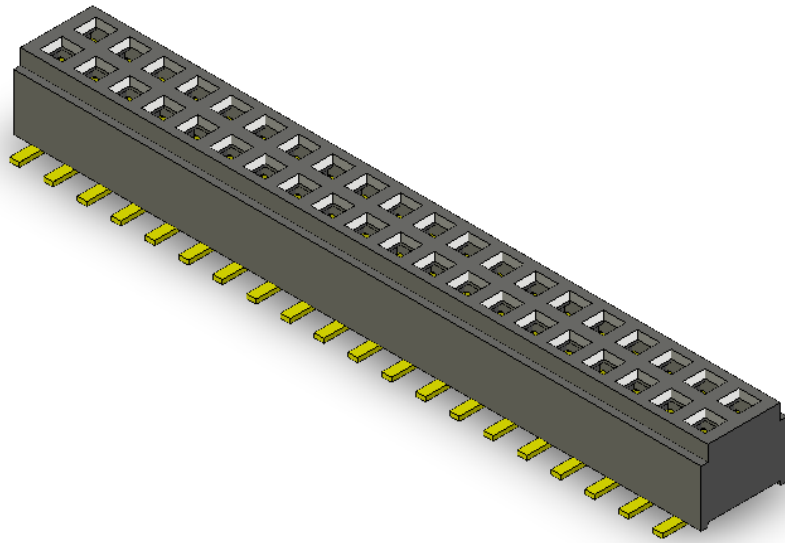




Project Number:		Tracking Code: TC095-CLM-2211			
Requested by: Bryon Saylor		Date: 8/26/2015		Product Rev: AU	
Part #: CLM-125-02-H-D-A/FTMH-125-03-H-DV-A		Lot #: 11/25/09	Tech: Rodney Riley, Gary Lomax, & Daniel Linton		Eng: Troy Cook
Part description: CLM/FTMH					Qty to test: 50
Test Start: 01/27/2009		Test Completed: 3/24/2009			



EXTENDED LIFE PRODUCTS TEST REPORT

PART DESCRIPTION

CLM-125-02-H-D-A/FTMH-125-03-H-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

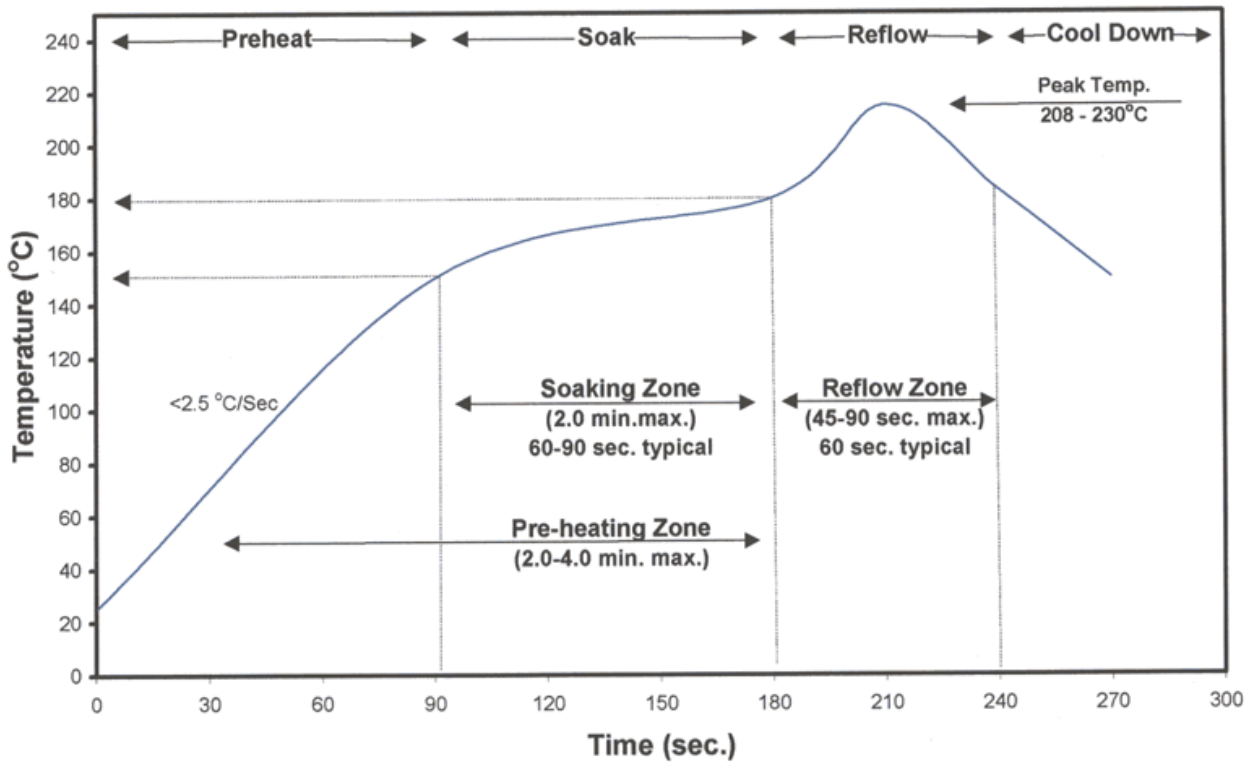
To perform the following tests: Test to current ELP test plan for 100 and 250 cycles. Process with leaded paste to PCB-100563.

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-100563-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 220 Points - 10 Samples 100 Cycles	GROUP B 220 Points - 10 Samples 250 Cycles
01	LLCR-1	LLCR-1
02	100 Cycles	250 Cycles
03	LLCR-2	LLCR-2
04	Data Review	Data Review
05	Thermals	Thermals
06	LLCR-3	LLCR-4
07	Data Review	Data Review
08	Humidity	Humidity
09	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 (220 LLCR test points)

- **Initial** -----9.2 mOhms Max
- **Durability, 100 Cycles**
 - **<= +5.0 mOhms** ----- 220 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** ----- 220 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** ----- 220 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 (220 LLCR test points)

- **Initial** -----9.2 mOhms Max
- **Durability, 250 Cycles**
 - **<= +5.0 mOhms** ----- 198 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** ----- 198 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** ----- 198 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

***Board #6 was removed from testing for inspection of cycling wear.**

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. $\leq +5.0$ 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. 09 2009	Feb. 10 2009	Feb. 24 2009	Mar. 11 2009
Room Temp C	25	25	24	24
RH	25%	31%	25%	33%
Name	Marshall	Lomax	Marshall	Lomax
mOhm values	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
Average	8.1	0.0	-0.2	-0.3
St. Dev.	0.4	0.2	0.4	0.3
Min	7.1	-0.9	-1.6	-1.6
Max	9.2	0.8	0.7	0.7
Count	220	220	220	220

Date	Feb. 09 2009	Feb. 11 2009	Feb. 24 2009	Mar. 11 2009
Room Temp C	25	24	24	24
RH	25%	39%	24%	32%
Name	Marshall	Marshall	Marshall	Lomax
mOhm values	Actual Initial	Delta 250 Cycles	Delta Thermal	Delta Humidity
Average	8.1	0.1	-0.3	-0.3
St. Dev.	0.4	0.2	0.4	0.3
Min	6.8	-0.8	-1.7	-1.1
Max	9.2	0.9	0.6	0.7
Count	220	198	198	198

DATA**LLCR:**

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	100 Cycles	Thermal	Humidity
1	P1	7.8	0.1	0.2	0.0
1	P2	7.7	0.1	0.1	0.0
1	P3	7.9	0.2	0.2	-0.1
1	P4	7.7	0.1	0.2	-0.1
1	P5	7.8	0.2	0.1	-0.1
1	P9	8.1	0.2	0.2	0.1
1	P10	8.0	0.2	0.2	-0.1
1	P11	7.9	0.2	0.2	-0.1
1	P12	7.9	0.1	0.1	-0.1
1	P13	8.0	0.2	0.2	-0.2
1	P14	7.7	0.1	0.0	-0.1
1	P15	7.7	0.1	-0.1	-0.3
1	P16	7.8	0.0	-0.1	-0.2
1	P17	7.8	0.1	0.0	-0.2
1	P18	7.6	0.1	0.1	-0.1
1	P19	7.8	0.2	0.2	0.0
1	P20	7.6	0.1	0.2	0.0
1	P21	7.9	0.1	0.0	-0.1
1	P22	8.0	0.1	0.1	-0.1
1	P23	7.9	0.4	0.2	0.0
1	P24	8.0	0.2	0.3	0.1
1	P25	7.1	0.5	0.7	0.7
2	P1	7.5	0.2	-0.1	-0.2
2	P2	7.6	0.0	-0.2	-0.3
2	P3	7.5	0.1	-0.1	-0.2
2	P4	7.6	0.1	-0.2	-0.3
2	P5	7.6	0.1	-0.1	-0.2
2	P9	8.2	0.4	0.1	-0.2
2	P10	8.5	0.2	-0.2	-0.5
2	P11	8.2	0.1	-0.2	-0.4
2	P12	8.3	0.3	0.0	-0.4
2	P13	8.7	0.3	-0.1	-0.5
2	P14	8.3	0.1	-0.2	-0.4
2	P15	8.3	0.2	-0.1	-0.4
2	P16	8.4	-0.1	-0.2	-0.5
2	P17	8.3	0.4	0.0	-0.3
2	P18	7.9	0.3	0.0	-0.2
2	P19	8.3	0.5	0.1	-0.1
2	P20	8.6	0.0	-0.3	-0.5
2	P21	7.9	0.0	0.1	-0.1
2	P22	8.0	0.1	0.0	-0.1
2	P23	7.9	0.2	0.1	0.1

Tracking Code: TC095-CLM-2211

Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A

Part description: CLM/FTMH

2	P24	8.3	0.2	0.1	0.0
2	P25	8.5	0.1	0.0	0.0
3	P1	8.5	0.0	-0.2	-0.5
3	P2	8.9	-0.1	-0.2	-0.8
3	P3	8.2	0.0	-0.1	-0.4
3	P4	8.4	0.0	-0.2	-0.6
3	P5	8.8	-0.3	-0.5	-0.8
3	P9	7.8	0.0	-0.2	-0.3
3	P10	7.6	0.2	0.0	-0.1
3	P11	7.7	0.2	-0.1	-0.3
3	P12	7.4	0.2	-0.1	-0.2
3	P13	7.7	0.2	-0.2	-0.3
3	P14	7.8	0.1	-0.2	-0.3
3	P15	7.9	0.1	-0.2	-0.4
3	P16	7.7	0.2	0.0	-0.1
3	P17	7.7	0.1	-0.1	-0.2
3	P18	7.9	0.1	0.1	-0.2
3	P19	7.6	0.0	-0.1	-0.2
3	P20	7.9	0.0	-0.1	-0.2
3	P21	8.5	-0.1	-0.3	-0.5
3	P22	8.4	-0.1	-0.3	-0.5
3	P23	8.2	0.1	0.0	-0.1
3	P24	8.4	0.2	-0.1	-0.2
3	P25	7.5	0.1	0.2	0.2
4	P1	8.7	-0.1	-1.3	-0.1
4	P2	8.4	-0.1	-0.7	-0.5
4	P3	8.5	0.0	-0.9	-0.7
4	P4	8.9	0.0	-1.6	-1.6
4	P5	8.7	0.1	-1.1	-1.0
4	P9	7.7	0.5	0.5	0.2
4	P10	8.8	-0.5	-0.8	-1.0
4	P11	8.2	0.1	0.0	-0.3
4	P12	8.4	-0.2	-0.3	-0.6
4	P13	9.1	-0.9	-1.0	-1.3
4	P14	8.8	-0.4	-0.6	-0.9
4	P15	8.4	-0.1	-0.2	-0.5
4	P16	8.4	0.0	-0.1	-0.5
4	P17	8.6	-0.3	-0.5	-0.8
4	P18	8.6	-0.2	-0.3	-0.6
4	P19	8.3	0.1	0.0	-0.2
4	P20	8.3	0.1	0.0	-0.1
4	P21	8.4	0.2	-0.1	-0.2
4	P22	8.9	-0.1	-0.5	-0.5
4	P23	8.9	-0.1	-0.7	-0.5
4	P24	8.9	-0.9	-0.4	-0.6
4	P25	8.1	0.0	0.1	0.1
5	P1	7.8	0.2	0.0	-0.2
5	P2	8.3	0.2	-0.2	-0.4
5	P3	8.1	0.3	0.1	-0.2

Tracking Code: TC095-CLM-2211	Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A
Part description: CLM/FTMH	

5	P4	8.2	0.2	-0.3	-0.4
5	P5	7.8	0.2	0.0	-0.2
5	P9	8.1	0.2	-0.2	-0.2
5	P10	8.2	0.3	-0.1	-0.3
5	P11	8.1	0.2	-0.1	-0.3
5	P12	8.6	0.0	-0.2	-0.5
5	P13	8.3	0.0	-0.2	-0.4
5	P14	8.2	0.0	-0.2	-0.5
5	P15	8.2	0.1	-0.1	-0.4
5	P16	8.4	0.0	-0.2	-0.4
5	P17	8.0	0.1	0.0	-0.3
5	P18	8.1	0.0	0.1	-0.1
5	P19	8.5	0.0	-0.1	-0.3
5	P20	8.1	0.3	0.4	0.1
5	P21	8.4	0.4	0.1	-0.1
5	P22	8.4	0.3	0.3	0.1
5	P23	8.4	0.3	0.5	0.1
5	P24	8.5	0.3	0.1	-0.2
5	P25	8.5	0.2	0.0	0.0
6	P1	8.3	0.0	-0.3	-0.5
6	P2	8.5	-0.1	-1.4	-1.2
6	P3	8.1	-0.3	-1.3	-1.2
6	P4	8.4	-0.7	-1.4	-1.4
6	P5	8.2	0.2	-1.2	-1.2
6	P9	7.7	0.2	0.0	-0.1
6	P10	7.7	0.0	-0.2	-0.3
6	P11	7.7	0.0	-0.2	-0.3
6	P12	7.9	0.1	0.0	-0.1
6	P13	7.7	0.2	-0.1	-0.1
6	P14	8.1	0.0	-0.2	-0.4
6	P15	7.9	-0.1	-0.2	-0.2
6	P16	7.9	0.0	0.0	0.0
6	P17	8.0	-0.1	-0.2	-0.2
6	P18	8.1	-0.1	-0.1	0.0
6	P19	7.9	-0.1	0.0	0.0
6	P20	8.0	0.0	0.3	0.3
6	P21	8.8	-0.7	-1.6	-1.5
6	P22	8.6	-0.1	-1.3	-0.6
6	P23	8.6	0.0	-0.3	-0.1
6	P24	8.5	0.0	-0.3	-0.2
6	P25	7.9	0.0	0.4	0.2
7	P1	8.4	0.2	0.0	-0.4
7	P2	8.2	0.1	0.0	-0.4
7	P3	8.8	-0.3	-0.5	-1.0
7	P4	8.4	-0.4	-0.7	-0.9
7	P5	8.3	-0.2	-0.4	-0.7
7	P9	8.9	-0.2	-0.3	-0.6
7	P10	8.9	-0.2	-0.5	-0.7
7	P11	9.2	-0.4	-0.4	-1.0

Tracking Code: TC095-CLM-2211

Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A

Part description: CLM/FTMH

7	P12	8.9	-0.1	-0.3	-0.8
7	P13	9.2	-0.1	-0.4	-1.0
7	P14	8.3	0.0	-0.2	-0.5
7	P15	8.6	0.0	0.0	-0.6
7	P16	8.6	0.1	0.1	-0.4
7	P17	8.6	0.2	0.2	-0.4
7	P18	8.5	-0.1	-0.1	-0.4
7	P19	9.0	-0.1	-0.1	-0.4
7	P20	8.5	-0.1	-0.1	-0.2
7	P21	8.4	-0.4	-0.3	-0.6
7	P22	9.0	-0.4	-0.4	-0.7
7	P23	8.2	-0.1	-0.1	-0.2
7	P24	8.6	0.0	-0.2	-0.5
7	P25	8.8	-0.1	-0.3	-0.4
8	P1	7.7	0.1	0.1	0.1
8	P2	7.7	0.2	0.1	-0.2
8	P3	7.9	0.3	0.1	-0.2
8	P4	7.8	0.3	0.1	-0.2
8	P5	7.5	0.2	0.0	-0.1
8	P9	8.0	-0.1	-0.1	-0.2
8	P10	7.9	0.0	-0.7	-0.2
8	P11	7.8	0.0	-0.8	-0.6
8	P12	7.8	0.1	-0.8	-0.6
8	P13	7.8	0.3	-0.9	-0.9
8	P14	7.9	-0.4	-0.2	-0.2
8	P15	7.8	-0.8	-0.3	-0.3
8	P16	7.7	-0.8	-0.2	-0.2
8	P17	7.8	-0.6	-0.3	0.0
8	P18	7.6	-0.8	-0.2	0.0
8	P19	7.7	-0.5	0.4	0.2
8	P20	7.7	0.0	0.0	-0.1
8	P21	7.9	0.2	0.1	0.0
8	P22	8.0	0.2	0.1	0.0
8	P23	8.0	0.2	0.2	0.1
8	P24	8.1	0.1	0.1	0.0
8	P25	8.0	0.2	0.2	0.0
9	P1	8.4	0.1	-0.8	-0.3
9	P2	8.5	0.0	-0.7	-0.6
9	P3	7.6	0.2	-0.3	-0.3
9	P4	8.5	-0.2	-1.0	-0.7
9	P5	7.2	0.2	-0.2	0.1
9	P9	7.6	0.2	-0.5	-0.3
9	P10	7.5	0.1	-0.2	-0.3
9	P11	7.6	0.3	0.0	-0.1
9	P12	7.8	0.0	-0.7	-0.5
9	P13	7.7	0.2	-0.6	-0.2
9	P14	7.9	0.3	-0.1	-0.2
9	P15	7.8	0.1	0.0	0.0
9	P16	7.9	0.1	-0.3	-0.2

Tracking Code: TC095-CLM-2211	Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A
Part description: CLM/FTMH	

9	P17	7.6	0.1	-0.1	-0.1
9	P18	7.6	0.3	0.0	0.0
9	P19	7.7	0.2	0.0	0.0
9	P20	7.9	-0.5	0.2	0.0
9	P21	8.7	-0.1	-0.7	-0.6
9	P22	8.4	-0.3	-1.1	-0.6
9	P23	8.7	-0.4	-1.2	-0.5
9	P24	8.3	0.2	0.3	-0.1
9	P25	7.5	0.1	0.0	0.0
10	P1	8.1	0.1	-0.2	-0.4
10	P2	8.6	-0.3	-0.4	-0.6
10	P3	7.5	0.6	-0.1	0.2
10	P4	7.6	0.8	-0.2	0.1
10	P5	8.7	-0.1	-1.4	-1.1
10	P9	8.1	0.1	0.0	-0.2
10	P10	7.8	0.3	0.0	-0.1
10	P11	7.8	0.1	-0.1	-0.2
10	P12	8.1	0.2	-0.1	-0.3
10	P13	8.0	0.2	-0.2	-0.2
10	P14	7.9	0.1	-0.2	-0.1
10	P15	8.1	0.2	-0.2	-0.2
10	P16	7.9	0.1	-0.1	-0.2
10	P17	7.8	0.1	-0.2	-0.1
10	P18	7.9	0.2	0.1	-0.1
10	P19	7.7	0.1	0.1	0.0
10	P20	7.7	0.0	0.0	0.0
10	P21	8.3	0.0	-0.1	-0.4
10	P22	8.5	-0.1	0.0	-0.3
10	P23	8.6	-0.1	-0.4	-0.2
10	P24	8.9	-0.3	-0.6	-0.6
10	P25	7.7	0.1	0.2	0.1

	mOhm values	Actual	Delta	Delta	Delta
Board	Position	Initial	250 Cycles	Thermal	Humidity
1	P1	7.6	0.2	-1.0	0.0
1	P2	7.5	0.1	-0.5	-0.3
1	P3	7.6	0.0	-1.0	-1.0
1	P4	7.6	0.2	-0.8	-0.7
1	P5	7.7	0.0	-0.9	-0.8
1	P9	8.4	0.1	-0.3	-0.4
1	P10	8.3	0.2	-0.2	-0.4
1	P11	8.5	-0.1	-0.3	-0.6
1	P12	8.5	-0.2	-0.4	-0.7
1	P13	8.5	0.1	-0.2	-0.4
1	P14	8.3	0.1	-0.2	-0.4
1	P15	8.5	-0.1	-0.3	-0.5
1	P16	8.2	0.0	-0.2	-0.4
1	P17	8.4	0.0	-0.2	-0.4
1	P18	8.4	0.1	-0.2	-0.5

Tracking Code: TC095-CLM-2211

Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A

Part description: CLM/FTMH

1	P19	8.3	-0.1	-0.1	-0.3
1	P20	8.0	0.0	0.1	-0.2
1	P21	7.5	0.0	0.0	-0.1
1	P22	7.8	0.1	-0.6	0.0
1	P23	7.7	0.1	0.2	0.1
1	P24	7.9	0.2	0.2	0.0
1	P25	8.6	-0.1	-0.1	-0.2
2	P1	8.4	0.1	-0.4	-0.3
2	P2	8.4	0.1	-0.3	-0.4
2	P3	8.3	0.4	-0.2	-0.3
2	P4	8.5	0.2	-0.4	-0.5
2	P5	8.5	-0.1	-0.9	-0.8
2	P9	8.1	0.1	0.0	-0.2
2	P10	7.9	0.1	-0.2	-0.2
2	P11	8.0	0.0	-1.0	-0.4
2	P12	7.7	-0.1	-0.3	-0.3
2	P13	8.2	0.0	-0.6	-0.4
2	P14	7.9	0.0	-0.1	-0.2
2	P15	7.9	0.0	-0.2	-0.3
2	P16	7.7	0.0	0.1	0.0
2	P17	7.8	0.0	-0.1	-0.3
2	P18	7.9	0.0	0.0	-0.2
2	P19	7.8	0.1	0.1	-0.1
2	P20	7.6	0.1	0.1	0.1
2	P21	8.1	0.2	-0.7	-0.3
2	P22	8.3	0.0	-0.7	-0.3
2	P23	8.2	0.0	-1.0	-0.2
2	P24	8.3	0.0	0.0	-0.1
2	P25	8.0	0.1	0.2	0.1
3	P1	8.2	0.2	-1.3	-0.9
3	P2	8.1	0.0	-1.2	-0.8
3	P3	8.0	0.4	-1.1	-0.7
3	P4	8.4	-0.2	-1.7	-0.7
3	P5	8.3	0.0	-1.3	-0.6
3	P9	8.1	0.1	-0.2	-0.3
3	P10	7.8	0.3	-0.1	-0.1
3	P11	7.6	0.3	0.0	-0.1
3	P12	7.9	0.1	-0.1	-0.2
3	P13	8.0	0.0	-0.1	-0.3
3	P14	7.9	0.3	-0.1	-0.2
3	P15	8.1	0.4	-0.2	-0.3
3	P16	7.9	0.7	0.1	-0.1
3	P17	8.0	0.8	0.0	-0.1
3	P18	7.8	0.4	0.0	-0.1
3	P19	7.9	0.5	0.0	-0.1
3	P20	8.0	0.5	0.0	-0.1
3	P21	8.2	0.8	-0.3	-0.1
3	P22	8.4	0.1	-0.8	-0.3
3	P23	8.3	0.3	-0.2	-0.1

Tracking Code: TC095-CLM-2211	Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A
Part description: CLM/FTMH	

3	P24	8.4	0.3	0.0	-0.3
3	P25	7.8	0.5	0.1	0.1
4	P1	7.5	0.1	0.2	0.0
4	P2	8.0	0.0	-0.1	-0.3
4	P3	7.7	-0.1	-0.6	-0.6
4	P4	7.9	0.0	-0.3	-0.3
4	P5	7.7	0.0	-0.5	-0.5
4	P9	8.0	0.0	0.2	-0.2
4	P10	8.2	0.1	-0.2	-0.5
4	P11	8.0	-0.1	-0.2	-0.5
4	P12	7.9	0.0	0.0	-0.4
4	P13	7.9	-0.1	-0.2	-0.4
4	P14	7.8	0.0	-0.2	-0.2
4	P15	7.9	0.1	-0.1	-0.2
4	P16	7.7	0.0	-0.1	-0.1
4	P17	7.8	0.0	-0.1	0.0
4	P18	7.7	0.0	0.1	0.2
4	P19	7.9	0.0	0.1	0.1
4	P20	7.8	-0.1	0.1	0.3
4	P21	7.9	-0.1	-0.3	0.0
4	P22	7.7	0.2	-0.3	0.3
4	P23	7.4	0.7	0.5	0.7
4	P24	7.6	0.6	0.3	0.5
4	P25	8.0	-0.1	-0.1	-0.1
5	P1	7.7	0.5	0.3	0.1
5	P2	7.8	0.9	0.0	0.2
5	P3	7.9	0.5	-0.1	-0.1
5	P4	8.1	0.4	-0.7	-0.7
5	P5	8.1	0.2	-0.7	-0.6
5	P9	7.9	0.2	0.2	0.1
5	P10	8.1	0.1	0.1	-0.1
5	P11	8.0	0.2	0.0	-0.1
5	P12	8.1	0.1	-0.2	-0.4
5	P13	7.9	0.4	0.3	0.1
5	P14	8.1	0.4	0.0	-0.1
5	P15	8.2	0.0	-0.3	-0.5
5	P16	8.0	0.1	-0.2	-0.3
5	P17	8.0	0.3	-0.1	-0.2
5	P18	7.7	0.1	0.0	-0.1
5	P19	8.0	0.1	0.0	0.0
5	P20	7.7	0.0	0.0	-0.1
5	P21	8.5	0.0	-0.1	-0.4
5	P22	7.4	0.7	0.6	0.6
5	P23	8.2	0.5	0.4	0.4
5	P24	8.4	0.1	0.1	0.0
5	P25	8.3	0.2	0.0	0.0
6	P1	8.3	o	o	o
6	P2	8.2	o	o	o
6	P3	8.1	o	o	o

Tracking Code: TC095-CLM-2211

Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A

Part description: CLM/FTMH

6	P4	8.2	0	0	0
6	P5	8.4	0	0	0
6	P9	7.6	0	0	0
6	P10	6.8	0	0	0
6	P11	6.9	0	0	0
6	P12	7.1	0	0	0
6	P13	7.7	0	0	0
6	P14	7.3	0	0	0
6	P15	7.4	0	0	0
6	P16	7.2	0	0	0
6	P17	7.6	0	0	0
6	P18	7.9	0	0	0
6	P19	7.6	0	0	0
6	P20	7.9	0	0	0
6	P21	8.3	0	0	0
6	P22	8.3	0	0	0
6	P23	8.4	0	0	0
6	P24	8.2	0	0	0
6	P25	8.0	0	0	0
7	P1	7.7	0.1	-0.8	0.0
7	P2	7.7	-0.1	-0.7	-0.6
7	P3	7.7	-0.4	-0.8	-1.0
7	P4	8.0	-0.2	-1.2	-1.1
7	P5	7.8	-0.6	-1.1	-1.0
7	P9	8.7	0.8	-0.3	-0.3
7	P10	8.4	0.0	-0.1	-0.3
7	P11	8.5	0.2	-0.3	-0.3
7	P12	8.8	-0.2	-0.5	-0.7
7	P13	8.9	-0.3	-0.6	-0.8
7	P14	8.5	-0.3	-0.2	-0.5
7	P15	8.3	0.0	-0.1	-0.3
7	P16	8.4	-0.1	-0.1	-0.3
7	P17	8.4	-0.1	-0.2	-0.4
7	P18	8.2	-0.1	-0.1	-0.2
7	P19	8.7	-0.1	-0.1	-0.4
7	P20	8.5	-0.1	-0.2	-0.5
7	P21	7.9	0.1	-0.1	-0.4
7	P22	7.5	0.4	0.0	0.2
7	P23	8.1	0.1	0.0	0.1
7	P24	7.6	0.4	0.4	0.4
7	P25	8.3	0.0	0.1	0.0
8	P1	8.2	0.0	-0.2	-0.4
8	P2	8.4	0.0	-0.3	-0.5
8	P3	8.1	0.1	-0.2	-0.4
8	P4	8.5	-0.1	-0.3	-0.6
8	P5	8.4	0.0	-0.3	-0.6
8	P9	8.5	0.1	-0.3	-0.5
8	P10	8.3	0.3	-0.3	-0.4
8	P11	8.6	0.1	-0.3	-0.5

Tracking Code: TC095-CLM-2211

Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A

Part description: CLM/FTMH

8	P12	8.3	-0.1	-0.3	-0.3
8	P13	8.5	-0.2	-0.4	-0.6
8	P14	8.6	-0.4	-0.4	-0.7
8	P15	8.7	-0.2	-0.3	-0.7
8	P16	8.5	-0.1	-0.3	-0.7
8	P17	8.4	-0.2	-0.3	-0.6
8	P18	8.4	0.1	-0.1	-0.4
8	P19	8.3	0.1	-0.1	-0.2
8	P20	8.7	-0.3	-0.3	-0.4
8	P21	8.5	-0.4	-0.4	-0.6
8	P22	8.6	-0.3	-0.2	-0.5
8	P23	8.5	-0.3	-0.1	-0.1
8	P24	8.7	-0.2	-0.3	-0.4
8	P25	8.4	0.0	-0.1	0.0
9	P1	7.9	0.1	-0.1	-0.2
9	P2	8.3	0.0	-0.2	-0.4
9	P3	8.6	-0.2	-0.8	-0.8
9	P4	8.2	0.1	-0.3	-0.4
9	P5	8.2	0.2	-0.8	-0.6
9	P9	8.1	0.1	0.0	0.0
9	P10	7.8	0.2	-0.2	-0.2
9	P11	7.9	0.2	-0.3	-0.4
9	P12	7.9	0.3	-0.2	-0.3
9	P13	8.0	0.1	-0.3	-0.4
9	P14	7.5	0.1	-0.1	-0.1
9	P15	7.8	0.0	-0.2	-0.3
9	P16	7.7	0.1	-0.1	-0.2
9	P17	7.9	0.1	0.0	-0.1
9	P18	7.7	0.0	0.0	-0.2
9	P19	7.7	0.2	0.1	0.0
9	P20	7.6	0.4	0.3	0.3
9	P21	8.3	0.2	-0.8	-0.3
9	P22	8.7	-0.3	-1.2	-0.6
9	P23	8.7	-0.2	-0.8	-0.5
9	P24	8.2	0.1	-0.1	-0.1
9	P25	8.0	-0.1	-0.2	-0.2
10	P1	7.9	0.2	-0.2	-0.2
10	P2	8.0	0.1	-0.3	-0.4
10	P3	7.9	0.3	-0.3	-0.3
10	P4	7.9	0.3	-0.2	-0.2
10	P5	7.9	0.4	-0.2	-0.2
10	P9	8.4	0.1	-0.3	-0.3
10	P10	8.6	-0.1	-0.4	-0.6
10	P11	8.4	0.0	-0.4	-0.6
10	P12	8.4	0.2	-0.3	-0.5
10	P13	8.5	0.4	-0.2	-0.4
10	P14	8.7	0.1	-0.4	-0.6
10	P15	8.6	-0.1	-0.5	-0.7
10	P16	8.4	0.1	-0.3	-0.5

Tracking Code: TC095-CLM-2211	Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A
Part description: CLM/FTMH	

10	P17	8.6	-0.2	-0.5	-0.7
10	P18	8.6	0.0	-0.4	-0.6
10	P19	9.0	-0.4	-0.6	-0.9
10	P20	8.7	-0.1	-0.4	-0.4
10	P21	8.2	0.5	-0.1	-0.2
10	P22	8.0	0.1	0.0	-0.2
10	P23	7.8	0.5	0.2	0.0
10	P24	8.0	0.4	0.1	0.1
10	P25	9.2	-0.8	-1.0	-0.9

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 #: 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 #: 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: 5/06/08, Next Cal: 5/06/09

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: 05/18/2008, Next Cal: 05/18/2009

Tracking Code: TC095-CLM-2211	Part #: CLM-125-02-H-D-A/FTMH-125-02-H-DV-A
Part description: CLM/FTMH	

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: 05/18/2008, Next Cal: 05/18/2009