.6	0.4	4.2
5	P2	8.9	0.9	1.9	5.3
5	P3	9.3	0.0	0.0	1.3
5	P4	9.2	0.1	0.5	5.5
5	P5	9.3	0.2	0.7	5.0
5	P6	9.1	0.0	0.1	2.3
5	P7	8.2	0.5	3.3	2.6
5	P8	8.5	0.0	-0.1	4.5
5	P9	8.8	1.3	0.7	1.6
5	P10	8.8	0.7	0.3	1.1
5	P11	8.8	0.1	-0.1	3.4
5	P12	9.0	-0.3	-0.3	6.7
5	P13	8.7	0.9	0.4	4.0
5	P14	8.8	2.7	4.6	7.3
5	P15	9.1	0.4	0.0	0.3
5	P16	8.8	0.0	0.4	2.4
5	P17	9.2	-0.3	0.1	2.7
5	P18	9.2	0.2	0.0	0.5
5	P19	9.3	0.5	-0.1	0.3
5	P20	9.6	0.5	0.6	0.7
5	P21	9.2	2.9	2.1	3.8
5	P22	9.4	1.0	1.4	3.4
5	P23	9.2	0.7	0.4	1.9
5	P24	9.4	0.6	0.5	4.4
5	P25	9.1	0.5	0.9	1.3
6	P1	9.0	0.0	0.1	0.3
6	P2	9.1	-0.3	0.4	1.1
6	P3	9.1	-0.4	0.2	1.0
6	P4	9.2	0.2	0.3	0.2
6	P5	9.0	-0.4	1.3	1.2
6	P6	9.6	-0.6	0.0	0.3
6	P7	8.6	-0.1	0.2	1.6
6	P8	8.7	-0.2	0.3	1.2
6	P9	8.7	0.2	0.5	0.5
6	P10	8.9	0.2	0.6	1.1

6	P11	8.8	0.3	0.3	0.0
6	P12	8.9	-0.2	0.1	0.6
6	P13	8.8	0.1	0.3	0.8
6	P14	9.7	-0.8	-0.3	0.6
6	P15	9.5	-0.6	-0.1	-0.2
6	P16	9.2	-0.5	0.1	0.1
6	P17	9.1	0.3	0.4	0.9
6	P18	9.4	-0.3	0.0	0.0
6	P19	9.1	0.0	0.2	0.2
6	P20	9.9	0.0	2.9	18.6
6	P21	9.8	-0.6	2.4	9.3
6	P22	9.7	-0.7	0.6	1.2
6	P23	10.0	-0.7	-0.5	2.1
6	P24	9.6	-0.8	-0.4	4.8
6	P25	8.8	0.1	0.3	0.3
7	P1	9.9	-1.1	-1.1	-0.3
7	P2	9.4	-0.5	-0.5	0.9
7	P3	9.7	-0.3	-0.7	-0.2
7	P4	9.2	0.0	-0.2	0.5
7	P5	9.4	-0.4	-0.5	-0.1
7	P6	9.3	-0.4	-0.4	0.6
7	P7	9.8	-1.3	-1.1	-0.3
7	P8	9.6	-0.6	-1.1	0.0
7	P9	9.3	0.4	0.4	4.2
7	P10	9.1	-0.4	-0.4	0.0
7	P11	8.8	0.3	-0.4	0.3
7	P12	8.9	-0.1	-0.2	1.3
7	P13	9.2	-0.5	-0.6	0.1
7	P14	9.5	-0.5	-0.5	0.2
7	P15	10.0	-0.6	-0.9	-0.2
7	P16	9.8	-0.9	-0.8	0.4
7	P17	9.9	-0.9	-1.1	-0.2
7	P18	9.4	-0.2	-0.3	0.1
7	P19	9.0	0.0	0.4	1.6
7	P20	10.4	-1.0	-1.1	0.9
7	P21	10.1	-0.5	0.0	2.9
7	P22	10.2	-0.7	-0.4	1.5
7	P23	10.4	-1.1	-0.9	0.3
7	P24	10.0	-0.9	-0.4	1.3
7	P25	9.9	-0.7	-0.4	0.3
8	P1	8.9	-0.3	-0.2	0.7
8	P2	9.0	-0.3	-0.5	0.7
8	P3	9.3	-0.5	-0.5	1.3
8	P4	9.2	-0.5	-0.6	1.4
8	P5	9.3	-0.5	-0.6	1.0
8	P6	9.2	0.2	-0.4	1.1
8	P7	8.9	-0.4	-0.3	0.9
8	P8	8.6	0.3	0.0	1.5

8	P9	8.9	-0.1	-0.3	0.3
8	P10	8.7	-0.5	-0.5	0.6
8	P11	8.8	-0.6	-0.6	1.1
8	P12	8.8	0.0	-0.3	1.1
8	P13	8.9	-0.4	-0.5	0.3
8	P14	9.4	-0.6	-0.3	0.4
8	P15	9.2	-0.3	0.4	2.3
8	P16	8.8	0.6	0.2	0.6
8	P17	9.1	-0.4	-0.5	0.2
8	P18	8.8	-0.3	0.0	8.7
8	P19	9.1	-0.2	-0.2	7.2
8	P20	9.6	-0.4	-0.2	1.0
8	P21	9.4	0.4	-0.1	0.4
8	P22	9.3	-0.4	-0.3	0.7
8	P23	9.2	0.0	0.0	1.1
8	P24	9.0	-0.3	-0.2	0.4
8	P25	9.0	0.2	0.0	1.2

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: MO-06
Description: Micro-Ohmeter
Manufacturer: Keithley
Model: 580
Serial #: 1110525
Accuracy: See Manual
… Last Cal: 06/22/2007, Next Cal: 06/22/2008

Equipment #: MO-07
Description: Multimeter / Data Acquistion System
Manufacturer: Keithley
Model: 2700
Serial #: 1116559
Accuracy: See Manual
… Last Cal: 6/22/2007, Next Cal: 6/22/2008

Equipment #: MO-01
Description: Micro-Ohmeter
Manufacturer: Keithley
Model: 580
Serial #: 0772740
Accuracy: See Manual
… Last Cal: 06/22/07, Next Cal: 06/22/08

Equipment #: MO-03
Description: Multimeter /Data Acquisition System
Manufacturer: Keithley
Model: 2700
Serial #: 0791975
Accuracy: See Manual
… Last Cal: 06/22/07, Next Cal: 06/22/08

Equipment #: TCT-03
Description: Dillon Quantrol TC2 Test Stand
Manufacturer: Dillon Quantrol
Model: TC2
Serial #: 02-1033-03
Accuracy: Speed Accuracy: +/- 5% of indicated speed; Displacement: +/- 5 micrometers.
… Last Cal: 5/18/07, Next Cal: 5/18/08