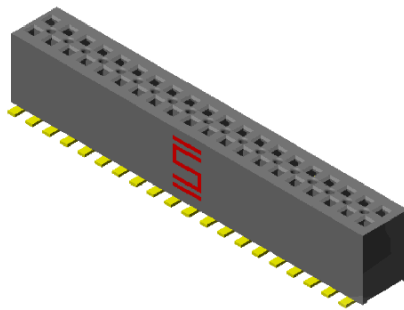




Project Number:		Tracking Code: TC095-FLE-2208			
Requested by: Bryon Saylor		Date: 4/17/2009		Product Rev: V	
Part #: FLE-130-02-H-DV-A/FTSH-130-02-S-DV-A		Lot #: 1/8/09		Tech: Rodney Riley & Gary Lomax	Eng: Troy Cook
Part description: FLE					Qty to test: 30
Test Start: 01/27/2009		Test Completed: 3/31/2009			



EXTENDED LIFE PRODUCTS TEST REPORT

PART DESCRIPTION

FLE-130-02-H-DV-A/FTSH-130-02-S-DV-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.

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SCOPE

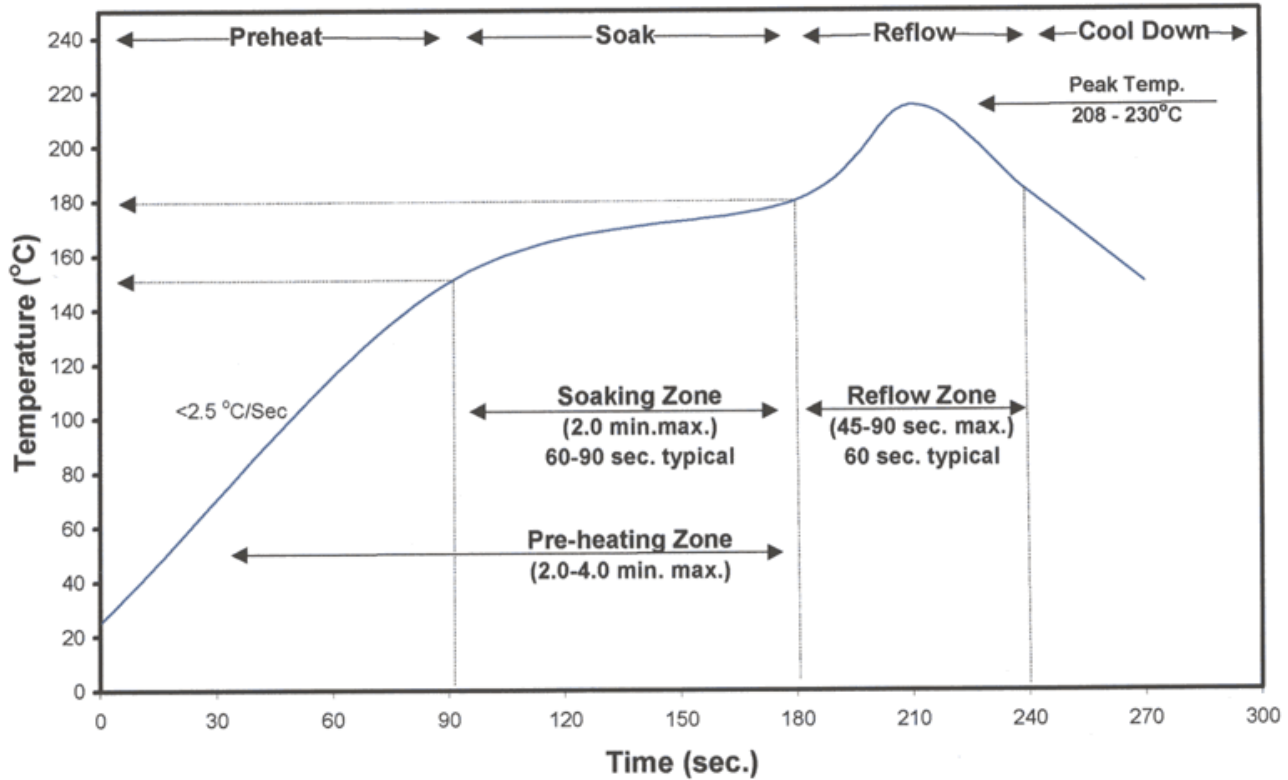
To perform the following tests: Test to current ELP test plan for 250, 500 and 1000 cycles.

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
- 9) Re-Flow Time/Temp: See accompanying profile.
- 10) Samtec Test PCBs used: PCB-100169-TST-XX

TYPICAL OVEN PROFILE (Soldering Parts to Test Boards)**Standard Solder Paste Reflow Profile
for Kester Paste Containing
Alloys: Sn63Pb37 or Sn62Pb36Ag02**

FLOWCHARTS

Durability

TEST STEP	GROUP A 250 Points - 10 Samples 250 Cycles	GROUP B 250 Points - 10 Samples 500 Cycles	GROUP C 250 Points - 10 Samples 1,000 Cycles
01	LLCR-1	LLCR-1	LLCR-1
02	250 Cycles	500 Cycles	1,000 Cycles
03	LLCR-2	LLCR-2	LLCR-2
04	Data Review	Data Review	Data Review
05	Thermals	Thermals	Thermals
06	LLCR-3	LLCR-3	LLCR-3
07	Data Review	Data Review	Data Review
08	Humidity	Humidity	Humidity
09	LLCR-4	LLCR-4	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. $\leq +5.0$ 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

RESULTS

LLCR Durability (250 LLCR test points)

- **Initial** ----- 12.9 mOhms Max
- **Durability, 250 Cycles**
 - **<= +5.0 mOhms** ----- 250 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** ----- 250 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** ----- 250 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 (250 LLCR test points)

- **Initial** ----- 12.7mOhms Max
- **Durability, 500 Cycles**
 - **<= +5.0 mOhms** ----- 250 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** ----- 250 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** ----- 250 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 (250 LLCR test points)

- **Initial** ----- **12.3 mOhms Max**
- **Durability, 1,000 Cycles**
 - **<= +5.0 mOhms** ----- **250 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** ----- **250 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** ----- **250 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**

DATA SUMMARIES**LLCR:**

- 1) A total of 250 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	Feb. 06 2009	Feb. 12 2009	Feb. 24 2009	Mar. 11 2009
Room Temp C	24	24	25	25
RH	27%	27%	223%	37%
Name	Marshall	Marshall	Marshall	Lomax
mOhm values	Actual Initial	Delta 250 Cycles	Delta Thermal	Delta Humidity
Average	10.6	0.0	0.0	-0.5
St. Dev.	0.4	0.4	0.5	0.4
Min	9.7	-2.5	-2.7	-3.0
Max	12.9	1.7	2.3	0.9
Count	250	250	250	250

Date	Feb. 06 2009	Feb. 12 2009	Feb. 24 2009	Mar. 11 2009
Room Temp C	24	23	25	25
RH	27%	31%	24%	37%
Name	Marshall	Marshall	Marshall	Lomax
mOhm values	Actual Initial	Delta 500 Cycles	Delta Thermal	Delta Humidity
Average	10.6	0.0	-0.1	-0.5
St. Dev.	0.4	0.4	0.4	0.4
Min	9.8	-0.9	-1.1	-1.5
Max	12.7	2.0	1.9	0.9
Count	250	250	250	250

Date	Feb. 06 2009	Feb. 16 2009	Mar. 10 2009	Mar. 24 2009
Room Temp C	24	22	25	23
RH	28%	22%	38%	24%
Name	Marshall	Marshall	RILEY	RILEY
mOhm values	Actual Initial	Delta 1000 Cycles	Delta Thermal	Delta Humidity
Average	10.5	0.2	0.1	-0.3
St. Dev.	0.4	0.6	0.6	0.5
Min	9.6	-1.3	-1.1	-1.5
Max	12.3	3.2	3.4	2.0
Count	250	250	250	250

DATA**LLCR:**

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	250 Cycles	Thermal	Humidity
1	P1	10.1	-0.2	-0.1	-0.1
1	P2	10.2	0.1	0.1	0.0
1	P3	10.3	0.0	0.1	0.0
1	P4	10.3	0.2	0.5	-0.1
1	P5	11.5	-0.1	0.0	-0.8
1	P6	12.3	0.2	-0.2	-0.4
1	P7	11.2	0.3	-0.1	-0.5
1	P8	10.8	0.3	0.1	-0.5
1	P9	10.7	0.4	-0.1	-0.7
1	P10	10.8	0.1	-0.4	-0.8
1	P11	10.1	0.1	0.0	-0.4
1	P12	10.3	0.3	-0.3	-0.6
1	P13	10.6	-0.1	-0.4	-0.9
1	P14	10.2	0.0	-0.3	-0.5
1	P15	10.2	0.0	-0.2	-0.6
1	P16	10.3	0.1	0.0	-0.5
1	P17	10.2	-0.2	-0.2	-0.6
1	P18	10.9	-0.3	-0.1	-0.9
1	P19	10.8	-0.5	-0.2	-0.7
1	P20	11.3	-0.1	0.0	0.7
1	P21	10.5	1.7	1.4	-0.2
1	P22	11.2	0.5	0.6	-0.8
1	P23	10.1	0.8	1.0	-0.1
1	P24	9.9	0.4	0.4	0.0
1	P25	9.9	0.5	0.3	0.1
2	P1	10.4	-0.2	0.1	-0.2
2	P2	11.5	-1.1	-0.7	-1.2
2	P3	10.4	0.0	0.3	-0.2
2	P4	10.9	-0.2	1.0	0.0
2	P5	10.7	0.3	2.1	-0.2
2	P6	11.4	-0.6	-0.3	-0.5
2	P7	11.2	-0.8	-0.3	-1.0
2	P8	11.0	-0.6	0.5	-0.9
2	P9	10.8	-0.2	2.3	-0.7
2	P10	10.7	-0.1	1.8	-0.6
2	P11	10.6	-0.3	0.1	-0.7
2	P12	10.9	-0.5	0.1	-0.9
2	P13	11.0	-0.2	0.0	-0.9
2	P14	10.3	-0.6	0.1	-0.4
2	P15	10.8	-0.4	0.2	-0.8
2	P16	10.3	-0.5	0.0	-0.7
2	P17	10.7	-0.5	-0.1	-0.8

2	P18	10.5	-0.4	0.5	-0.5
2	P19	10.8	-0.1	0.9	-0.1
2	P20	10.6	-0.1	1.4	0.7
2	P21	11.0	-0.4	0.2	-0.7
2	P22	10.8	-0.2	0.8	-0.8
2	P23	10.3	0.3	0.4	-0.2
2	P24	10.2	0.3	0.0	-0.2
2	P25	10.8	-0.2	-0.2	-0.5
3	P1	10.0	0.3	0.4	0.3
3	P2	10.1	0.5	0.8	0.2
3	P3	9.8	0.3	0.4	0.2
3	P4	10.1	0.4	0.5	0.0
3	P5	10.4	0.3	0.2	-0.3
3	P6	10.9	1.0	-0.2	-0.3
3	P7	10.4	1.2	0.7	-0.2
3	P8	10.4	1.0	0.7	-0.3
3	P9	10.5	0.5	0.2	-0.4
3	P10	10.7	0.5	0.5	-0.4
3	P11	10.1	0.6	0.0	-0.3
3	P12	10.3	0.3	-0.1	-0.4
3	P13	10.4	0.0	-0.3	-0.6
3	P14	10.3	0.1	-0.3	-0.5
3	P15	10.7	0.0	0.0	-0.6
3	P16	10.6	-0.3	0.2	-0.1
3	P17	11.0	-0.2	0.0	-0.6
3	P18	10.6	0.0	1.1	0.4
3	P19	11.0	-0.1	-0.1	-0.1
3	P20	10.7	0.1	0.4	0.4
3	P21	11.3	1.5	0.1	-1.3
3	P22	10.6	1.1	-0.1	-0.6
3	P23	10.4	0.8	0.1	-0.5
3	P24	10.2	1.0	0.5	-0.1
3	P25	9.7	0.6	0.5	0.3
4	P1	10.3	-0.1	-0.1	-0.2
4	P2	10.8	-0.1	-0.1	-0.5
4	P3	10.1	-0.1	0.3	0.0
4	P4	10.5	0.3	0.3	-0.2
4	P5	10.5	0.2	-0.1	-0.3
4	P6	10.8	-0.1	-0.3	-0.5
4	P7	10.5	0.0	-0.3	-0.6
4	P8	10.2	0.0	-0.2	-0.5
4	P9	10.4	0.0	-0.3	-0.7
4	P10	10.7	-0.2	-0.3	-0.9
4	P11	9.9	0.5	-0.2	-0.3
4	P12	10.1	0.9	-0.1	-0.4
4	P13	10.1	0.2	-0.4	-0.6
4	P14	10.0	0.5	0.0	-0.3
4	P15	10.7	0.1	-0.3	-0.5
4	P16	10.4	0.3	-0.1	-0.7

4	P17	10.8	0.2	-0.1	-0.6
4	P18	10.5	-0.1	0.1	-0.2
4	P19	10.8	0.0	-0.1	-0.6
4	P20	10.6	0.3	0.1	-0.1
4	P21	11.5	0.9	0.0	-0.4
4	P22	10.7	-0.2	-0.4	-0.4
4	P23	9.9	0.4	0.4	0.3
4	P24	10.2	0.4	0.2	0.1
4	P25	9.8	0.2	0.0	-0.1
5	P1	10.4	-0.5	-0.4	-0.6
5	P2	11.0	-0.4	-0.1	-0.9
5	P3	10.5	0.1	0.2	-0.4
5	P4	10.9	0.1	0.0	-0.7
5	P5	10.1	0.6	0.5	-0.2
5	P6	10.8	0.2	-0.3	-0.3
5	P7	10.4	0.0	-0.2	-0.6
5	P8	10.3	-0.1	-0.4	-0.9
5	P9	10.1	0.0	-0.3	-0.6
5	P10	10.6	-0.3	-0.8	-1.1
5	P11	9.9	0.0	-0.3	-0.6
5	P12	10.4	-0.4	-0.8	-1.0
5	P13	10.2	-0.3	-0.6	-0.8
5	P14	10.2	-0.1	-0.5	-0.6
5	P15	10.1	-0.1	0.0	-0.6
5	P16	10.8	-0.1	0.0	-0.7
5	P17	10.6	0.0	-0.3	-0.8
5	P18	11.1	-0.1	0.1	-0.9
5	P19	10.9	0.1	-0.1	-0.7
5	P20	11.5	-0.1	0.8	0.9
5	P21	10.6	0.0	-0.3	-0.7
5	P22	11.2	-0.4	-0.6	-1.0
5	P23	10.3	-0.1	0.1	-0.3
5	P24	10.0	0.3	0.2	0.0
5	P25	9.7	0.1	0.3	0.1
6	P1	10.3	-0.2	-0.2	-0.3
6	P2	10.8	0.3	0.0	-0.4
6	P3	10.2	0.2	-0.3	-0.4
6	P4	10.4	0.1	-0.2	-0.4
6	P5	10.5	0.0	-0.5	-0.6
6	P6	11.0	-0.6	-0.7	-0.9
6	P7	10.4	-0.5	-0.3	-0.5
6	P8	10.6	-0.4	-0.4	-0.8
6	P9	10.5	-0.5	-0.4	-0.9
6	P10	10.6	-0.4	-0.2	-0.9
6	P11	10.2	-0.1	-0.2	-0.7
6	P12	10.0	0.0	0.1	-0.5
6	P13	9.9	-0.1	0.0	-0.5
6	P14	9.8	0.1	0.0	-0.4
6	P15	10.5	-0.2	-0.2	-0.7

6	P16	10.4	-0.3	0.1	-0.5
6	P17	10.6	-0.2	0.5	-0.5
6	P18	10.7	-0.2	0.4	-0.5
6	P19	11.0	-0.2	0.2	-0.5
6	P20	10.7	-0.1	0.8	0.3
6	P21	11.0	-0.2	-0.4	-0.8
6	P22	10.7	-0.2	-0.4	-0.8
6	P23	10.4	0.3	0.0	-0.4
6	P24	10.6	0.6	0.0	-0.3
6	P25	10.9	-0.6	-0.6	-0.6
7	P1	10.6	0.0	0.5	0.1
7	P2	10.9	0.0	1.0	0.2
7	P3	11.1	-0.2	0.9	0.1
7	P4	11.0	-0.2	0.2	-0.4
7	P5	10.6	0.0	0.3	-0.2
7	P6	9.9	1.0	-0.1	-0.1
7	P7	9.9	1.0	0.6	0.2
7	P8	10.5	-0.6	0.2	-0.3
7	P9	10.7	-0.3	-0.1	-0.7
7	P10	10.4	-0.3	-0.3	-0.7
7	P11	10.3	-0.2	-0.2	-0.6
7	P12	10.3	0.1	0.0	-0.5
7	P13	10.5	-0.2	-0.1	-0.5
7	P14	10.6	0.1	-0.2	-0.6
7	P15	10.4	0.2	0.0	-0.5
7	P16	10.6	0.1	-0.1	-0.5
7	P17	10.5	0.0	-0.4	-0.6
7	P18	10.5	0.5	-0.3	-0.4
7	P19	10.1	0.4	0.1	0.0
7	P20	10.2	0.7	0.3	0.1
7	P21	10.9	0.5	1.1	-0.6
7	P22	11.2	0.4	1.6	-0.5
7	P23	10.9	0.3	0.6	-0.5
7	P24	11.2	0.4	0.2	-0.5
7	P25	11.1	0.3	-0.5	-0.6
8	P1	10.6	0.2	0.1	-0.1
8	P2	11.0	-0.2	0.2	0.4
8	P3	10.4	-0.1	0.1	-0.4
8	P4	10.8	-0.1	-0.1	-0.5
8	P5	10.6	-0.1	0.1	-0.3
8	P6	10.6	-0.1	-0.2	-0.3
8	P7	10.5	0.0	-0.2	-0.4
8	P8	10.7	0.1	-0.2	-0.6
8	P9	10.7	-0.1	-0.2	-0.8
8	P10	10.9	-0.3	-0.6	-1.0
8	P11	10.6	-0.3	-0.5	-0.8
8	P12	10.4	-0.1	-0.3	-0.6
8	P13	11.1	-0.4	-0.6	-1.1
8	P14	10.2	-0.3	-0.3	-0.8

8	P15	10.5	-0.1	-0.3	-0.8
8	P16	10.3	-0.3	0.0	-0.7
8	P17	10.5	-0.2	0.0	-0.7
8	P18	10.1	0.0	0.1	-0.3
8	P19	10.6	0.0	0.4	-0.4
8	P20	10.5	0.1	0.3	-0.1
8	P21	10.7	0.1	0.0	-0.5
8	P22	10.3	0.1	-0.2	-0.5
8	P23	10.9	0.0	-0.2	-0.5
8	P24	10.7	0.1	-0.3	-0.6
8	P25	10.6	0.0	-0.1	-0.3
9	P1	12.2	-1.0	-2.0	-1.9
9	P2	10.4	0.1	-0.1	-0.3
9	P3	11.0	0.1	-0.4	-0.6
9	P4	11.4	-0.6	0.0	-0.9
9	P5	10.3	0.6	0.1	-0.2
9	P6	10.6	0.3	-0.3	-0.3
9	P7	11.4	-0.5	-0.8	-1.2
9	P8	11.0	-0.2	0.2	-0.6
9	P9	12.9	-2.5	-2.7	-3.0
9	P10	10.6	0.0	-0.3	-0.6
9	P11	10.6	0.1	-0.3	-0.5
9	P12	10.6	0.1	-0.4	-0.8
9	P13	10.6	-0.1	-0.4	-0.8
9	P14	10.6	-0.1	-0.1	-0.1
9	P15	10.3	0.0	0.3	-0.4
9	P16	10.4	-0.2	0.0	-0.5
9	P17	10.4	-0.1	-0.3	-0.6
9	P18	10.8	-0.3	-0.3	-0.3
9	P19	11.0	-0.3	-0.1	-0.4
9	P20	11.1	-0.5	-0.5	0.0
9	P21	10.7	0.0	-0.3	-0.6
9	P22	11.2	-0.1	-0.2	-0.6
9	P23	10.7	-0.2	-0.3	-0.4
9	P24	10.7	-0.1	-0.2	-0.4
9	P25	10.6	0.4	0.1	-0.1
10	P1	10.4	-0.1	-0.1	-0.2
10	P2	10.6	-0.1	-0.2	0.1
10	P3	10.2	-0.2	0.0	-0.3
10	P4	10.8	-0.4	-0.1	-0.7
10	P5	10.4	-0.1	0.1	0.0
10	P6	10.7	-0.3	-0.4	-0.6
10	P7	10.5	-0.2	-0.5	-0.8
10	P8	10.6	-0.1	-0.5	-0.5
10	P9	10.6	-0.3	-0.7	-0.9
10	P10	10.6	-0.6	-0.8	-1.1
10	P11	9.9	0.3	-0.2	-0.4
10	P12	10.1	0.1	-0.3	-0.5
10	P13	10.3	0.1	-0.3	-0.8

10	P14	10.1	0.3	-0.3	-0.5
10	P15	10.6	0.1	-0.5	-0.6
10	P16	10.3	-0.1	-0.2	-0.6
10	P17	10.7	0.0	-0.4	-0.7
10	P18	10.9	-0.1	-0.3	-0.7
10	P19	11.0	0.1	0.0	-0.6
10	P20	11.0	0.1	0.4	0.2
10	P21	12.0	0.1	-1.1	-1.8
10	P22	10.5	0.3	0.2	0.1
10	P23	10.0	0.1	0.3	-0.1
10	P24	10.2	0.3	0.4	0.1
10	P25	9.8	0.2	0.5	0.2

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	500 Cycles	Thermal	Humidity
1	P1	10.2	-0.1	-0.2	-0.3
1	P2	10.3	-0.1	0.3	0.0
1	P3	9.8	0.1	0.4	-0.1
1	P4	10.3	0.0	0.2	-0.3
1	P5	10.3	-0.2	0.1	-0.4
1	P6	10.7	0.0	-0.3	-0.1
1	P7	10.4	0.4	0.1	-0.3
1	P8	10.3	2.0	0.1	-0.5
1	P9	10.6	0.0	-0.3	-0.6
1	P10	10.6	0.1	-0.6	-0.9
1	P11	10.4	0.9	-0.4	-0.6
1	P12	10.5	0.0	-0.4	-0.8
1	P13	10.3	0.3	-0.3	-0.6
1	P14	10.6	0.2	-0.4	-0.7
1	P15	10.9	0.0	-0.5	-0.9
1	P16	10.6	0.2	-0.3	-0.8
1	P17	11.1	0.2	-0.3	-1.0
1	P18	10.5	0.2	-0.1	-0.7
1	P19	11.3	0.1	-0.1	-0.9
1	P20	10.9	0.0	-0.5	-0.6
1	P21	10.6	0.2	-0.1	-0.5
1	P22	10.5	0.2	-0.3	-0.9
1	P23	10.4	0.3	0.3	0.0
1	P24	10.9	0.4	-0.2	-0.4
1	P25	10.3	0.4	0.2	0.2
2	P1	10.9	0.0	0.2	0.1
2	P2	10.8	0.4	0.2	-0.3
2	P3	10.9	0.0	0.1	-0.6
2	P4	10.6	-0.1	0.1	-0.5
2	P5	10.3	0.1	0.2	-0.4
2	P6	10.5	0.4	0.1	0.1
2	P7	10.3	0.1	0.6	0.2

2	P8	10.7	-0.2	0.2	-0.6
2	P9	10.9	-0.2	-0.3	-0.9
2	P10	10.8	-0.1	-0.1	-0.8
2	P11	10.7	-0.3	-0.5	-1.0
2	P12	10.5	-0.5	-0.5	-0.5
2	P13	10.6	-0.4	-0.4	0.9
2	P14	10.3	0.1	0.3	-0.4
2	P15	10.1	0.1	-0.1	-0.6
2	P16	10.7	-0.4	-0.5	-0.9
2	P17	10.5	-0.2	-0.4	-0.8
2	P18	10.8	-0.4	-0.1	-0.5
2	P19	10.1	0.0	0.4	-0.1
2	P20	10.3	0.0	0.1	0.0
2	P21	10.6	0.3	-0.3	-0.7
2	P22	10.6	-0.3	-0.5	-0.7
2	P23	10.9	-0.2	-0.2	-0.5
2	P24	10.2	0.4	-0.5	-0.6
2	P25	11.6	-0.4	-1.1	-1.4
3	P1	11.0	-0.3	0.6	0.2
3	P2	11.0	-0.1	-0.1	-0.4
3	P3	10.6	0.1	0.2	-0.2
3	P4	10.9	-0.3	-0.1	-0.6
3	P5	10.5	0.0	0.0	-0.5
3	P6	11.0	0.5	-0.2	-0.1
3	P7	10.7	0.4	0.2	-0.1
3	P8	10.6	0.1	0.8	-0.4
3	P9	10.8	-0.3	0.4	-0.8
3	P10	10.9	0.2	-0.3	-0.9
3	P11	10.7	-0.1	-0.2	-0.8
3	P12	10.4	0.2	-0.3	-0.5
3	P13	11.3	0.1	-0.5	-1.2
3	P14	10.4	0.1	-0.4	-0.7
3	P15	10.6	-0.1	-0.4	-0.9
3	P16	10.5	0.1	-0.4	-0.7
3	P17	10.2	-0.1	-0.1	-0.6
3	P18	10.5	0.6	0.0	-0.3
3	P19	10.3	0.5	0.1	-0.2
3	P20	10.8	-0.1	0.1	-0.1
3	P21	11.0	0.0	-0.4	-0.9
3	P22	11.0	-0.1	-0.5	-0.5
3	P23	10.8	0.5	-0.4	-0.6
3	P24	10.5	0.8	-0.5	-0.4
3	P25	10.1	0.7	0.5	0.4
4	P1	10.8	-0.5	-0.1	-0.5
4	P2	10.8	-0.1	0.1	-0.4
4	P3	10.1	0.1	0.1	-0.4
4	P4	10.6	-0.2	-0.4	-0.7
4	P5	10.5	-0.2	-0.4	-0.7
4	P6	10.0	0.2	0.3	0.3

4	P7	10.1	0.1	0.9	0.5
4	P8	10.9	-0.4	1.9	0.5
4	P9	10.6	-0.3	0.1	-0.5
4	P10	10.6	-0.4	-0.2	-0.9
4	P11	11.2	-0.9	-0.1	-1.0
4	P12	11.1	-0.7	0.1	-1.0
4	P13	10.9	-0.3	-0.1	-0.6
4	P14	10.3	-0.2	0.2	-0.5
4	P15	10.6	-0.2	0.3	-0.6
4	P16	10.5	-0.3	0.4	-0.6
4	P17	10.8	-0.5	0.2	-0.4
4	P18	9.9	0.0	0.4	-0.1
4	P19	10.4	0.1	0.3	-0.1
4	P20	10.1	0.1	0.1	0.1
4	P21	10.2	0.4	0.5	-0.2
4	P22	9.8	0.5	0.4	-0.1
4	P23	10.4	0.4	0.3	-0.2
4	P24	10.9	-0.5	-0.1	-0.5
4	P25	10.6	0.2	0.2	-0.1
5	P1	10.6	-0.3	-0.3	-0.3
5	P2	10.7	0.0	-0.5	-0.1
5	P3	10.9	-0.4	-0.7	-0.7
5	P4	10.8	-0.5	-0.4	-0.6
5	P5	11.2	-0.5	-0.7	-0.8
5	P6	11.0	-0.8	-0.8	-0.7
5	P7	10.8	-0.7	-0.6	-0.7
5	P8	10.6	-0.2	-0.5	-0.7
5	P9	10.9	-0.6	-0.7	-1.1
5	P10	10.3	-0.1	-0.4	-0.6
5	P11	10.2	-0.2	-0.5	-0.7
5	P12	10.2	-0.2	-0.3	-0.7
5	P13	10.7	-0.4	-0.7	-1.1
5	P14	10.2	-0.1	-0.5	-0.7
5	P15	10.6	-0.2	-0.5	-0.7
5	P16	10.2	0.0	-0.1	-0.5
5	P17	10.5	-0.2	-0.1	-0.5
5	P18	10.6	0.1	-0.2	-0.7
5	P19	10.7	-0.3	-0.3	-0.5
5	P20	10.7	0.3	-0.2	0.1
5	P21	10.8	0.2	-0.2	-0.6
5	P22	10.7	0.0	-0.4	-0.6
5	P23	10.2	0.4	-0.2	-0.3
5	P24	11.1	0.3	-0.6	-0.7
5	P25	10.6	0.6	-0.3	-0.8
6	P1	11.0	0.1	-0.3	-0.4
6	P2	11.2	0.1	0.0	-0.1
6	P3	10.7	-0.1	-0.2	0.6
6	P4	11.0	-0.2	-0.4	-0.8
6	P5	10.8	-0.1	0.0	-0.4

6	P6	10.3	0.0	0.2	0.0
6	P7	9.8	0.2	0.2	0.2
6	P8	10.9	-0.2	-0.1	-0.8
6	P9	10.3	0.0	-0.2	-0.4
6	P10	10.6	-0.1	-0.6	-0.9
6	P11	10.5	-0.4	-0.6	-0.9
6	P12	10.5	-0.4	-0.4	-0.8
6	P13	10.4	-0.4	-0.4	-0.7
6	P14	10.1	-0.2	-0.3	-0.6
6	P15	10.1	-0.1	0.0	-0.5
6	P16	9.9	0.2	0.1	-0.4
6	P17	10.1	0.0	0.0	-0.3
6	P18	9.8	0.3	0.3	0.0
6	P19	10.2	0.1	0.1	0.0
6	P20	10.0	0.4	0.4	0.3
6	P21	10.7	0.3	-0.1	-0.2
6	P22	10.2	0.2	-0.1	-0.3
6	P23	11.1	0.4	-0.1	-0.2
6	P24	10.7	0.6	0.2	-0.1
6	P25	10.7	0.5	-0.1	-0.4
7	P1	10.2	-0.1	0.0	-0.1
7	P2	10.6	-0.3	-0.3	-0.6
7	P3	10.9	-0.4	0.0	-0.3
7	P4	10.6	-0.5	-0.4	-0.6
7	P5	10.8	-0.1	-0.4	-0.7
7	P6	11.2	0.2	0.0	0.0
7	P7	11.3	0.1	0.1	-0.3
7	P8	11.0	0.1	0.2	-0.2
7	P9	11.0	0.2	0.6	-0.2
7	P10	11.1	-0.2	0.2	-0.2
7	P11	11.0	-0.1	-0.1	-0.7
7	P12	10.7	0.4	0.3	-0.4
7	P13	11.1	-0.5	-0.2	-0.9
7	P14	10.7	0.3	0.1	-0.5
7	P15	11.0	-0.2	0.1	-1.1
7	P16	10.5	0.2	0.1	-0.3
7	P17	10.6	-0.1	0.1	-0.6
7	P18	11.1	-0.3	-0.2	-0.7
7	P19	11.0	-0.3	-0.1	-0.6
7	P20	11.1	-0.1	-0.1	-0.3
7	P21	11.8	-0.7	-0.8	-1.5
7	P22	11.6	-0.2	-0.4	-0.9
7	P23	10.6	-0.4	-0.6	-0.9
7	P24	10.7	0.3	-0.3	-0.6
7	P25	9.8	0.2	0.0	-0.1
8	P1	10.5	-0.2	-0.4	-0.5
8	P2	10.6	0.2	-0.1	-0.5
8	P3	10.7	-0.1	-0.2	-0.9
8	P4	11.0	-0.4	-0.3	-1.0

8	P5	10.5	0.2	-0.2	-0.7
8	P6	10.7	0.1	0.1	0.5
8	P7	10.8	0.1	-0.3	-0.5
8	P8	10.9	-0.2	-0.3	-0.7
8	P9	10.7	-0.1	0.0	-0.7
8	P10	10.6	0.2	-0.4	-0.8
8	P11	10.4	0.2	-0.4	-0.7
8	P12	10.4	-0.1	-0.6	-0.8
8	P13	10.4	-0.1	-0.5	-0.7
8	P14	10.7	-0.1	-0.5	-0.8
8	P15	10.6	0.2	-0.1	-0.7
8	P16	10.7	-0.3	-0.4	-0.8
8	P17	10.6	-0.3	-0.6	-0.9
8	P18	11.0	-0.2	-0.8	-0.9
8	P19	10.6	-0.2	0.0	-0.5
8	P20	10.9	-0.3	-0.7	-0.6
8	P21	10.7	-0.4	-0.7	-0.9
8	P22	10.8	0.2	-0.3	-0.5
8	P23	10.7	-0.6	-0.6	-0.8
8	P24	10.3	0.7	0.2	-0.1
8	P25	10.5	0.4	0.1	-0.2
9	P1	10.9	-0.6	-0.6	0.8
9	P2	11.0	-0.6	-0.2	-0.5
9	P3	10.3	-0.4	0.2	-0.2
9	P4	11.1	-0.6	-0.3	-1.0
9	P5	10.6	-0.1	-0.1	-0.5
9	P6	10.9	-0.2	-0.3	-0.4
9	P7	10.6	0.0	-0.2	-0.4
9	P8	10.7	-0.3	-0.5	-0.8
9	P9	10.8	-0.2	-0.7	-1.1
9	P10	10.6	-0.1	-0.6	-0.9
9	P11	10.6	-0.2	-0.5	-0.9
9	P12	10.7	-0.3	-0.2	-0.9
9	P13	10.5	-0.1	-0.4	-0.8
9	P14	10.6	-0.1	-0.5	-0.8
9	P15	10.8	-0.3	-0.5	-0.9
9	P16	10.7	0.1	-0.3	-0.7
9	P17	11.1	-0.4	-0.3	-0.8
9	P18	10.6	-0.3	-0.1	-0.5
9	P19	10.9	0.0	-0.1	-0.3
9	P20	10.4	0.3	-0.2	-0.2
9	P21	11.0	-0.2	-0.5	-0.7
9	P22	10.7	-0.3	-0.8	-0.9
9	P23	10.6	0.1	-0.3	-0.4
9	P24	10.4	0.0	-0.4	-0.4
9	P25	10.4	0.1	-0.2	-0.2
10	P1	11.2	0.0	-0.2	-0.2
10	P2	10.9	-0.2	0.1	-0.1
10	P3	10.9	-0.5	0.1	-0.2

10	P4	10.6	-0.4	0.2	-0.2
10	P5	11.1	-0.3	0.5	-0.5
10	P6	10.1	0.5	-0.1	-0.1
10	P7	10.2	0.8	0.2	0.1
10	P8	12.7	-0.8	0.6	-1.2
10	P9	10.7	0.6	-0.1	-0.6
10	P10	10.8	0.1	-0.6	-1.1
10	P11	10.8	0.2	-0.1	-0.9
10	P12	10.5	0.4	-0.2	-0.8
10	P13	10.5	0.5	0.0	-0.7
10	P14	10.7	0.1	-0.6	-1.0
10	P15	11.0	0.1	-0.4	-0.8
10	P16	10.7	0.3	0.5	-0.5
10	P17	10.6	-0.1	-0.2	-0.5
10	P18	10.4	0.1	-0.3	-0.5
10	P19	10.3	1.2	0.0	-0.1
10	P20	10.2	1.1	0.2	0.2
10	P21	10.3	0.2	-0.4	-0.6
10	P22	10.0	0.3	-0.1	-0.2
10	P23	10.6	-0.1	-0.3	-0.7
10	P24	10.9	0.0	-0.2	-0.4
10	P25	10.6	0.0	-0.1	-0.4

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	1000 Cycles	Thermal	Humidity
1	P1	10.1	-0.1	-0.1	-0.2
1	P2	11.0	-0.3	0.0	-0.2
1	P3	10.3	-0.1	0.1	0.0
1	P4	10.4	0.0	0.4	0.0
1	P5	10.7	0.1	0.4	-0.6
1	P6	11.2	-0.3	-0.5	-0.9
1	P7	10.8	-0.4	-0.3	-0.6
1	P8	10.3	0.1	0.0	-0.3
1	P9	10.5	0.1	0.2	-0.3
1	P10	10.4	0.2	0.0	-0.5
1	P11	10.1	0.1	0.1	-0.4
1	P12	10.2	0.0	-0.2	-0.6
1	P13	10.4	-0.2	-0.2	-0.5
1	P14	10.3	-0.1	-0.4	-0.6
1	P15	10.3	-0.3	-0.3	-0.7
1	P16	10.7	0.0	0.0	-0.8
1	P17	10.6	-0.2	-0.4	-0.8
1	P18	11.9	-1.0	-1.0	-1.5
1	P19	10.7	0.1	-0.1	-0.3
1	P20	11.3	0.2	0.0	-0.3
1	P21	10.8	0.0	-0.3	-0.8
1	P22	10.6	0.6	0.0	-0.3

1	P23	10.6	1.0	-0.1	-0.2
1	P24	10.0	0.5	-0.1	-0.3
1	P25	10.1	0.5	0.0	-0.1
2	P1	10.6	-1.3	-1.1	-1.3
2	P2	10.2	-0.6	-0.4	-0.3
2	P3	10.3	-0.5	-0.3	-0.6
2	P4	10.6	-0.7	0.0	-0.7
2	P5	10.6	-0.8	-0.8	-1.0
2	P6	11.2	-0.2	-0.2	-0.9
2	P7	10.8	0.3	-0.2	-0.5
2	P8	10.4	0.4	0.0	-0.2
2	P9	10.8	0.2	-0.4	-0.6
2	P10	10.7	0.1	-0.3	-0.7
2	P11	10.5	0.0	-0.3	-0.7
2	P12	10.4	0.2	-0.4	-0.6
2	P13	10.6	0.2	-0.6	-0.7
2	P14	10.3	0.1	-0.4	-0.6
2	P15	10.7	-0.6	-0.4	-0.8
2	P16	10.6	-0.1	-0.4	-0.8
2	P17	10.5	-0.4	-0.4	-0.9
2	P18	11.0	-0.1	-0.6	-1.2
2	P19	10.5	-0.2	-0.2	-0.6
2	P20	12.3	-0.7	-0.3	-0.7
2	P21	10.9	-0.5	-0.7	-1.0
2	P22	10.3	0.9	0.4	0.1
2	P23	10.4	0.4	0.1	-0.1
2	P24	9.8	0.4	0.0	0.1
2	P25	10.2	0.2	-0.3	-0.3
3	P1	9.9	0.5	-0.3	-0.3
3	P2	10.5	-0.3	-0.2	-0.5
3	P3	10.9	-0.3	0.3	0.2
3	P4	11.6	-1.1	-0.1	-0.4
3	P5	11.4	-1.0	0.1	-0.4
3	P6	11.5	0.1	0.2	0.2
3	P7	11.6	0.4	-0.1	-0.1
3	P8	10.7	0.1	0.0	-0.4
3	P9	10.4	0.1	-0.1	-0.6
3	P10	10.6	0.1	-0.5	-0.8
3	P11	10.1	0.1	-0.2	-0.6
3	P12	10.3	0.1	-0.4	-0.8
3	P13	10.4	0.4	-0.1	-0.8
3	P14	10.5	0.0	-0.4	-0.9
3	P15	10.5	0.2	-0.1	-0.8
3	P16	10.8	-0.2	-0.5	-1.0
3	P17	10.4	-0.2	-0.1	-0.7
3	P18	11.4	-0.6	0.0	-1.0
3	P19	10.4	0.1	-0.1	-0.4
3	P20	11.1	-0.1	0.2	-0.1
3	P21	10.8	0.3	-0.3	-0.8

3	P22	10.4	1.0	-0.1	-0.3
3	P23	10.0	0.7	0.1	-0.2
3	P24	10.1	0.6	0.1	-0.2
3	P25	11.2	-0.7	-0.9	-0.4
4	P1	10.4	0.0	-0.1	-0.3
4	P2	10.4	-0.2	0.1	-0.3
4	P3	10.6	0.0	0.8	0.3
4	P4	10.3	0.3	0.2	-0.2
4	P5	10.7	-0.3	-0.4	-0.8
4	P6	10.6	0.0	0.1	0.1
4	P7	10.6	-0.4	-0.1	0.3
4	P8	10.1	-0.2	0.0	-0.4
4	P9	10.4	-0.3	-0.2	-0.5
4	P10	10.1	-0.3	-0.1	-0.5
4	P11	10.0	0.0	0.0	-0.4
4	P12	10.3	-0.2	-0.1	-0.7
4	P13	10.4	-0.2	-0.4	-0.8
4	P14	10.4	-0.2	-0.3	-0.6
4	P15	10.5	-0.5	-0.4	-0.1
4	P16	10.7	-0.4	-0.2	-0.8
4	P17	10.6	-0.5	-0.1	-0.8
4	P18	10.8	-0.5	0.2	-0.5
4	P19	10.5	0.1	0.0	-0.4
4	P20	10.9	0.5	0.6	1.4
4	P21	10.9	-0.1	-0.3	-0.9
4	P22	11.0	0.0	-0.1	-0.5
4	P23	10.4	0.1	0.1	-0.2
4	P24	10.2	0.2	0.1	0.1
4	P25	10.2	0.0	0.1	1.0
5	P1	9.9	-0.3	-0.2	-0.4
5	P2	10.5	0.3	0.5	-0.3
5	P3	10.3	0.1	0.2	-0.5
5	P4	10.4	0.1	0.6	-0.1
5	P5	10.2	-0.1	0.9	-0.1
5	P6	10.9	1.7	1.2	0.7
5	P7	10.7	0.1	0.2	0.0
5	P8	11.1	-0.5	-0.3	-1.1
5	P9	10.5	-0.2	0.3	-0.6
5	P10	10.4	0.2	0.2	-0.3
5	P11	10.4	0.6	0.5	-0.1
5	P12	10.8	-0.8	-0.8	-1.0
5	P13	10.9	-0.3	-0.5	-0.8
5	P14	10.1	0.8	0.8	0.0
5	P15	10.7	-0.6	-0.4	-0.8
5	P16	10.4	0.0	-0.1	-0.5
5	P17	10.5	-0.4	-0.1	-0.6
5	P18	10.6	-0.1	0.2	-0.6
5	P19	11.1	-0.6	-0.4	-0.9
5	P20	10.7	1.6	1.9	1.3

5	P21	10.8	-0.2	0.0	-0.6
5	P22	10.1	0.4	0.9	0.2
5	P23	10.3	0.1	0.0	0.0
5	P24	10.6	-0.1	-0.6	-0.8
5	P25	10.2	0.6	-0.5	0.9
6	P1	10.3	0.4	0.6	0.5
6	P2	10.9	0.1	0.1	-0.3
6	P3	10.4	-0.1	0.4	-0.3
6	P4	10.4	0.6	1.3	0.0
6	P5	10.5	0.4	0.4	0.3
6	P6	10.8	0.5	0.2	-0.2
6	P7	10.6	0.5	0.3	-0.1
6	P8	10.2	0.6	-0.1	-0.3
6	P9	11.1	-0.1	-0.6	-0.9
6	P10	11.1	-0.2	-0.7	-0.9
6	P11	10.4	0.3	-0.3	-0.6
6	P12	10.8	0.2	-0.6	-0.9
6	P13	10.7	-0.1	-0.6	-0.8
6	P14	10.5	0.1	-0.3	-0.6
6	P15	10.1	0.3	0.0	-0.2
6	P16	10.6	0.6	-0.1	-0.5
6	P17	10.8	0.5	-0.5	-0.7
6	P18	10.8	0.1	-0.1	-0.5
6	P19	10.6	0.8	0.1	-0.4
6	P20	10.7	0.4	-0.3	-0.4
6	P21	10.7	0.1	0.0	-0.3
6	P22	10.3	0.3	0.2	0.0
6	P23	10.2	0.0	0.2	0.0
6	P24	10.1	0.7	0.9	0.3
6	P25	10.0	0.7	0.8	0.5
7	P1	11.1	-0.3	1.0	1.4
7	P2	11.0	0.8	0.5	-0.2
7	P3	11.1	0.6	0.2	-0.6
7	P4	10.8	0.4	0.4	-0.5
7	P5	11.0	0.3	0.6	-0.4
7	P6	9.8	0.5	0.5	0.4
7	P7	10.4	0.2	0.1	-0.3
7	P8	10.6	0.5	0.3	-0.2
7	P9	10.6	0.4	0.3	-0.5
7	P10	10.5	0.5	0.8	-0.5
7	P11	11.5	-0.2	0.0	-1.2
7	P12	10.8	0.0	-0.6	-1.1
7	P13	11.1	-0.2	-0.7	-1.2
7	P14	10.8	0.6	-0.3	-0.9
7	P15	10.5	0.4	0.5	-0.7
7	P16	10.5	0.9	0.2	0.2
7	P17	10.1	1.4	0.9	0.0
7	P18	10.5	1.3	0.3	-0.4
7	P19	9.6	0.3	0.6	0.1

7	P20	9.9	0.8	1.1	1.0
7	P21	10.2	3.2	0.3	-0.3
7	P22	10.8	1.8	-0.1	-0.3
7	P23	10.5	0.7	0.3	-0.4
7	P24	10.7	0.5	0.1	-0.1
7	P25	10.7	0.1	-0.2	0.3
8	P1	10.7	0.0	0.2	0.0
8	P2	10.7	-0.1	0.3	-0.3
8	P3	11.0	0.0	0.0	-0.5
8	P4	10.6	0.5	0.4	-0.2
8	P5	10.6	-0.3	-0.1	0.0
8	P6	9.9	0.2	0.2	0.1
8	P7	10.2	0.5	0.4	0.3
8	P8	10.5	-0.2	-0.2	-0.5
8	P9	10.4	-0.1	0.1	-0.4
8	P10	10.7	-0.2	0.1	-0.9
8	P11	10.6	0.0	-0.5	-0.7
8	P12	10.5	0.0	-0.2	-0.5
8	P13	10.5	-0.2	-0.2	-0.6
8	P14	10.3	-0.2	0.0	-0.4
8	P15	10.4	0.3	-0.3	-0.9
8	P16	10.8	-0.2	-0.7	-0.5
8	P17	10.5	0.2	-0.2	-0.8
8	P18	10.3	0.4	0.6	-0.4
8	P19	9.8	0.0	0.2	-0.3
8	P20	10.0	0.3	0.2	0.1
8	P21	10.4	0.1	0.1	-0.5
8	P22	10.9	0.1	-0.1	-0.4
8	P23	10.5	0.0	0.0	-0.3
8	P24	11.0	-0.3	-0.5	-0.8
8	P25	10.5	0.5	0.2	-0.1
9	P1	10.3	0.2	0.0	0.6
9	P2	10.5	0.1	-0.2	-0.6
9	P3	10.4	0.2	0.1	-0.1
9	P4	11.2	-1.0	-0.7	-0.6
9	P5	10.4	-0.2	0.0	-0.5
9	P6	9.8	0.1	0.2	0.0
9	P7	10.8	0.1	0.2	-0.7
9	P8	10.5	0.3	0.6	-0.5
9	P9	10.4	0.1	0.9	-0.5
9	P10	10.4	0.3	0.4	-0.5
9	P11	9.9	0.4	0.2	-0.3
9	P12	10.4	0.4	-0.2	-0.9
9	P13	10.1	0.3	-0.3	-0.6
9	P14	10.4	0.2	-0.3	-0.8
9	P15	10.2	0.3	0.1	-0.6
9	P16	10.4	0.5	0.2	-0.3
9	P17	10.4	0.2	-0.1	1.0
9	P18	10.7	-0.1	0.0	-0.6

9	P19	10.4	0.1	-0.1	-0.5
9	P20	11.3	1.5	0.2	-0.5
9	P21	10.3	1.7	0.6	-0.4
9	P22	10.3	2.3	0.9	0.0
9	P23	9.7	1.7	0.7	0.0
9	P24	10.0	1.8	0.2	-0.3
9	P25	9.9	2.0	0.1	0.2
10	P1	9.9	0.5	2.8	1.7
10	P2	10.5	0.6	0.6	0.2
10	P3	10.3	0.7	1.5	0.4
10	P4	10.4	1.2	1.3	1.6
10	P5	10.2	0.6	1.8	0.6
10	P6	10.9	0.1	-0.5	-0.2
10	P7	10.7	0.3	0.6	0.3
10	P8	11.1	0.1	-0.4	-0.9
10	P9	10.5	0.1	0.5	-0.4
10	P10	10.4	0.0	0.6	-0.3
10	P11	10.4	0.0	0.6	-0.4
10	P12	10.8	-0.2	0.2	-0.6
10	P13	10.9	-0.4	1.0	-0.4
10	P14	10.1	0.0	0.3	-0.3
10	P15	10.7	0.4	3.4	1.3
10	P16	10.4	-0.4	0.4	-0.3
10	P17	10.5	-0.2	0.5	0.2
10	P18	10.6	0.1	2.1	2.0
10	P19	11.1	0.0	1.3	1.9
10	P20	10.7	0.0	1.9	1.3
10	P21	10.8	-0.4	-0.1	-0.4
10	P22	10.1	0.8	0.0	0.2
10	P23	10.3	0.7	-0.1	0.1
10	P24	10.6	1.4	0.1	0.5
10	P25	10.2	1.1	0.1	0.1

EQUIPMENT AND CALIBRATION SCHEDULES**Equipment #:** MO-06**Description:** Micro-Ohmmeter**Manufacturer:** Keithley**Model:** 580**Serial #:** 1110525**Accuracy:** See Manual

... Last Cal: 06/17/2008, Next Cal: 06/17/2009

Equipment #: MO-07**Description:** Multimeter / Data Acquisition System**Manufacturer:** Keithley**Model:** 2700**Serial #:** 1116559**Accuracy:** See Manual

... Last Cal: 6/17/2008, Next Cal: 6/17/2009

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: 5/6/2008, Next Cal: 5/6/2009

Equipment #: THC-04**Description:** Temperature/Humidity Chamber**Manufacturer:** Thermotron**Model:** SM-8-3800**Serial #:** 37782**Accuracy:** See Manual

... Last Cal: 04/07/2009, Next Cal: 04/07/2010

Equipment #: MO-01**Description:** Micro-Ohmmeter**Manufacturer:** Keithley**Model:** 580**Serial #:** 0772740**Accuracy:** See Manual

... Last Cal: 06/17/08, Next Cal: 06/17/09

Equipment #: MO-03**Description:** Multimeter /Data Acquisition System**Manufacturer:** Keithley**Model:** 2700**Serial #:** 0791975**Accuracy:** See Manual

... Last Cal: 06/17/08, Next Cal: 06/17/09

Equipment #: OV-03

Description: Cascade Tek Forced Air Oven

Manufacturer: Cascade Tek

Model: TFO-5

Serial #: 0500100

Accuracy: Temp. Stability: +/- .1C/C change in ambient Temp. Stability: +/- .1C/C change in ambient
... Last Cal: 06/17/2009, Next Cal: 06/17/2010