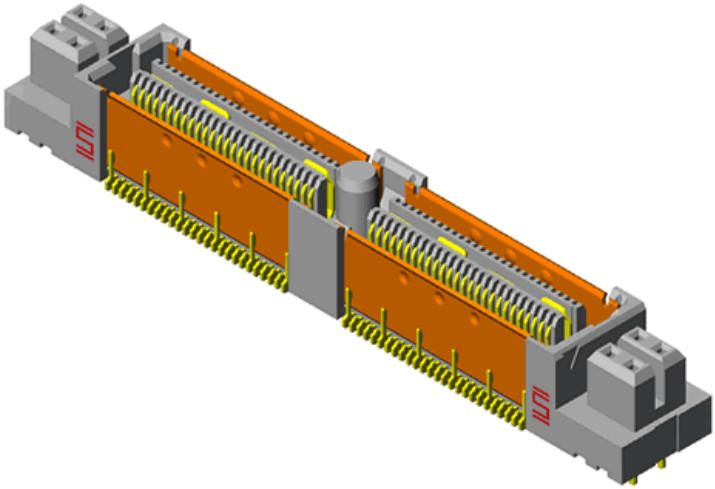
Project Number: NA	Tracking Code: TC0426--0462		
Requested by: Brian Niehoff	Date: 6/24/2004	Product Rev: G / C	
Part #: QFSS-052-01-H-D-PC4	Lot #: 1	Tech: Troy Cook	Eng: John Tozier
Part description: High Speed Shielded Socket			Qty to test: 8
Test Start: 6/29/2004	Test Completed: 8/2/2004		



Durability

PART DESCRIPTION

QFSS-052-01-H-D-PC4

Mated with QMSS-052-11-H-D-PC4

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

CERTIFICATION

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

SCOPE

To perform the following tests: LLCR on both the power pins and the signal pins at 25, 50, 100, 250, 500, and 1000 cycles.

APPLICABLE DOCUMENTS

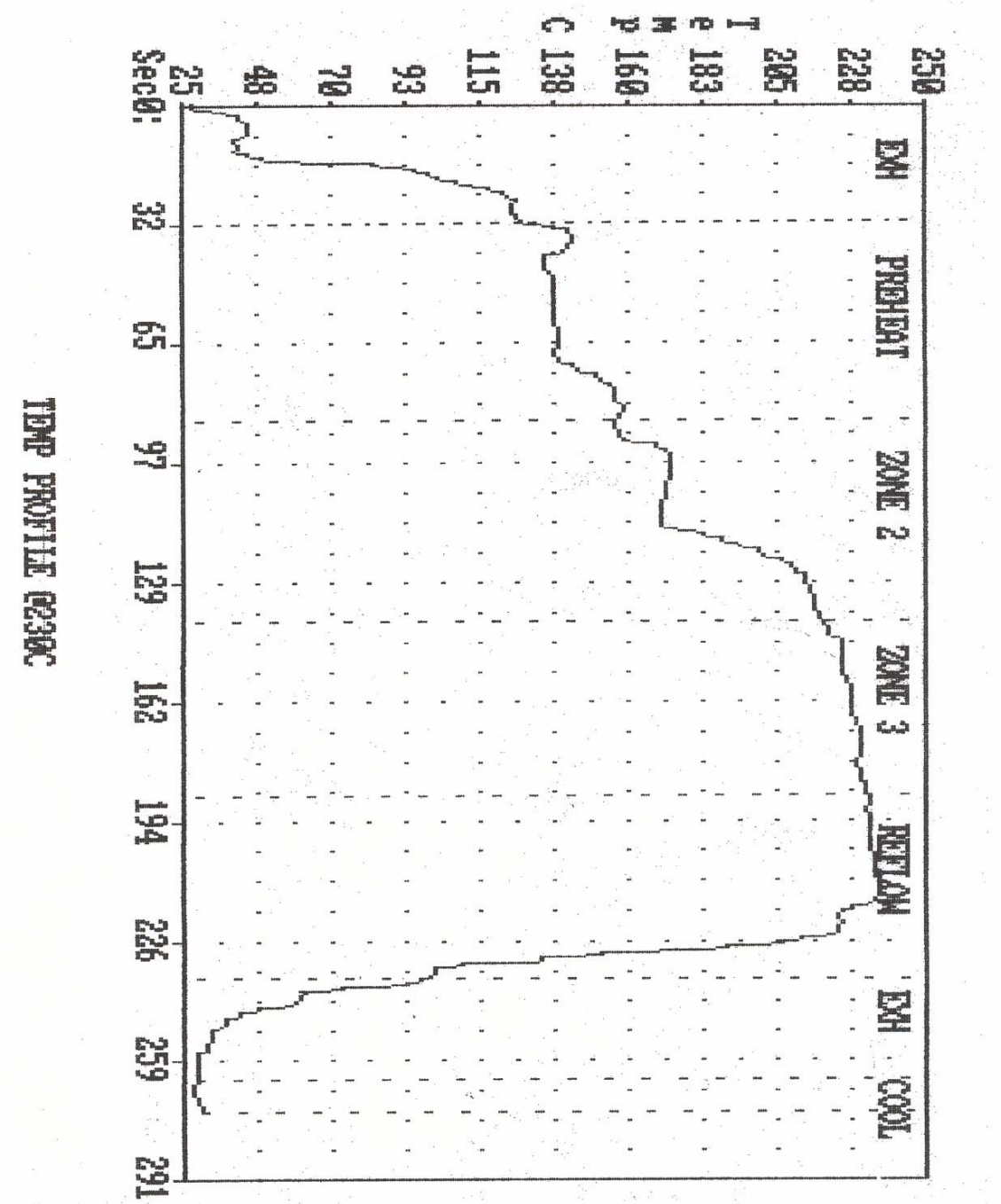
Standards: EIA Publication 364

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) The ultrasonic procedure can be used with either aqueous or non-aqueous soldering components and follows:
    a. Sample test boards are to be ultrasonically cleaned after test lead attachment, preparation and/or soldering.
    b. Sample test boards are immersed into Branson 3510 cleaner containing Kyzen Ionox HC1 (or equivalent) with the following conditions:
        i. Temperature: -------55° C+/- 5° C
        ii. Frequency:----------40 KHz
        iii. Immersion Time: ---5 to 10 Minutes
    c. Sample test boards are removed and placed into the Branson 3510 cleaner containing deionized water with the following conditions:
        i. Temperature: --------55° C +/- 5° C
        ii. Frequency:----------40 KHz
        iii. Immersion Time: ---5 to 10 Minutes
    d. Sample test boards are removed and placed in a beaker positioned on a hot plate with a magnetic stirrer containing deionized water warmed to 55° C +/- 5° C for 1/2 to 1 minute.
    e. Upon removal, the sample boards are rinsed for ½ to 1 minute at room temperature with free flowing deionized water.
    f. After the final rinse, the sample test boards are dried in an air-circulating oven for 10 to 15 minutes at 50° C +/- 5° C.
    g. Sample test boards are then allowed to set and recover to room ambient condition prior to testing.
7) Parts not intended for testing LLCR and DWV/IR are visually inspected and cleaned if necessary.
8) Any additional preparation will be noted in the individual test sequences.
9) Solder Information: Sn63Pb37
10) Re-Flow Time/Temp: See accompanying profile
11) Internal Test PCBs used: 100155-TST-XX

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

OVEN PROFILE (Soldering Parts to Test Boards)



Screen: Calib Data Current Job: E130-230

	TC1
Peak Temperature(Deg C):	236
Maximum Slope (Deg/Sec):	-18
Seconds Above Threshold:	35

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

FLOWCHARTS

TEST STEP	GROUP A1, Contacts 175 Points 1000 Cycles	GROUP A2, Power 56 Points 1000 Cycles
01	LLCR-1	LLCR-1
02	Data Review	Data Review
03	25 Cycles	25 Cycles
04	LLCR-2	LLCR-2
05	Data Review	Data Review
06	50 Cycles	50 Cycles
07	LLCR-3	LLCR-3
08	Data Review	Data Review
09	100 Cycles	100 Cycles
10	LLCR-4	LLCR-4
11	Data Review	Data Review
12	250 Cycles	250 Cycles
13	LLCR-5	LLCR-5
14	Data Review	Data Review
15	500 Cycles	500 Cycles
16	LLCR-6	LLCR-6
17	Data Review	Data Review
18	1000 Cycles	1000 Cycles
19	LLCR-7	LLCR-7

LLCR = EIA-364-23, LLCR
use Keithley 580 in the dry circuit mode, 10 mA Max

TEST STEP	GROUP A1 200 Contacts Points 100 Cycles	GROUP A2 64 Power Points 100 Cycles
01	LLCR-1	LLCR-1
02	Data Review	Data Review
03	100 Cycles	100 Cycles
04	LLCR-2	LLCR-2
05	Data Review	Data Review
06	Thermal Age	Thermal Age
07	LLCR-3	LLCR-3
08	Data Review	Data Review
09	Cyclic Humidity	Cyclic Humidity
10	LLCR-4	LLCR-4

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
LLCR = EIA-364-23, LLCR
use Keithley 580 in the dry circuit mode, 10 mA Max

FLOWCHARTS Continued

TEST STEP	GROUP A1 200 Contacts Points 250 Cycles	GROUP A2 64 Power Points 250 Cycles
01	LLCR-1	LLCR-1
02	Data Review	Data Review
03	250 Cycles	250 Cycles
04	LLCR-2	LLCR-2
05	Data Review	Data Review
06	Thermal Age	Thermal Age
07	LLCR-3	LLCR-3
08	Data Review	Data Review
09	Cyclic Humidity	Cyclic Humidity
10	LLCR-4	LLCR-4

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
LLCR = EIA-364-23, LLCR
use Keithley 580 in the dry circuit mode, 10 mA Max

TEST STEP	GROUP A1 200 Contacts Points 500 Cycles	GROUP A2 64 Power Points 500 Cycles
01	LLCR-1	LLCR-1
02	Data Review	Data Review
03	500 Cycles	500 Cycles
04	LLCR-2	LLCR-2
05	Data Review	Data Review
06	Thermal Age	Thermal Age
07	LLCR-3	LLCR-3
08	Data Review	Data Review
09	Cyclic Humidity	Cyclic Humidity
10	LLCR-4	LLCR-4

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
LLCR = EIA-364-23, LLCR
use Keithley 580 in the dry circuit mode, 10 mA Max

FLOWCHARTS Continued

TEST STEP	GROUP A1 200 Contacts Points 1000 Cycles	GROUP A2 64 Power Points 1000 Cycles
01	LLCR-1	LLCR-1
02	Data Review	Data Review
03	1000 Cycles	1000 Cycles
04	LLCR-2	LLCR-2
05	Data Review	Data Review
06	Thermal Age	Thermal Age
07	LLCR-3	LLCR-3
08	Data Review	Data Review
09	Cyclic Humidity	Cyclic Humidity
10	LLCR-4	LLCR-4

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
LLCR = EIA-364-23, LLCR
use Keithley 580 in the dry circuit mode, 10 mA Max

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

ATTRIBUTE DEFINITION

The following is a brief, simplified description of attributes.

MATING/UNMATING for DURABILITY:

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.

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) Connectors are mated and pre-conditioned at ambient.

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) Connectors are mated and pre-conditioned at ambient.

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

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

RESULTS

1000 Cycle Signal Contact Durability
LLCR Durability (175 LLCR test points)

- **Initial ---------- 26.7 mOhms Max**
- **Durability, 25 Cycles**
  - **<= +5.0 mOhms ---------- 175 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**
- **Durability, 50 Cycles**
  - **<= +5.0 mOhms ---------- 175 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**
- **Durability, 100 Cycles**
  - **<= +5.0 mOhms ---------- 175 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**
- **Durability, 500 Cycles**
  - **<= +5.0 mOhms ---------- 173 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**
- **Durability, 1000 Cycles**
  - **<= +5.0 mOhms ---------- 175 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**

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

RESULTS Continued

1000 Cycle Power Contact Durability
LLCR Durability (56 LLCR test points)

- **Initial ---------- 5.1 mOhms Max**
- **Durability, 25 Cycles**
  - **<= +5.0 mOhms ---------- 56 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**
- **Durability, 50 Cycles**
  - **<= +5.0 mOhms ---------- 56 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**
- **Durability, 100 Cycles**
  - **<= +5.0 mOhms ---------- 56 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**
- **Durability, 500 Cycles**
  - **<= +5.0 mOhms ---------- 56 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**
- **Durability, 1000 Cycles**
  - **<= +5.0 mOhms ---------- 56 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**

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

RESULTS Continued

100 Cycle Signal Contact Durability
LLCR Durability (200 LLCR test points)

- **Initial ---------- 30.9 mOhms Max**
- **Durability, 100 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 ---------- 199 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 0 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 1 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**

100 Cycle Power Contact Durability
LLCR Durability (64 LLCR test points)

- **Initial ---------- 5.3 mOhms Max**
- **Durability, 100 Cycles**
  - **<= +5.0 mOhms ---------- 64 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 ---------- 64 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 ---------- 64 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**

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

RESULTS Continued

250 Cycle Signal Contact Durability
LLCR Durability (200 LLCR test points)

- **Initial ---------- 31.4 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 ---------- 197 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 2 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 1 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 ---------- 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**

250 Cycle Power Contact Durability
LLCR Durability (64 LLCR test points)

- **Initial ---------- 5.1 mOhms Max**
- **Durability, 250 Cycles**
  - **<= +5.0 mOhms ---------- 64 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 ---------- 64 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 ---------- 64 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**

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

RESULTS Continued

500 Cycle Signal Contact Durability
LLCR Durability (200 LLCR test points)

- **Initial ---------- 28.4 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 ---------- 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 ---------- 198 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 1 Points ---------- Minor**
  - **+10.1 to +15.0 mOhms ---------- 1 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**

500 Cycle Power Contact Durability
LLCR Durability (64 LLCR test points)

- **Initial ---------- 5.0 mOhms Max**
- **Durability, 500 Cycles**
  - **<= +5.0 mOhms ---------- 64 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 ---------- 64 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 ---------- 64 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**

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

RESULTS Continued

1000 Cycle Signal Contact Durability
LLCR Durability (200 LLCR test points)

- **Initial ---------- 25.9 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 ---------- 197 Points ---------- Stable**
  - **+5.1 to +10.0 mOhms ---------- 3 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 ---------- 9 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**

1000 Cycle Power Contact Durability
LLCR Durability (64 LLCR test points)

- **Initial ---------- 4.9 mOhms Max**
- **Durability, 1000 Cycles**
  - **<= +5.0 mOhms ---------- 64 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 ---------- 64 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 ---------- 64 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**

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

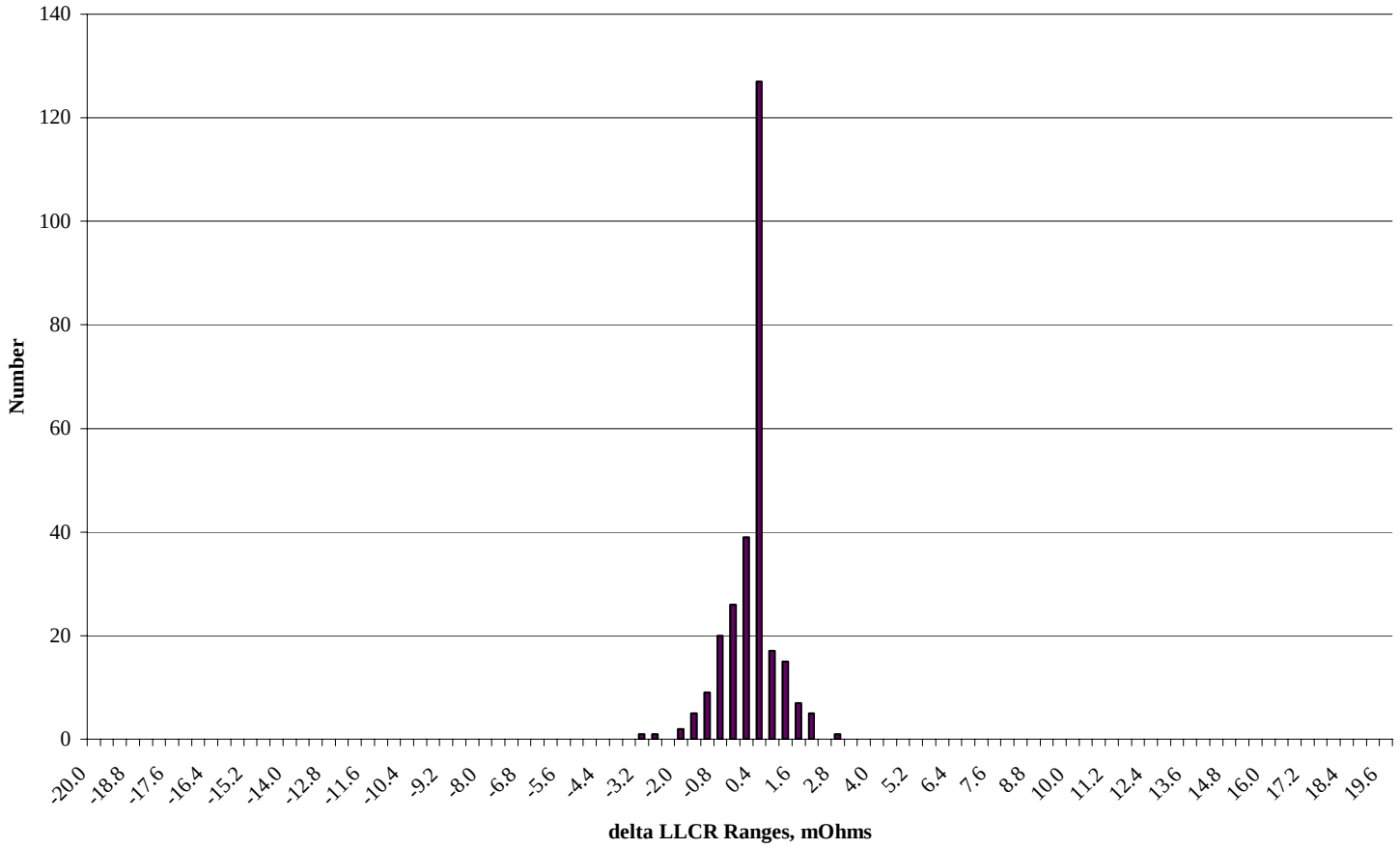
DATA SUMMARIES

LLCR, 1000 Cycle Signal Contact Durability:

1) A total of 175 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 Signal Contacts	Actual Initial	Delta 25 Cycles	Delta 50 Cycles	Delta 100 Cycles	Delta 250 Cycles	Delta 500 Cycles	Delta 1000 Cycles
Average	23.2	-0.2	0.0	-0.1	-0.1	0.2	-0.1
St. Dev.	1.2	1.0	0.9	1.0	1.0	1.3	0.9
Min	20.5	-3.5	-2.8	-3.1	-3.5	-2.6	-3.6
Max	26.7	2.5	3.1	3.0	3.1	7.1	2.4
Count	175	175	175	175	175	175	175

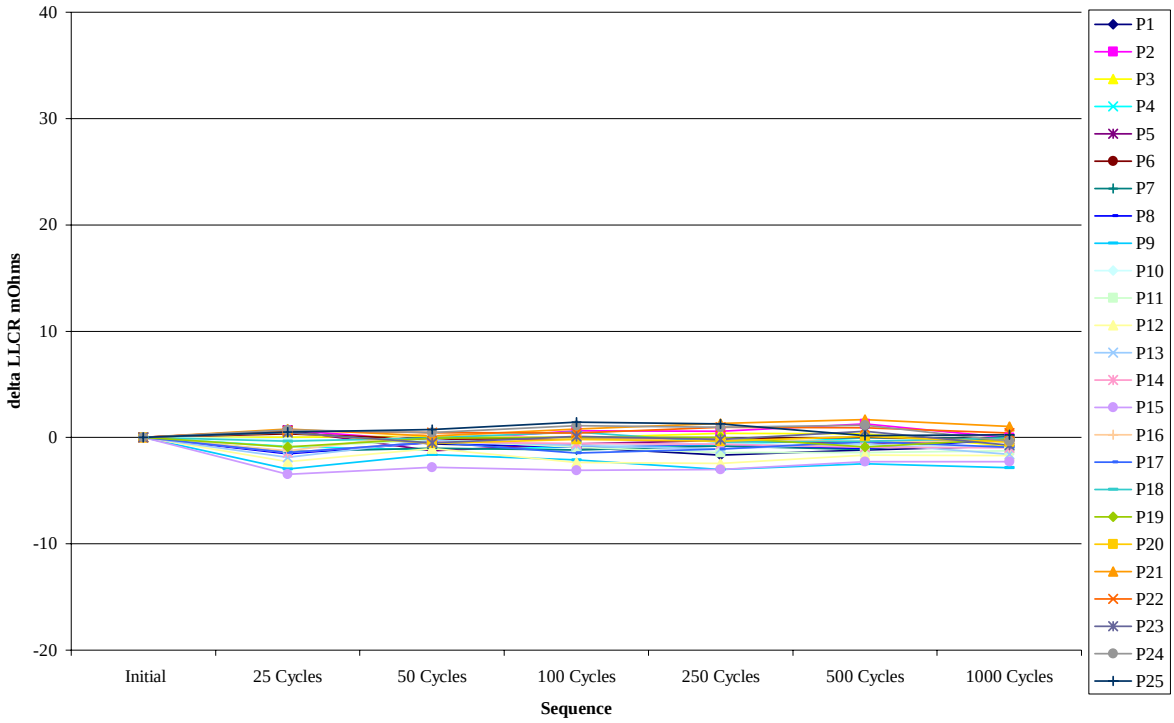
1000 Cycle Signal Contact Durability



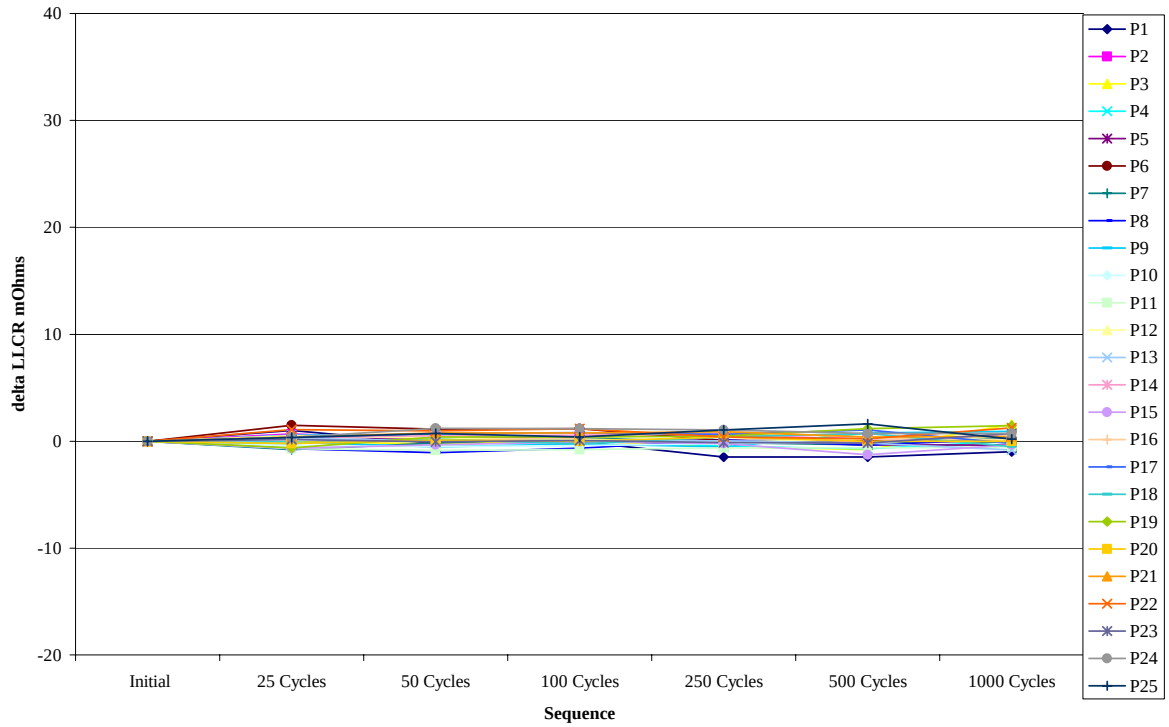
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Signal Contacts



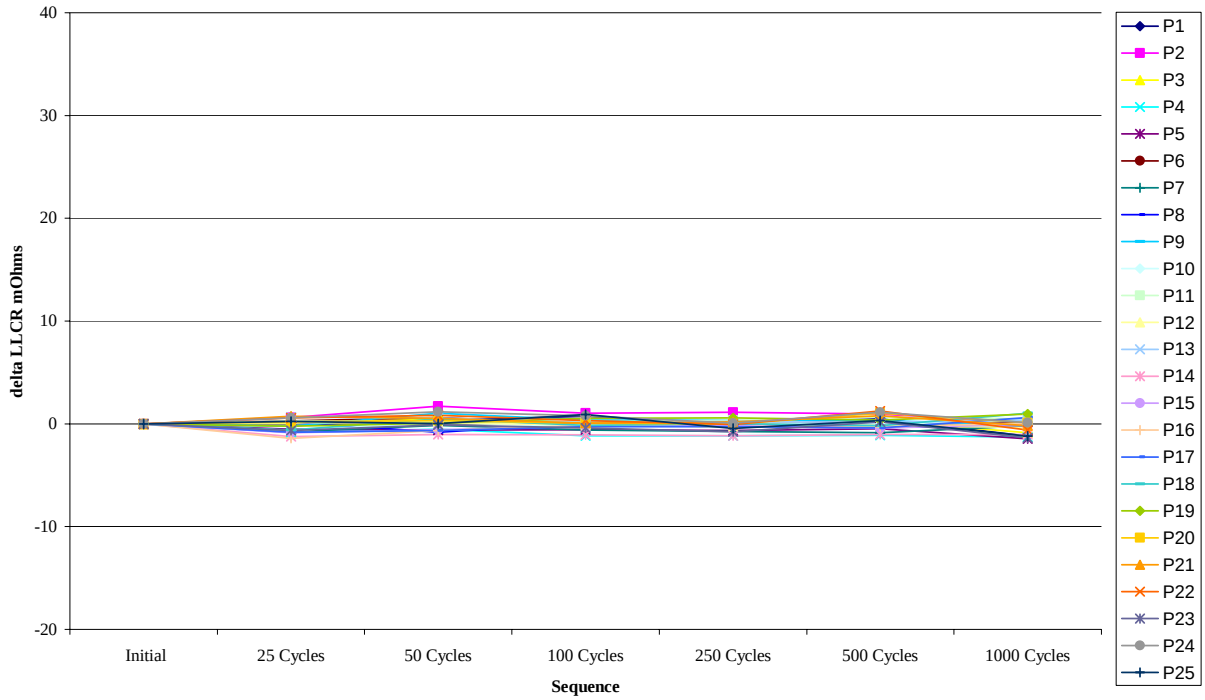
Board #2
Signal Contacts



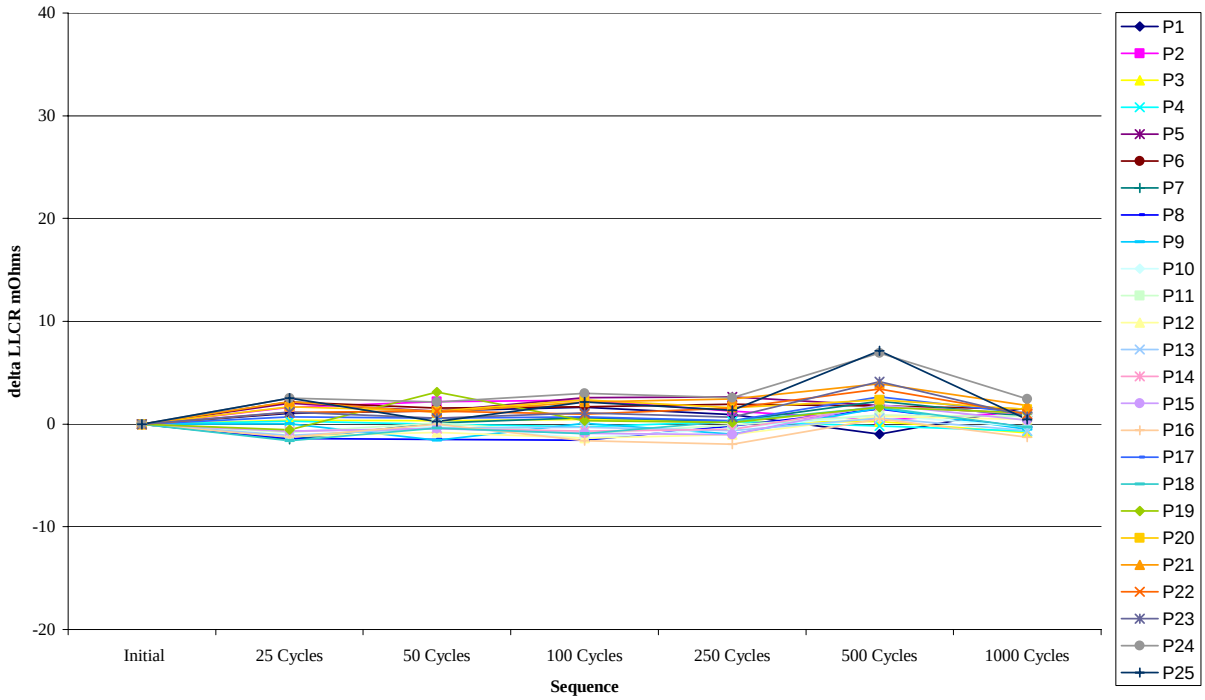
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Signal Contacts



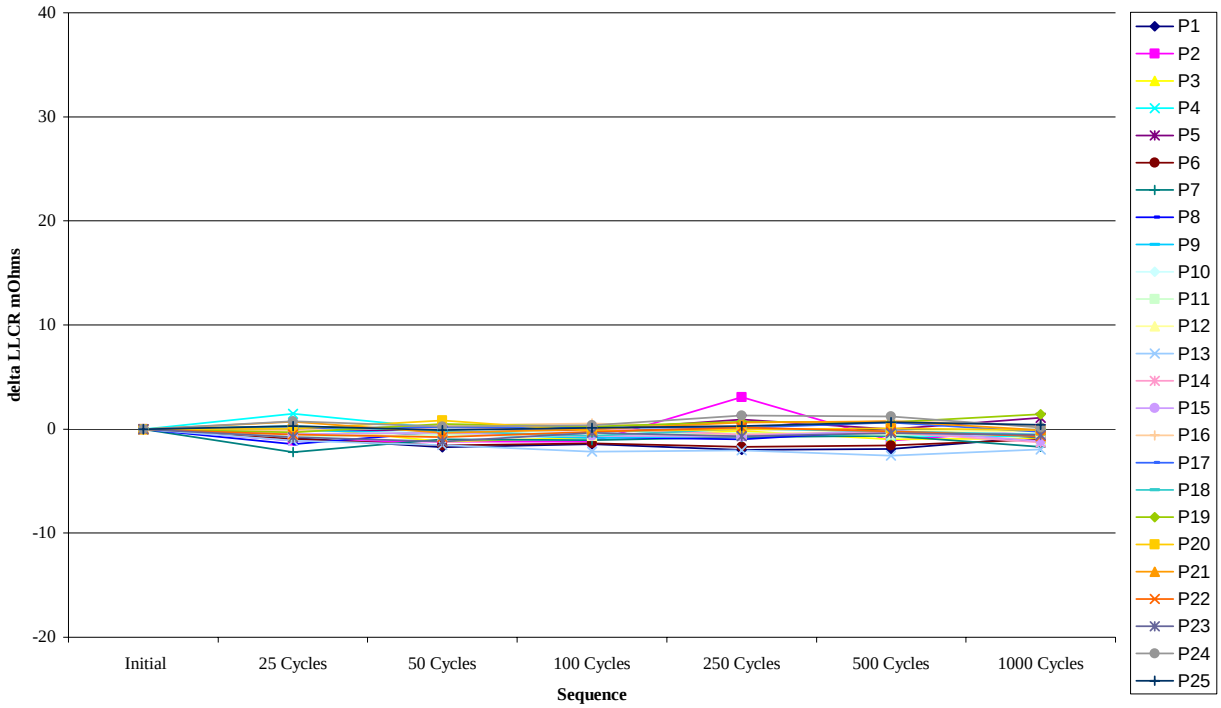
Board #5
Signal Contacts



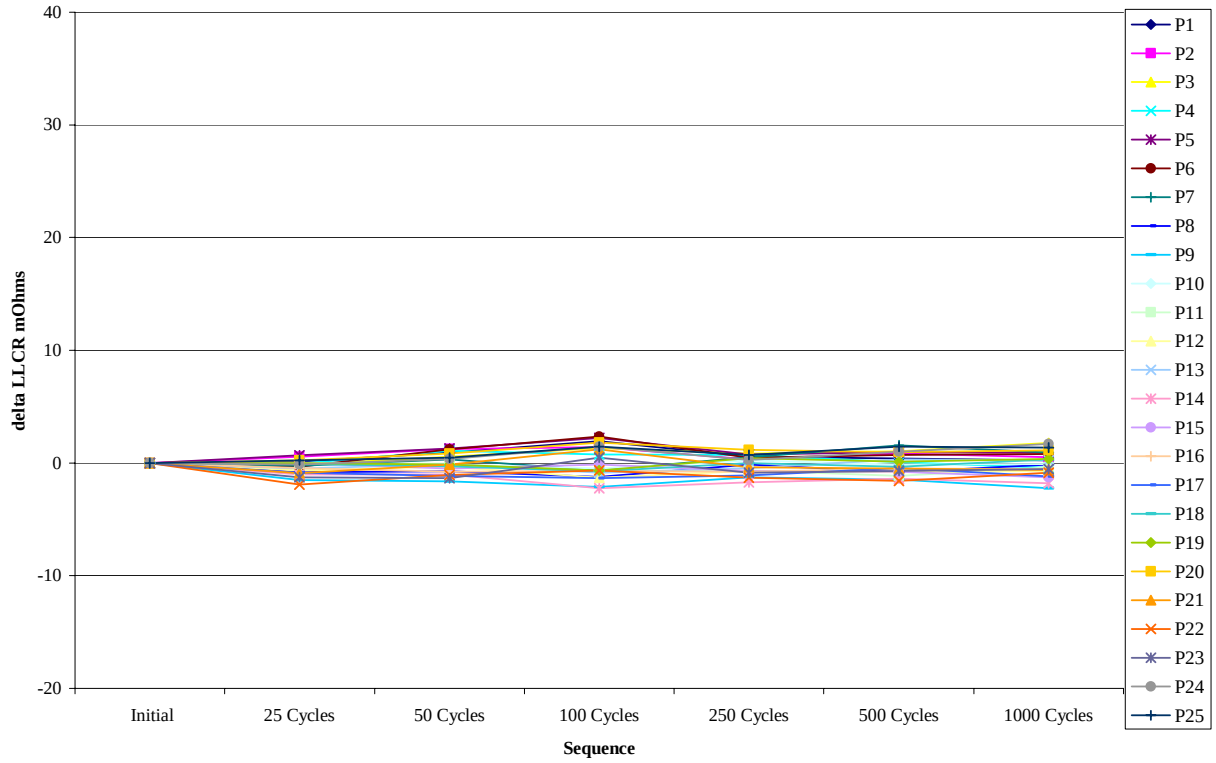
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #6
Signal Contacts

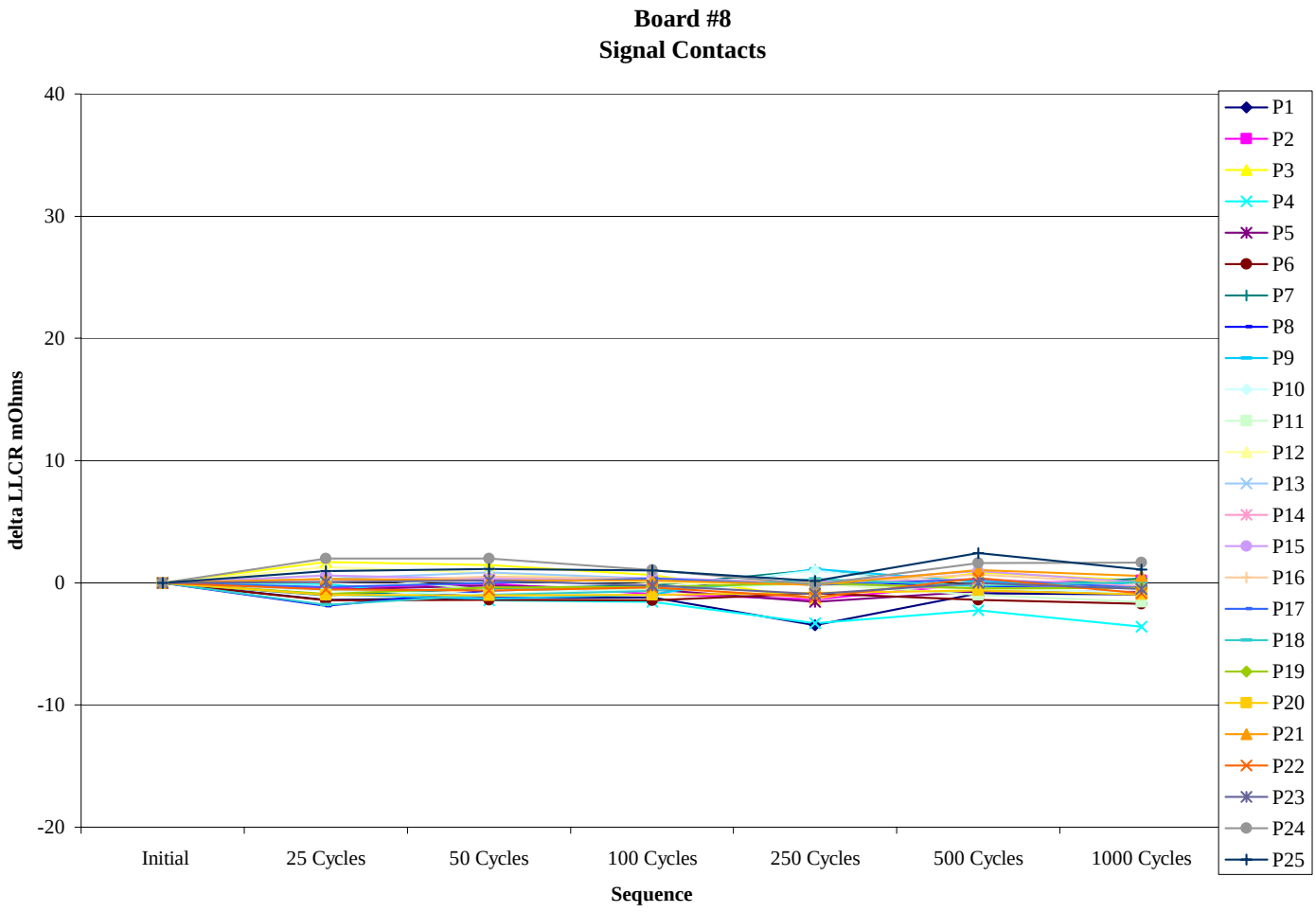


Board #7
Signal Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

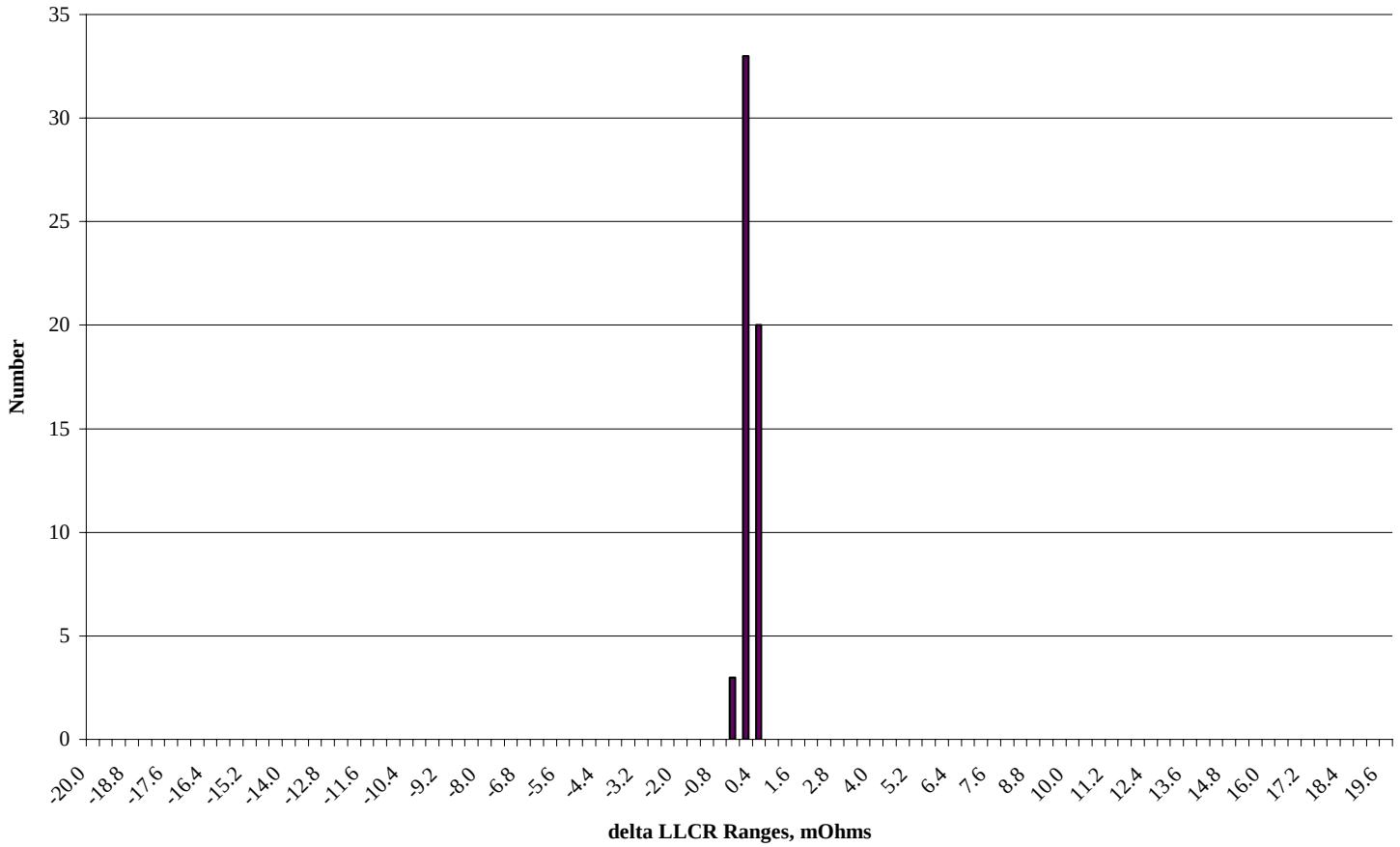
DATA SUMMARIES

LLCR, 1000 Cycle Power Contact Durability:

1) A total of 56 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 Power Contacts	Actual Initial	Delta 25 Cycles	Delta 50 Cycles	Delta 100 Cycles	Delta 250 Cycles	Delta 500 Cycles	Delta 1000 Cycles
Average	4.6	0.0	0.0	0.0	0.0	0.0	-0.1
St. Dev.	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Min	4.3	-0.4	-0.3	-0.3	-0.4	-0.5	-0.6
Max	5.1	0.3	0.8	0.6	0.5	0.7	0.4
Count	56	56	56	56	56	56	56

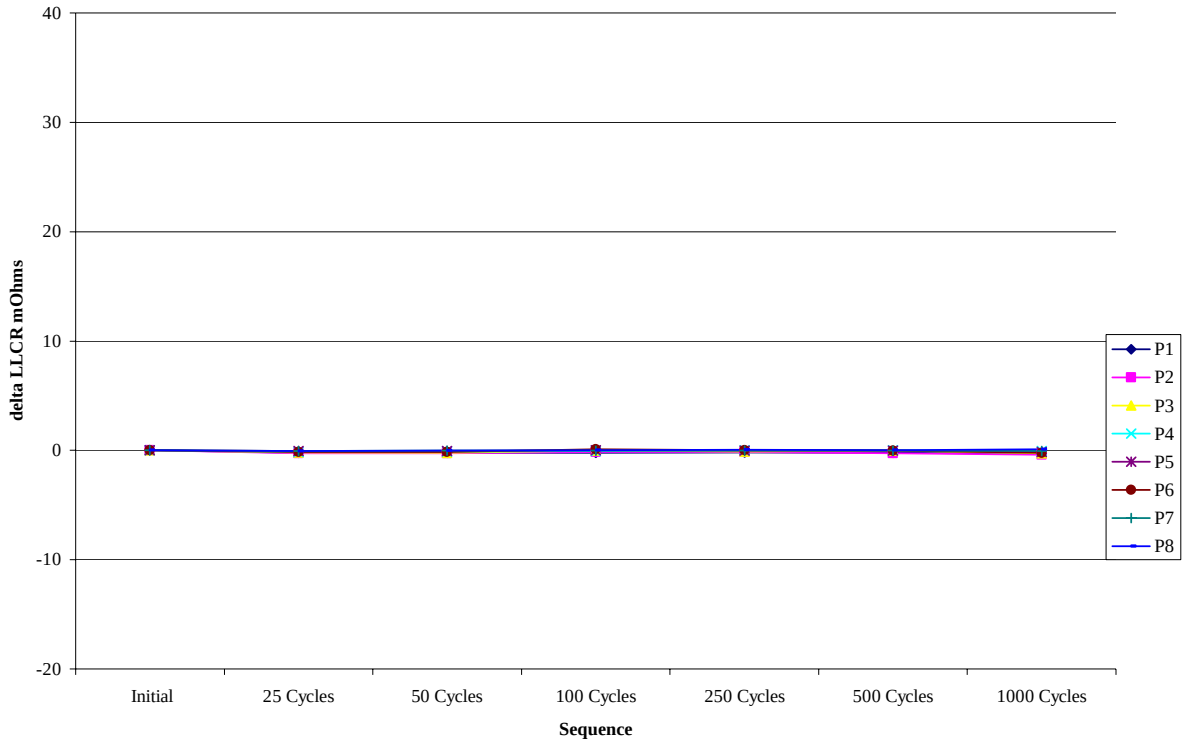
1000 Cycle Power Contact Durability



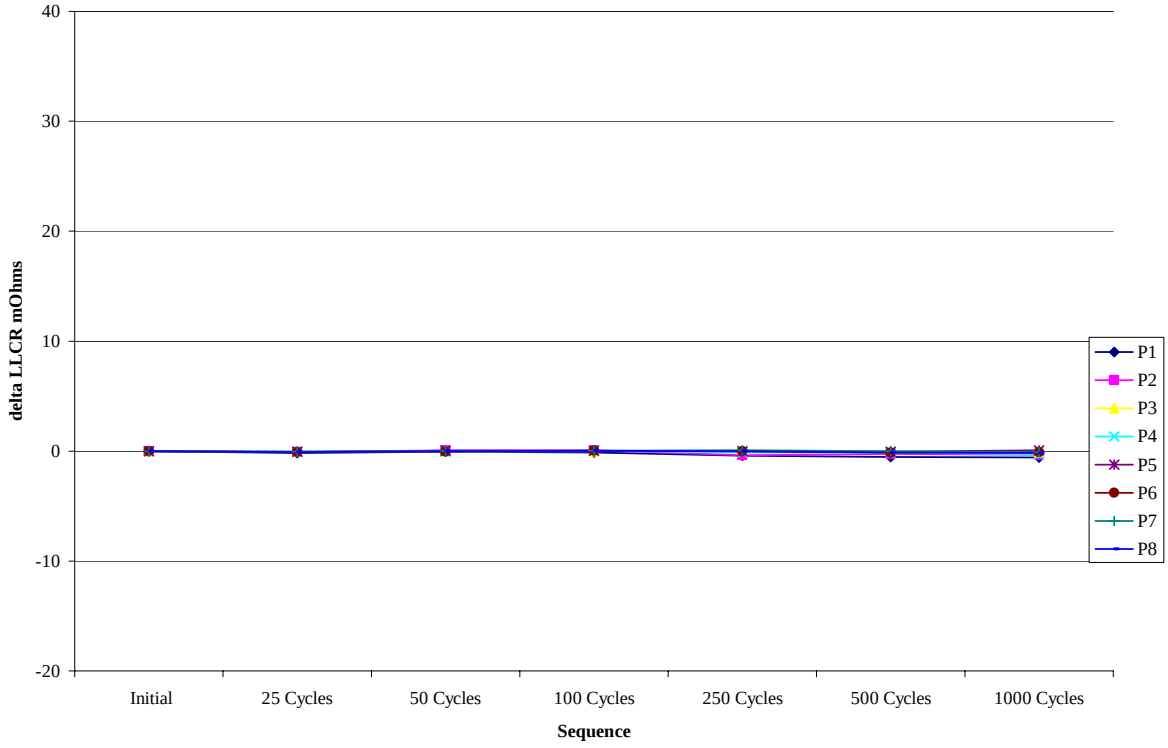
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Power Contacts



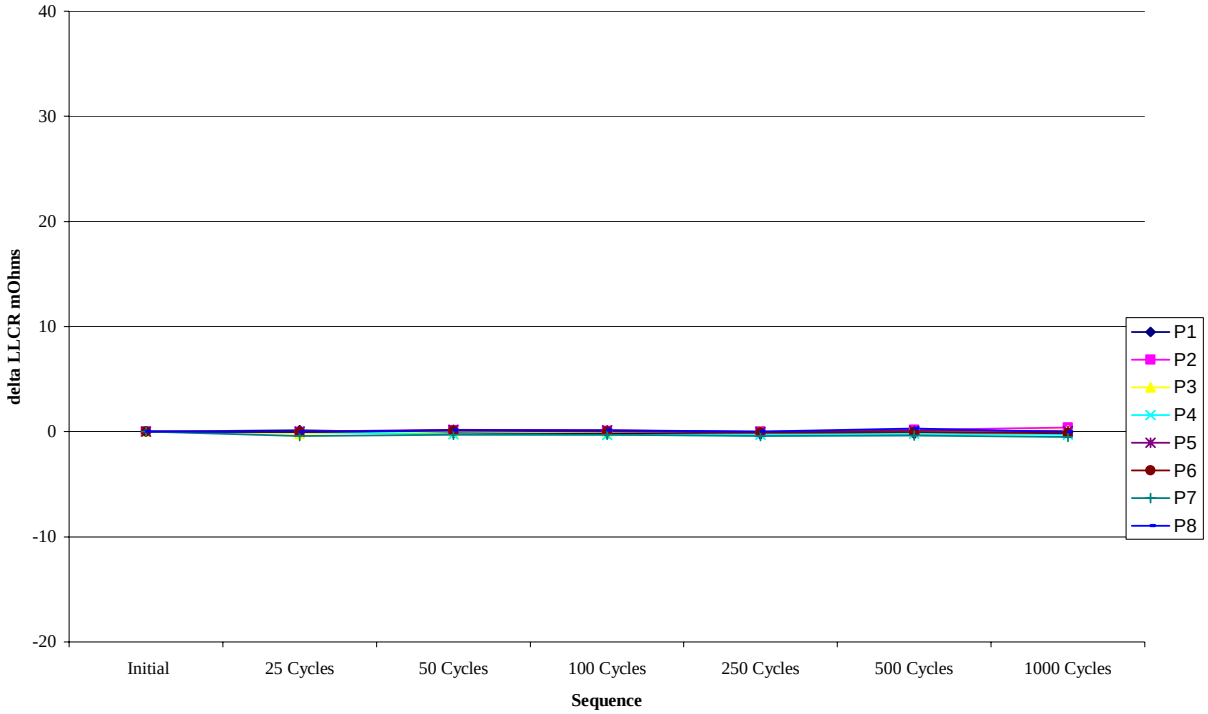
Board #2
Power Contacts



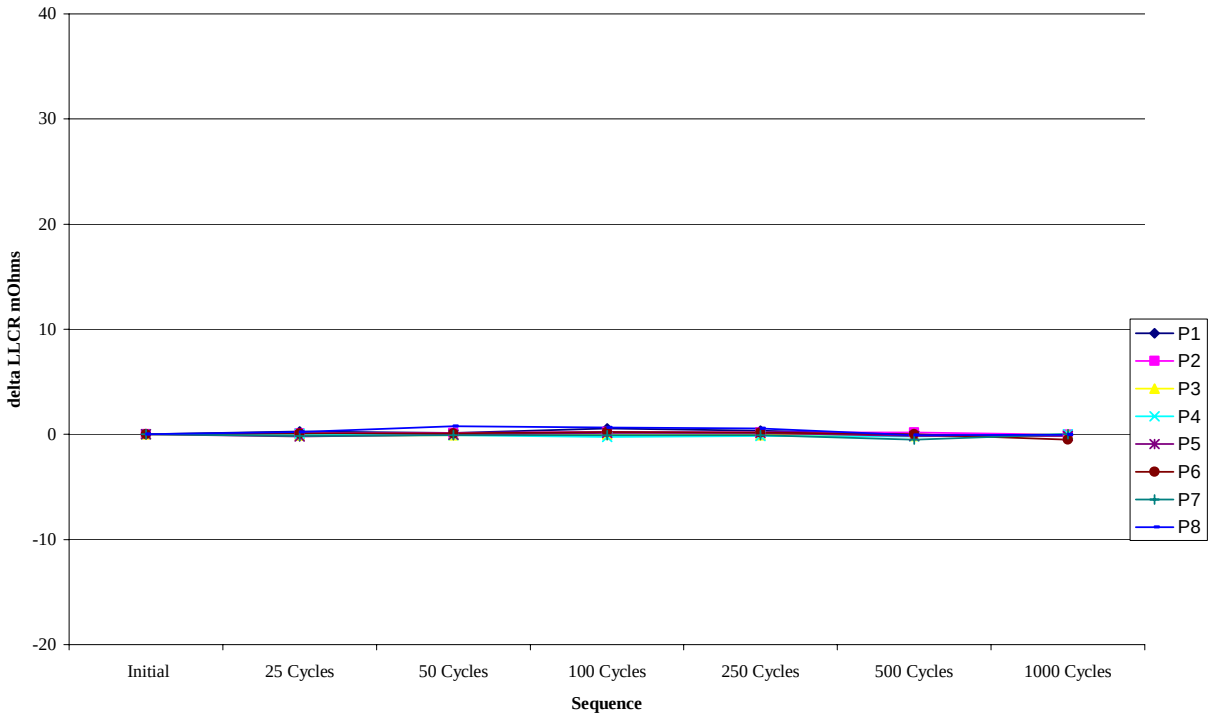
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Power Contacts



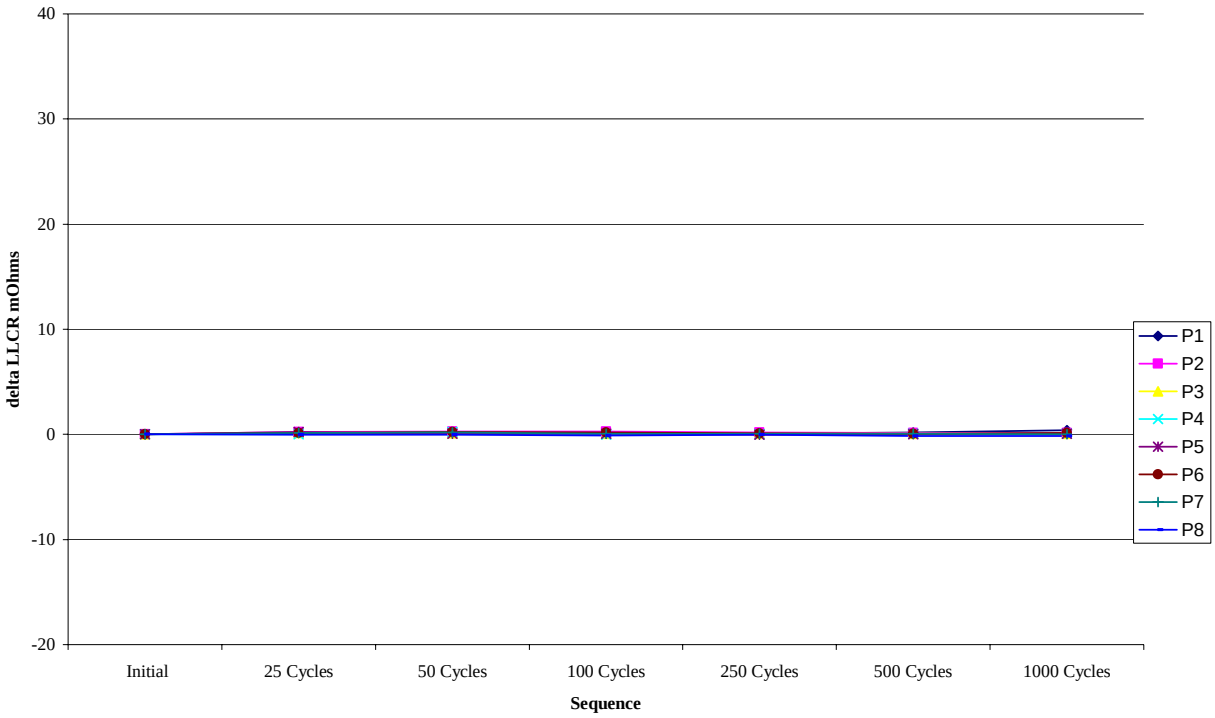
Board #5
Power Contacts



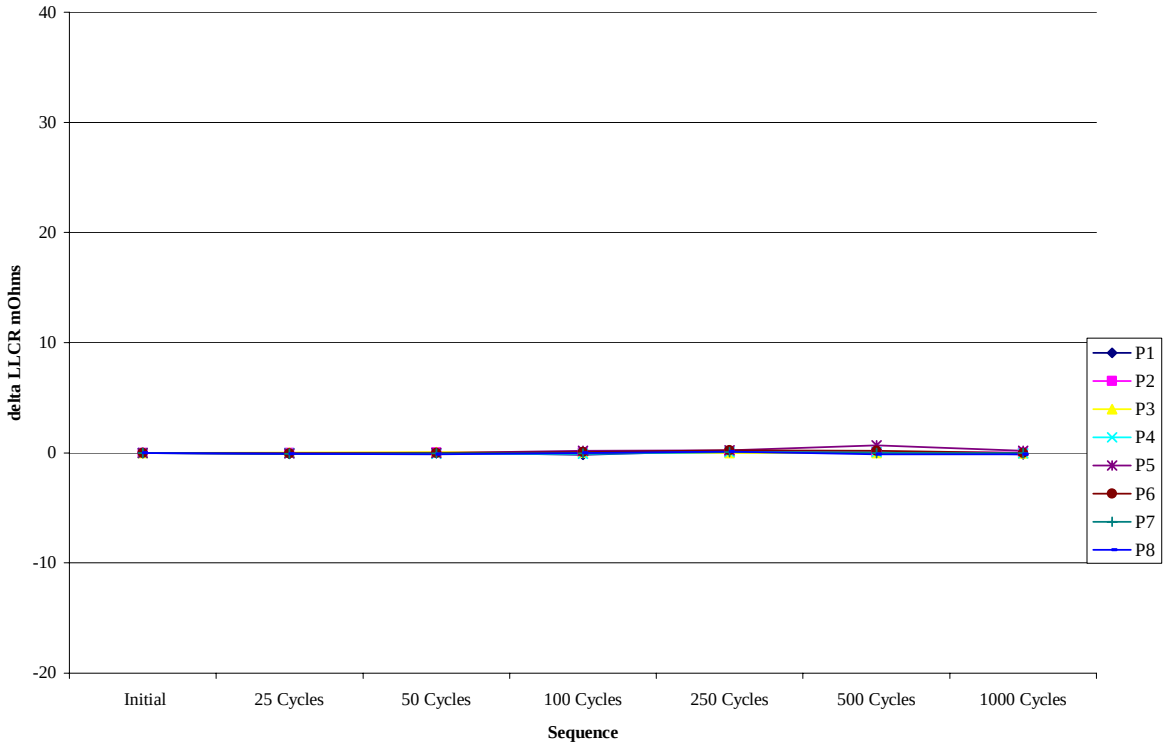
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #6
Power Contacts

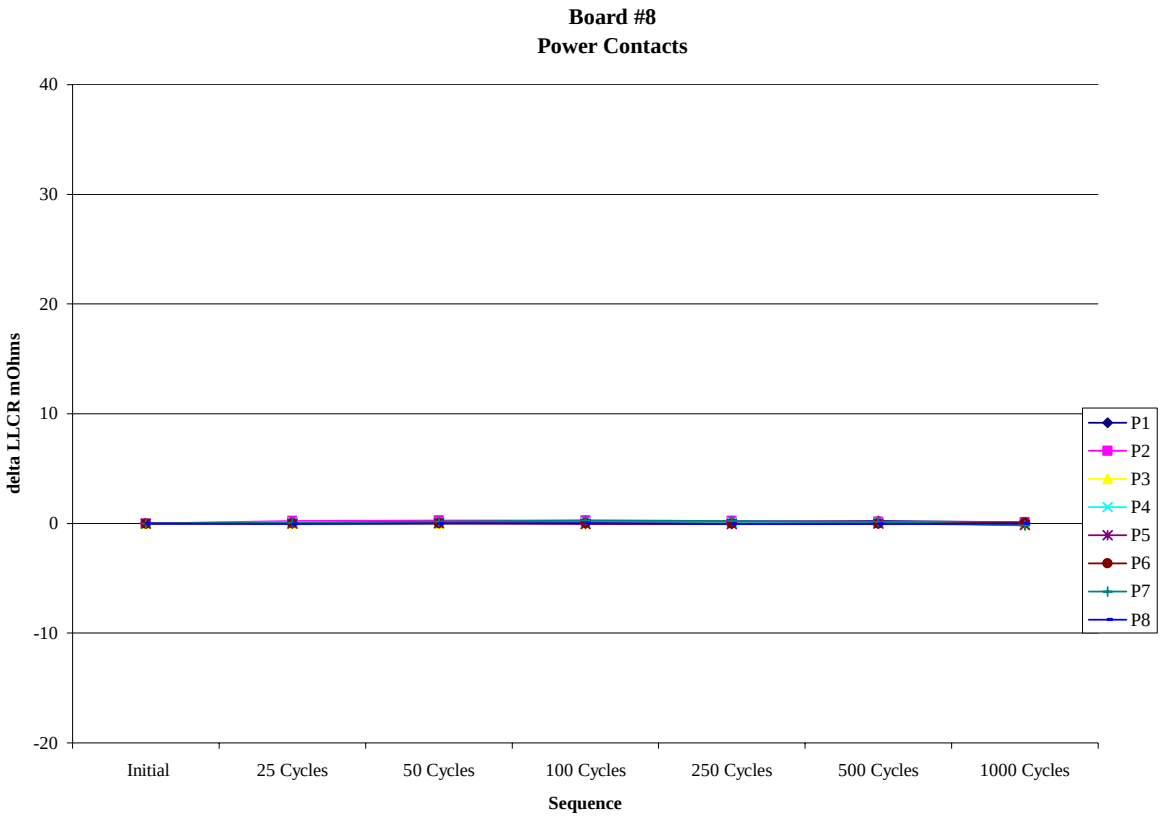


Board #7
Power Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

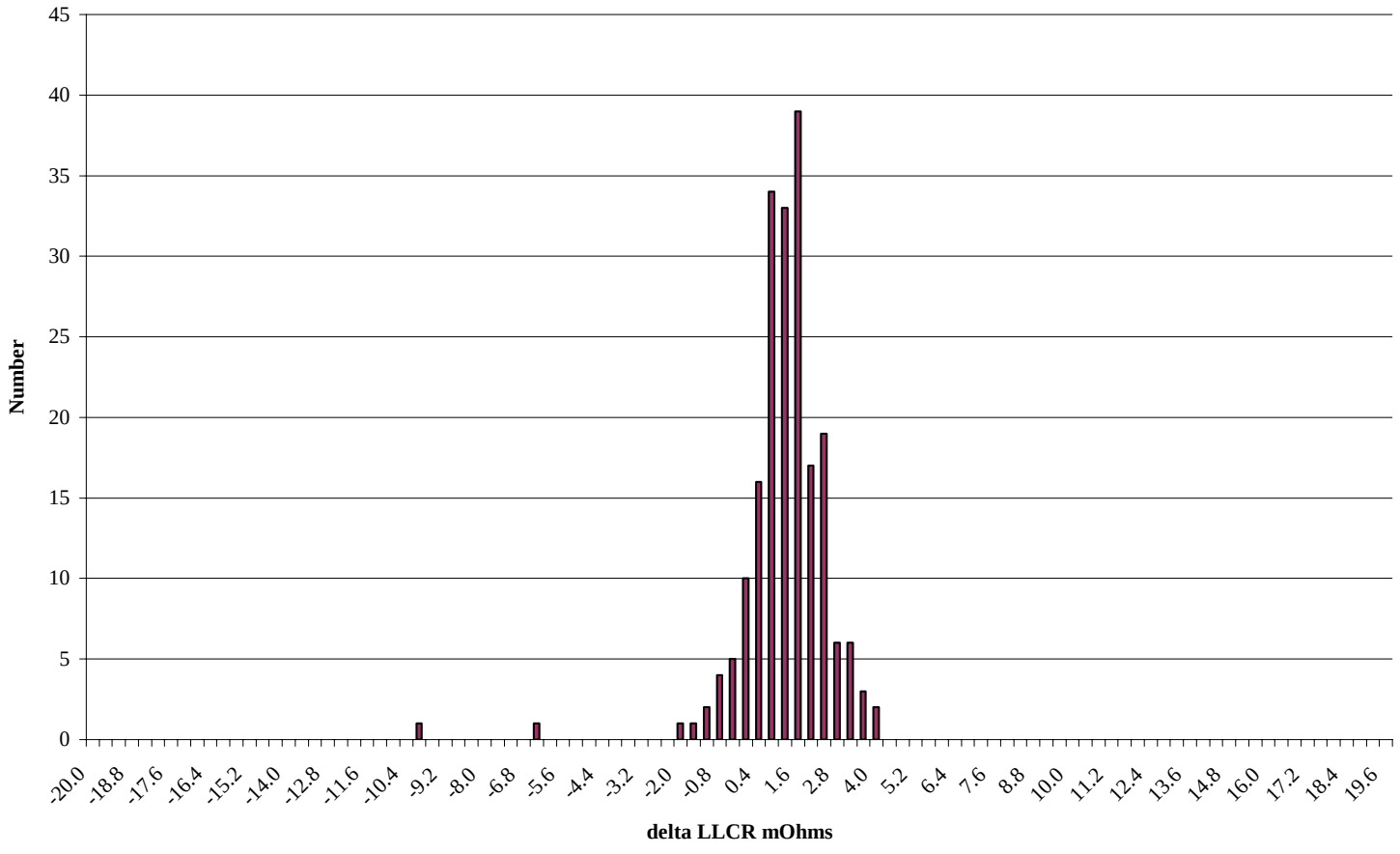
DATA SUMMARIES

LLCR, 100 Cycle Signal Contact Durability with Environmental Stressing:

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 Signal Contacts	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
Average	23.1	-0.4	1.3	1.0
St. Dev.	1.4	1.2	1.8	1.4
Min	20.6	-10.7	-9.7	-10.1
Max	30.9	2.1	15.3	3.8
Count	200	200	200	200

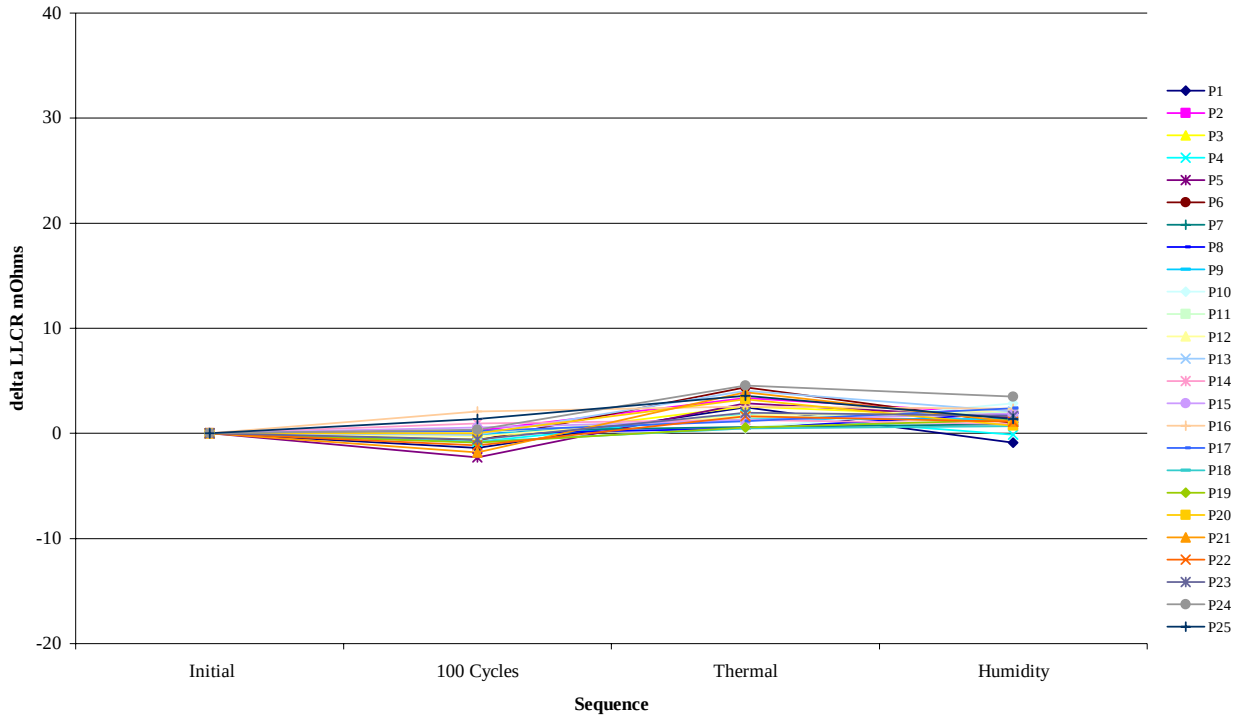
100 Cycle Signal Contact Durability after Environmental Stressing



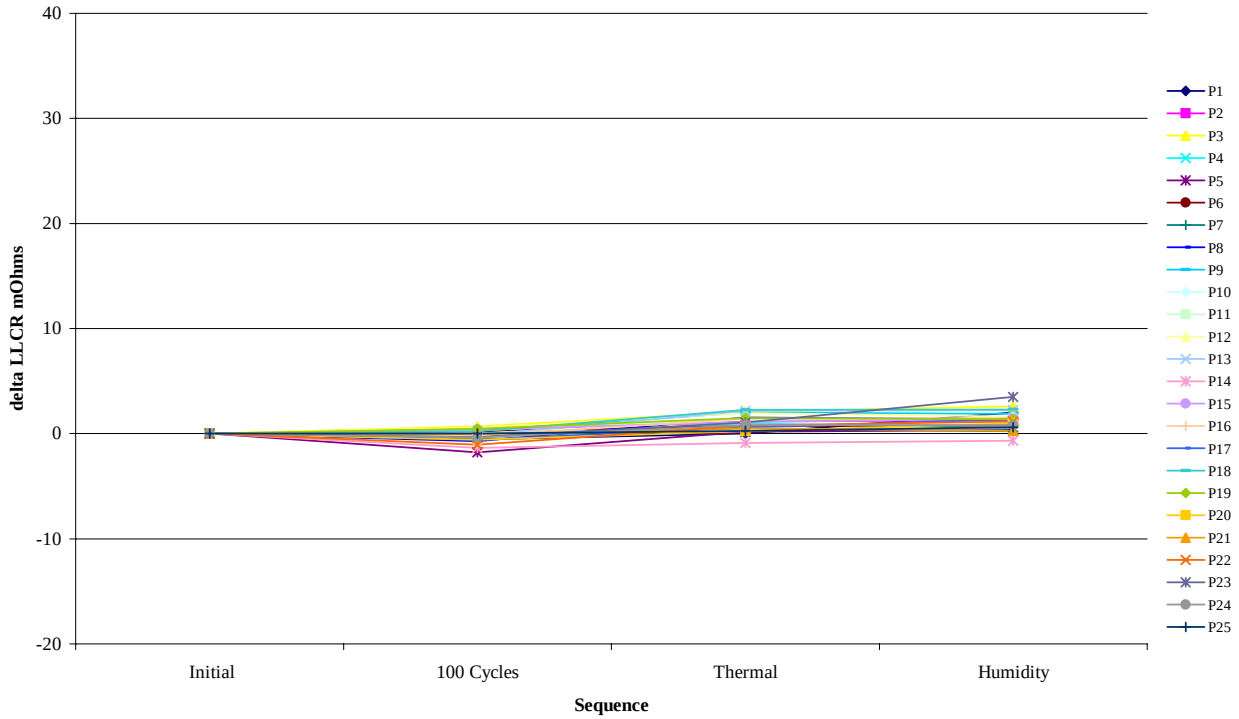
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Signal Contacts



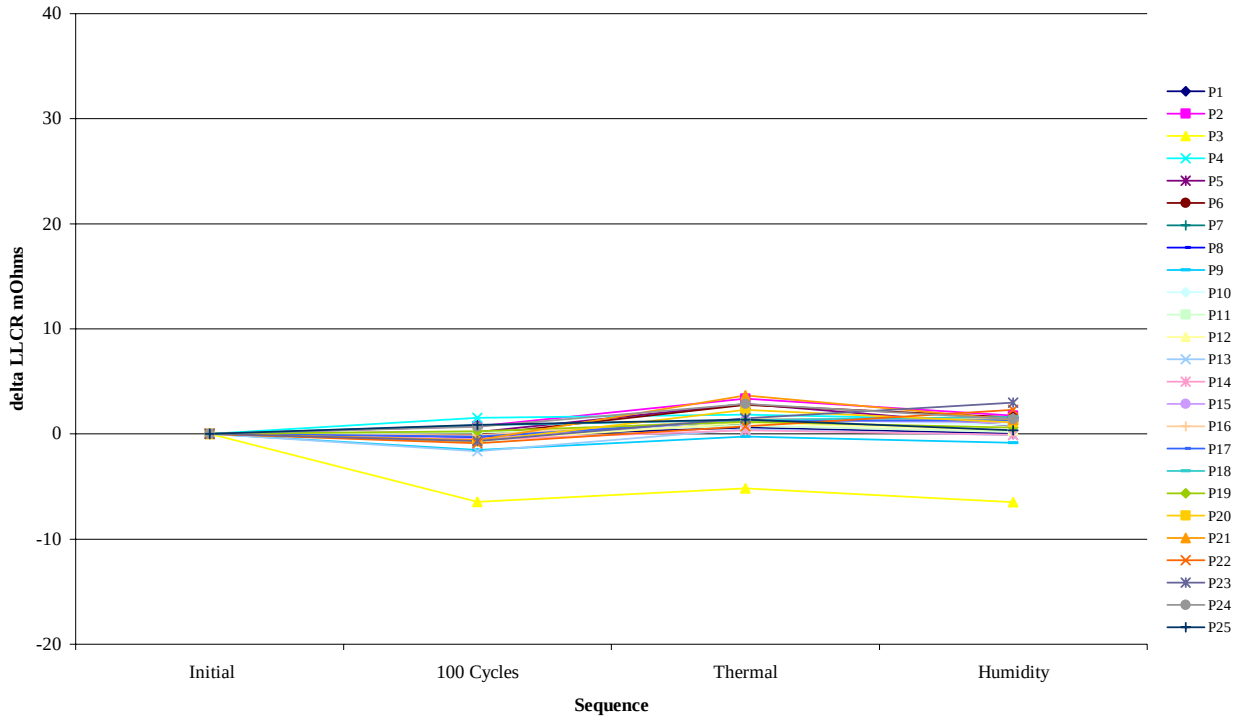
Board #2
Signal Contacts



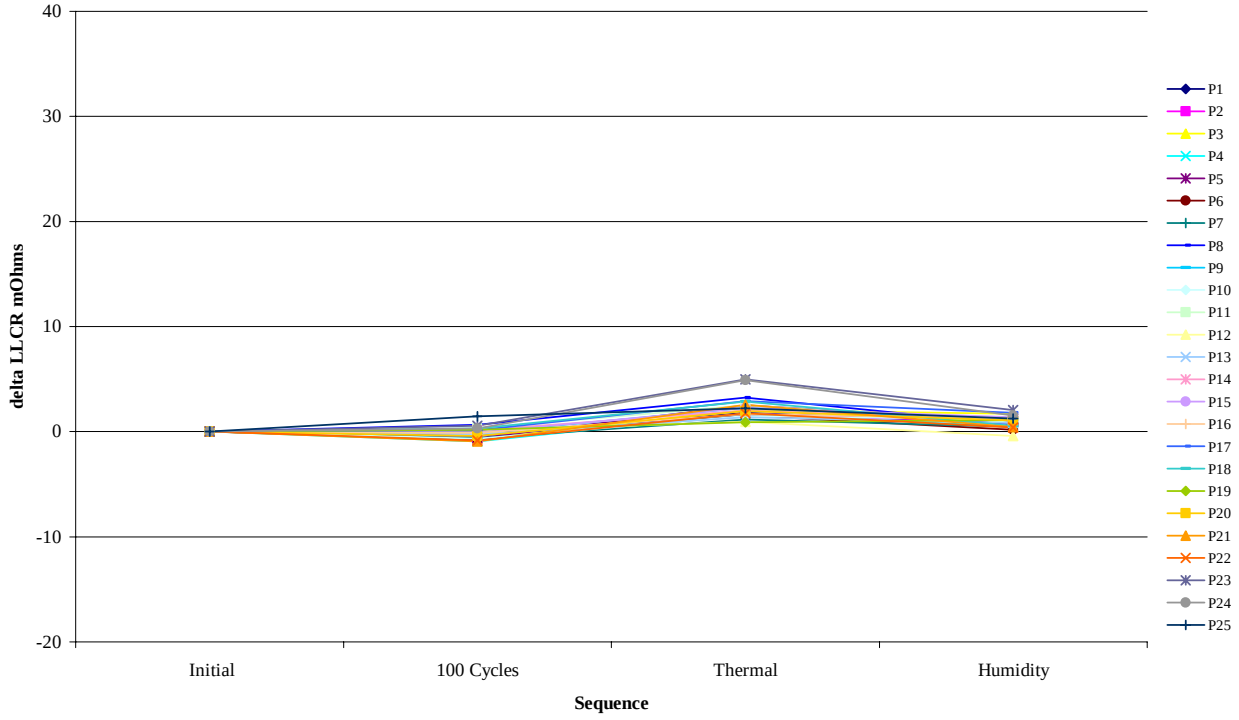
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Signal Contacts



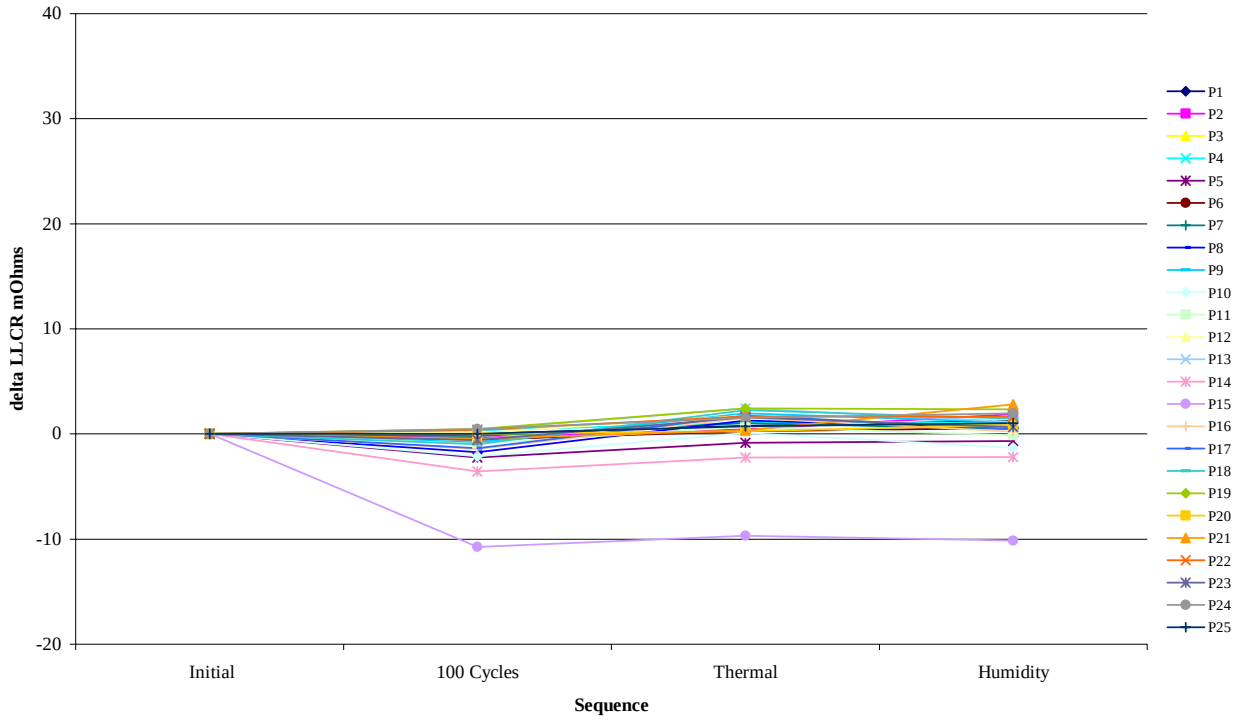
Board #4
Signal Contacts



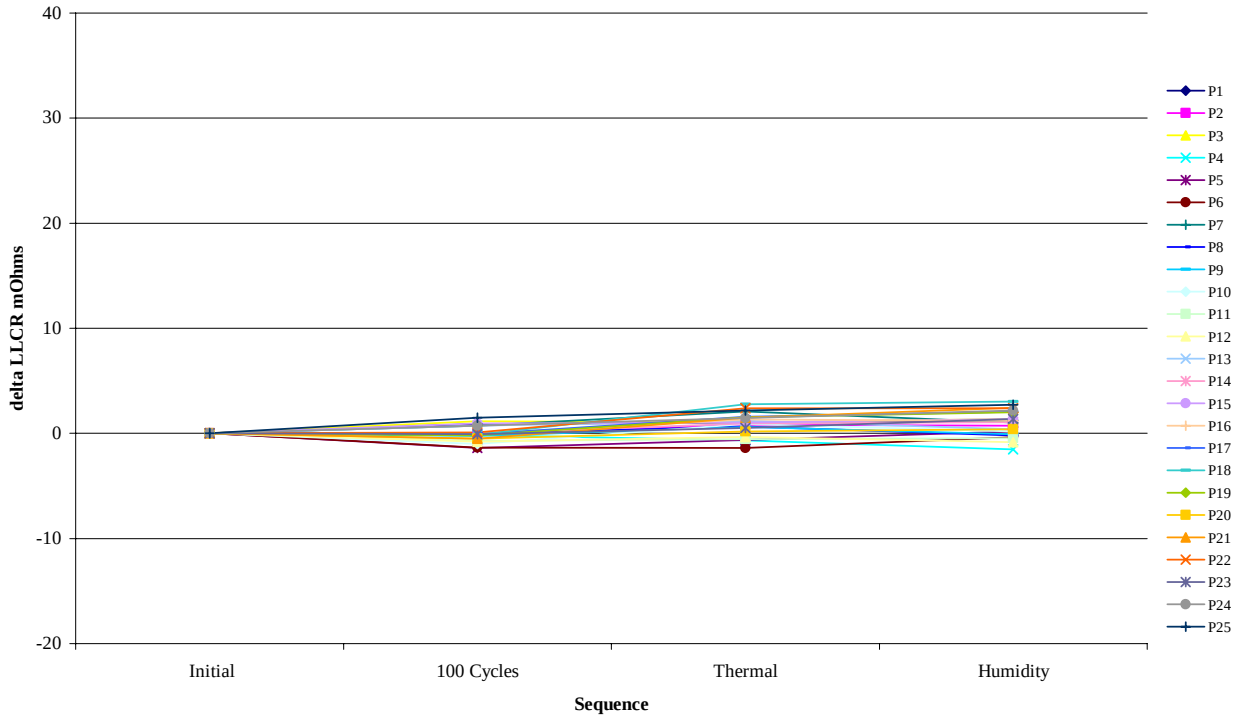
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #5
Signal Contacts



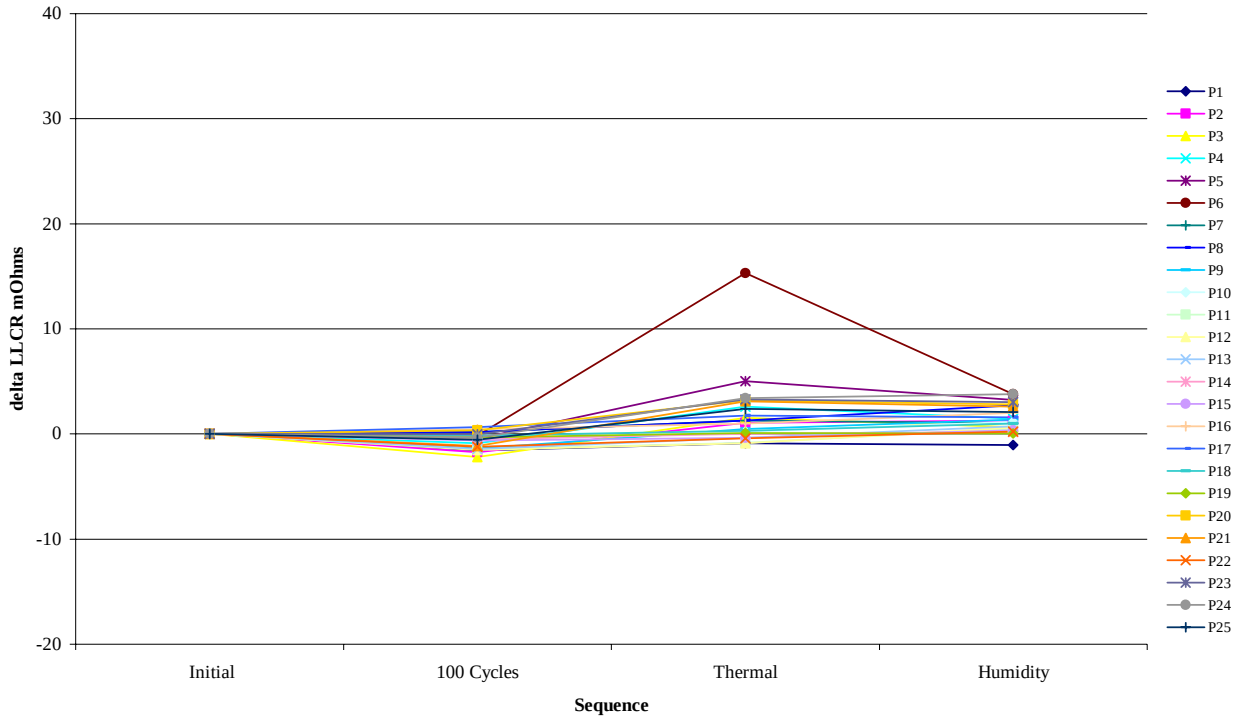
Board #6
Signal Contacts



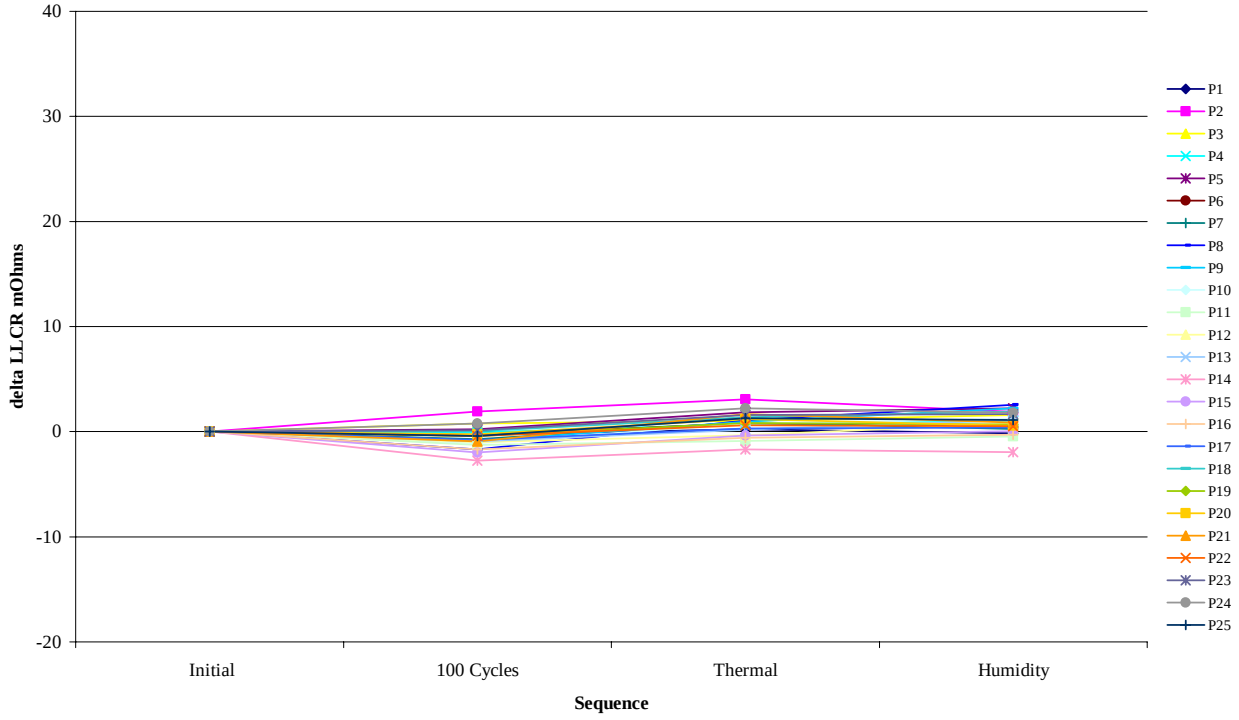
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #7
Signal Contacts



Board #8
Signal Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

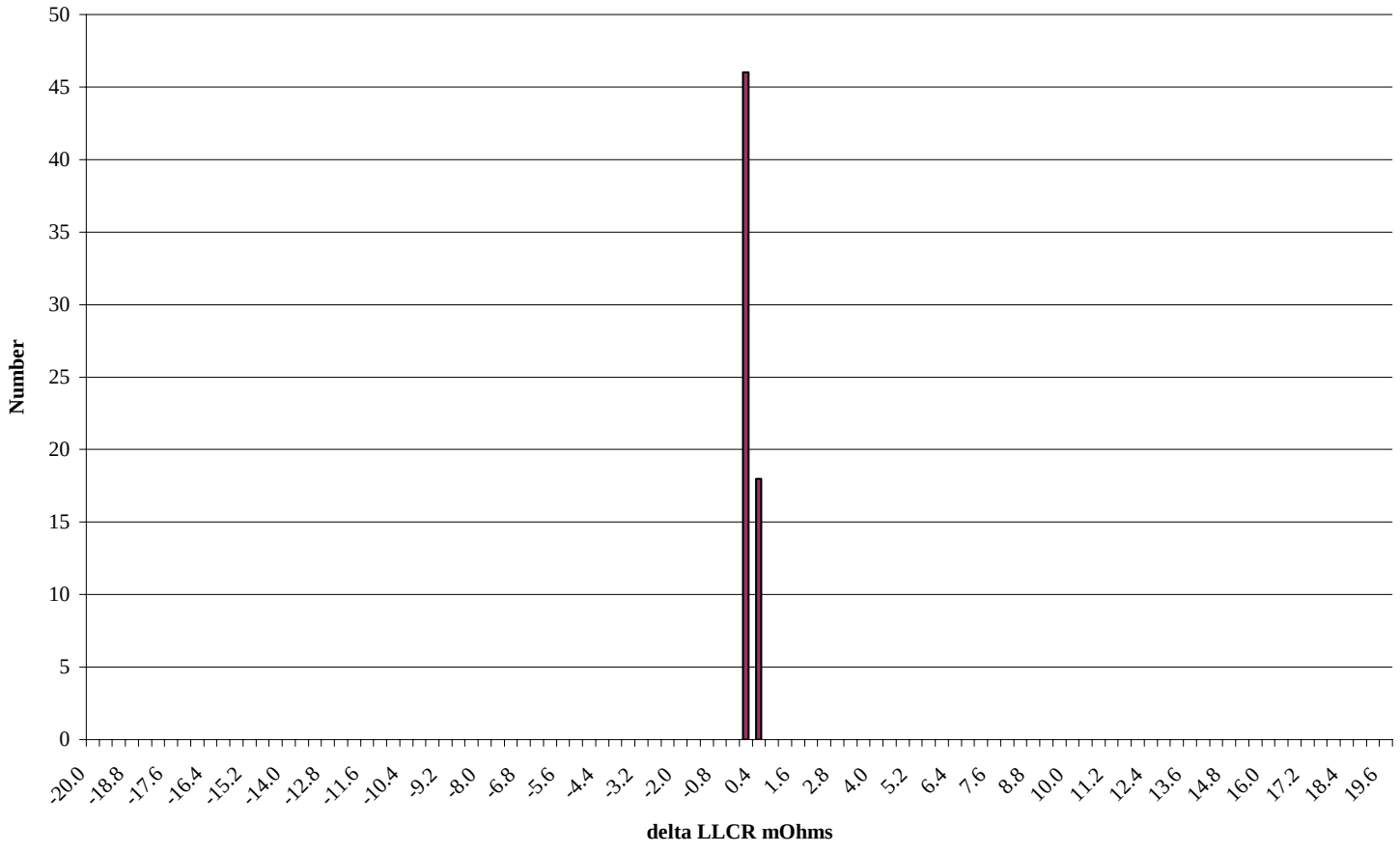
DATA SUMMARIES

LLCR, 100 Cycle Power Contact Durability with Environmental Stressing:

1) A total of 64 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 Power Contacts	Actual Initial	Delta 100 Cycles	Delta Thermal	Delta Humidity
Average	4.6	-0.1	0.0	-0.1
St. Dev.	0.1	0.1	0.2	0.1
Min	4.4	-0.4	-0.3	-0.4
Max	5.3	0.2	0.5	0.1
Count	64	64	64	64

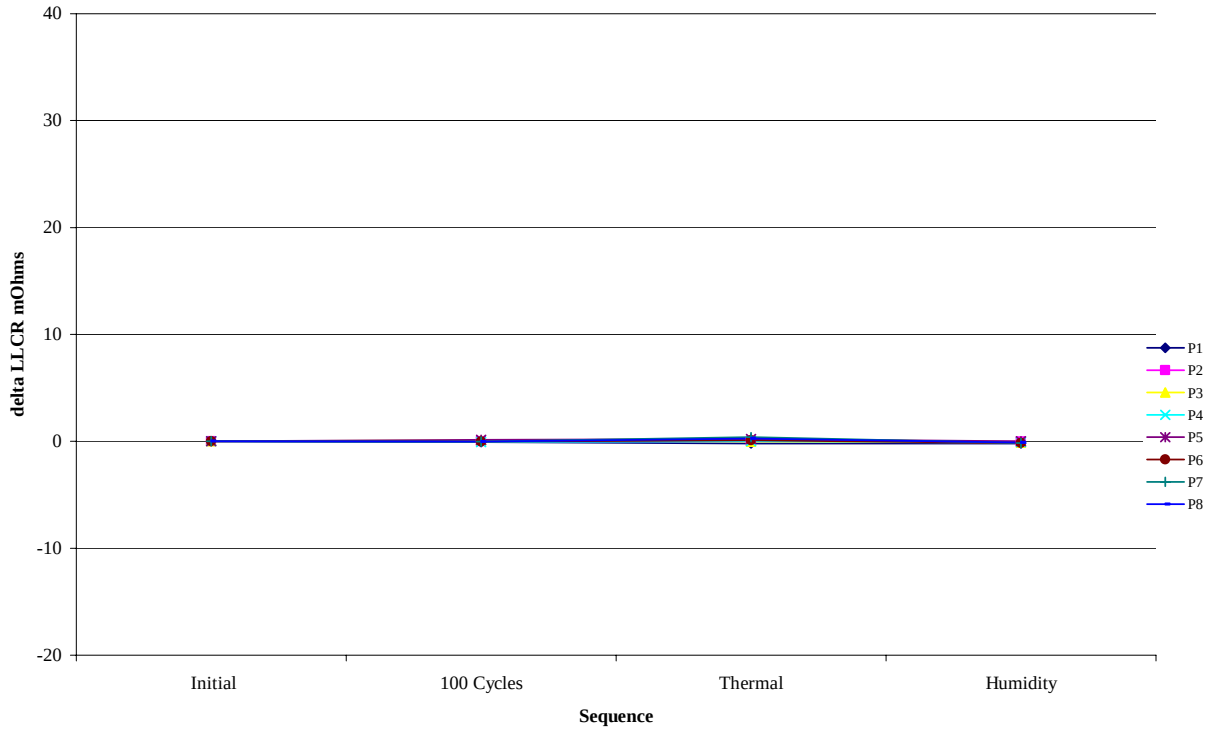
100 Cycle Power Contact Durability after Environmental Stressing



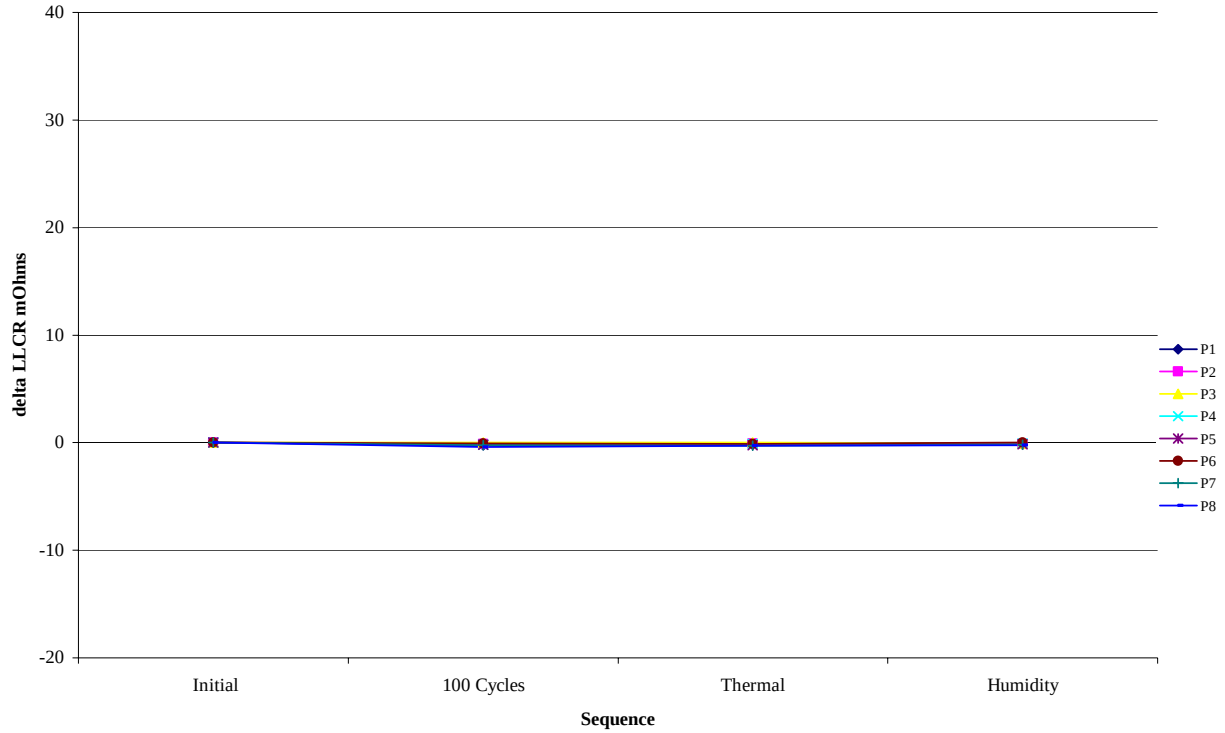
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Power Contacts



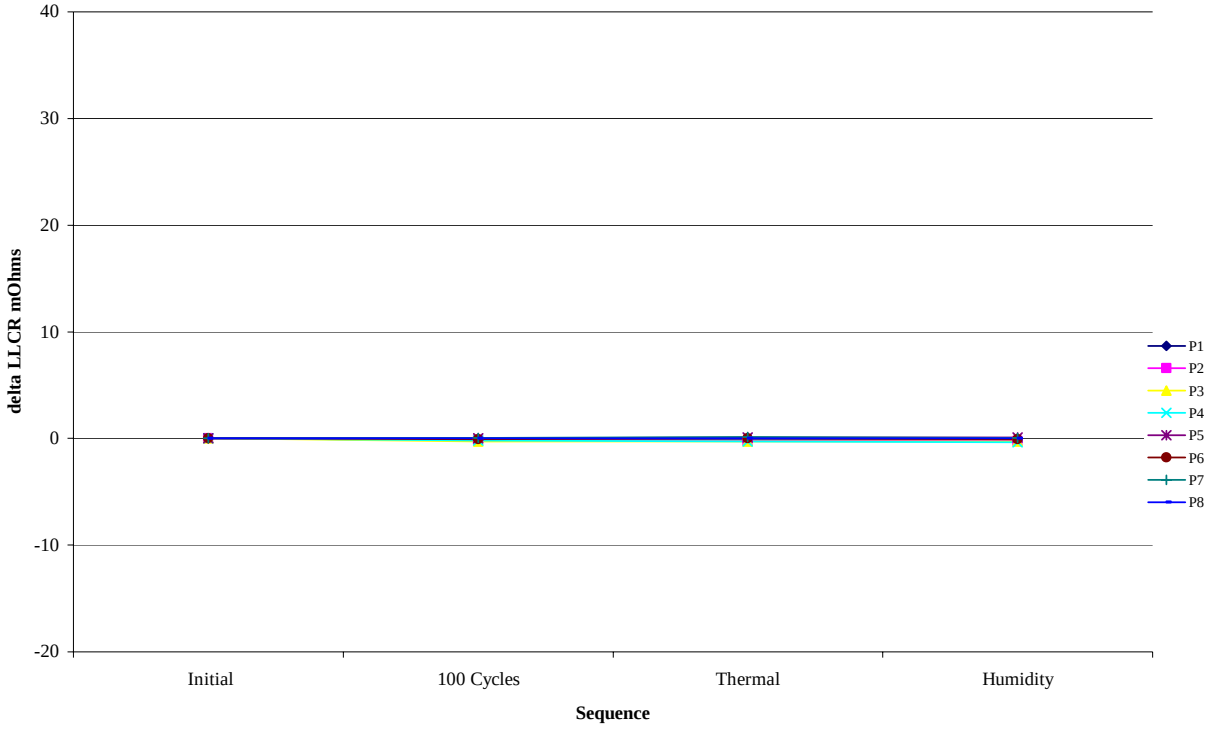
Board #2
Power Contacts



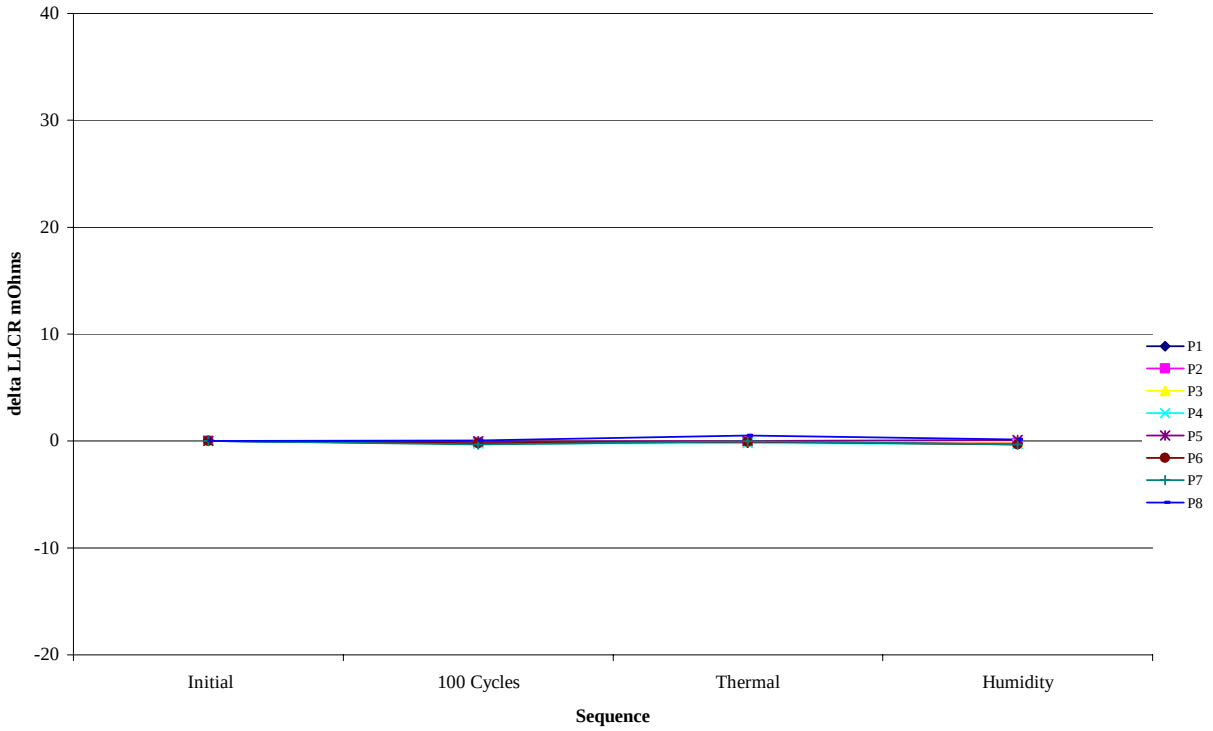
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Power Contacts



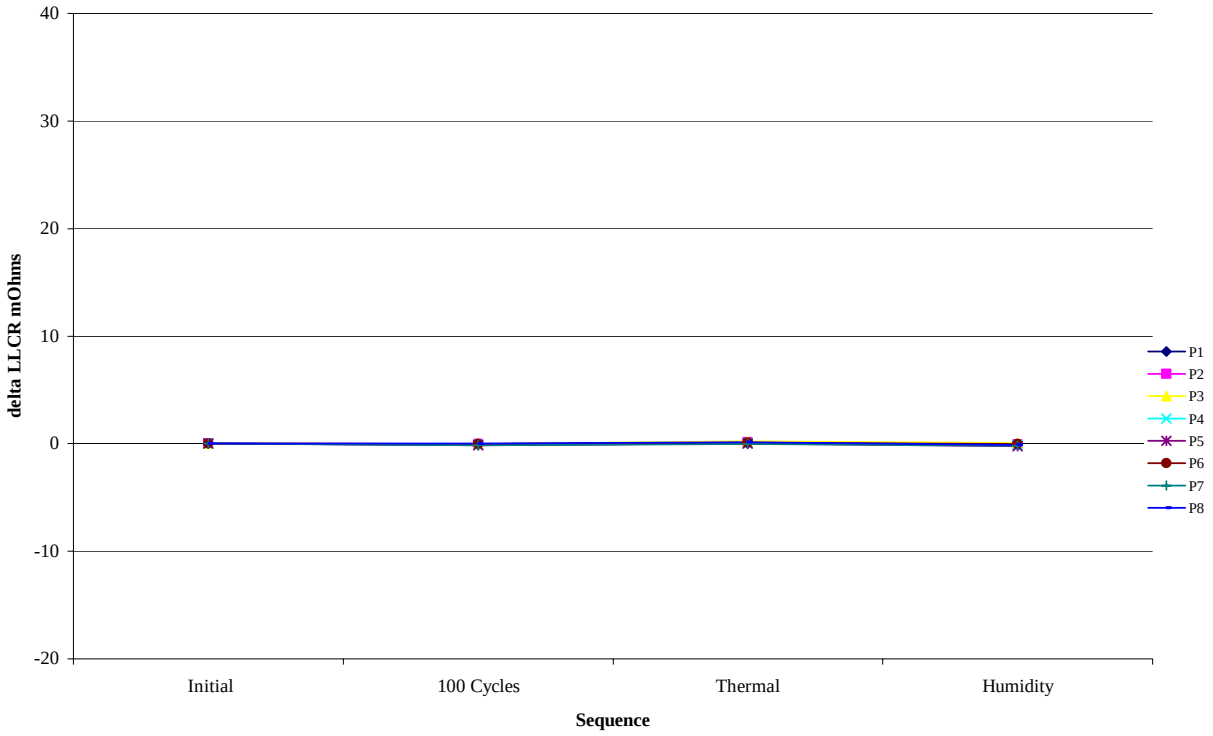
Board #4
Power Contacts



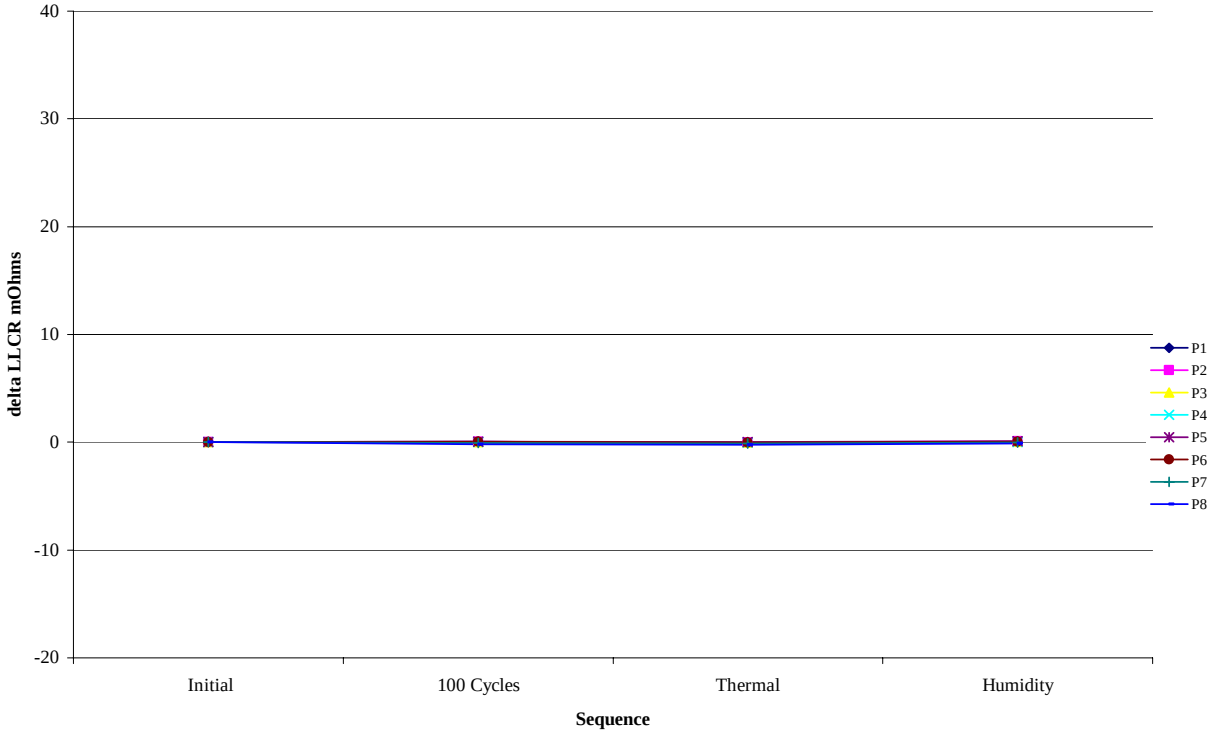
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #5
Power Contacts



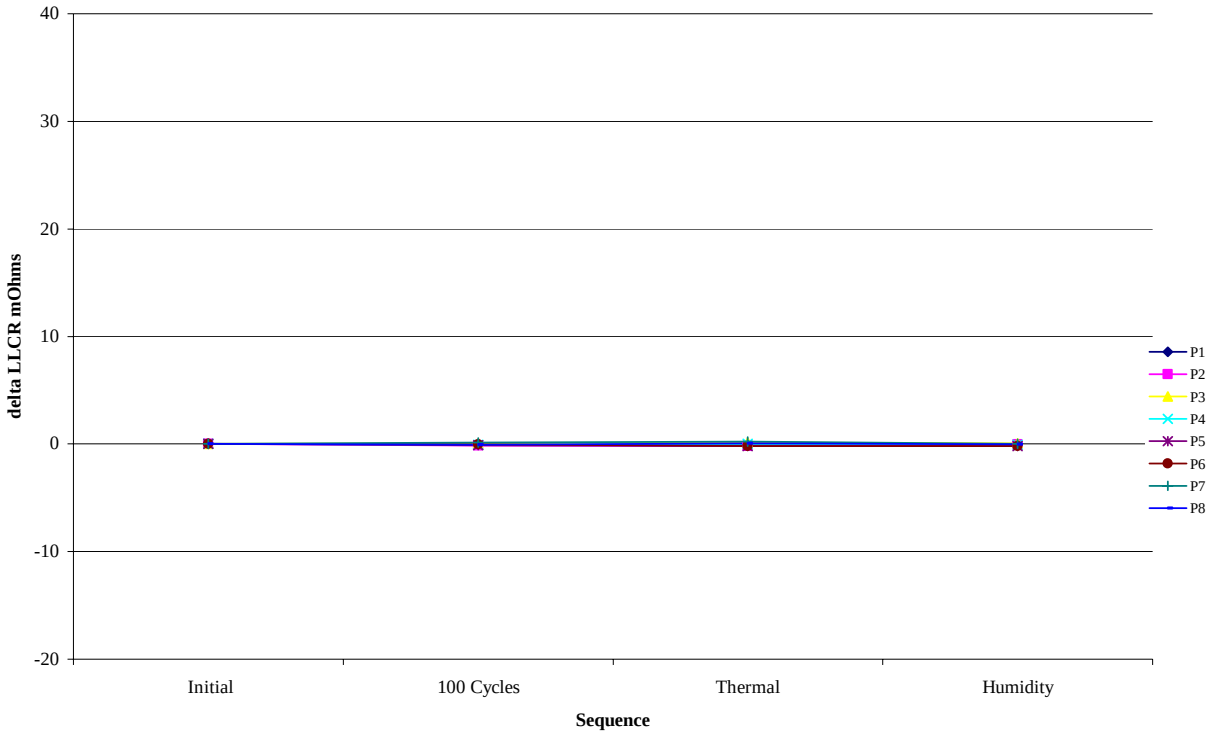
Board #6
Power Contacts



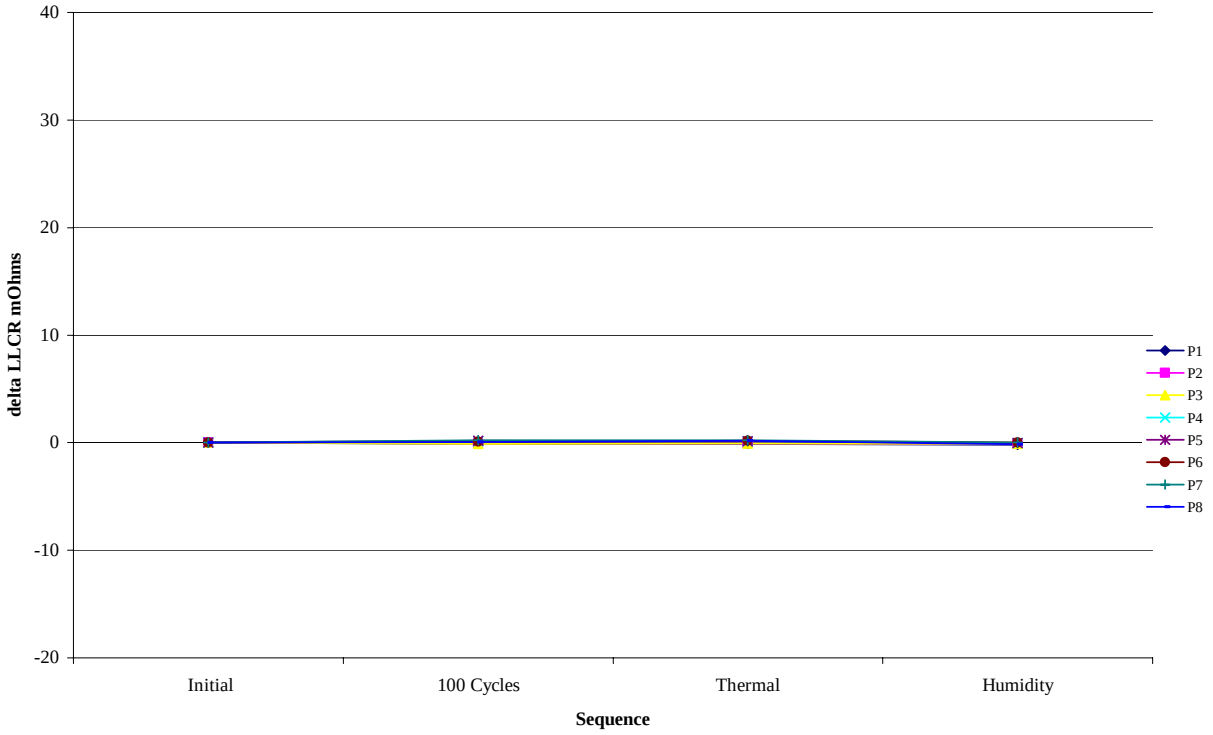
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #7
Power Contacts



Board #8
Power Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

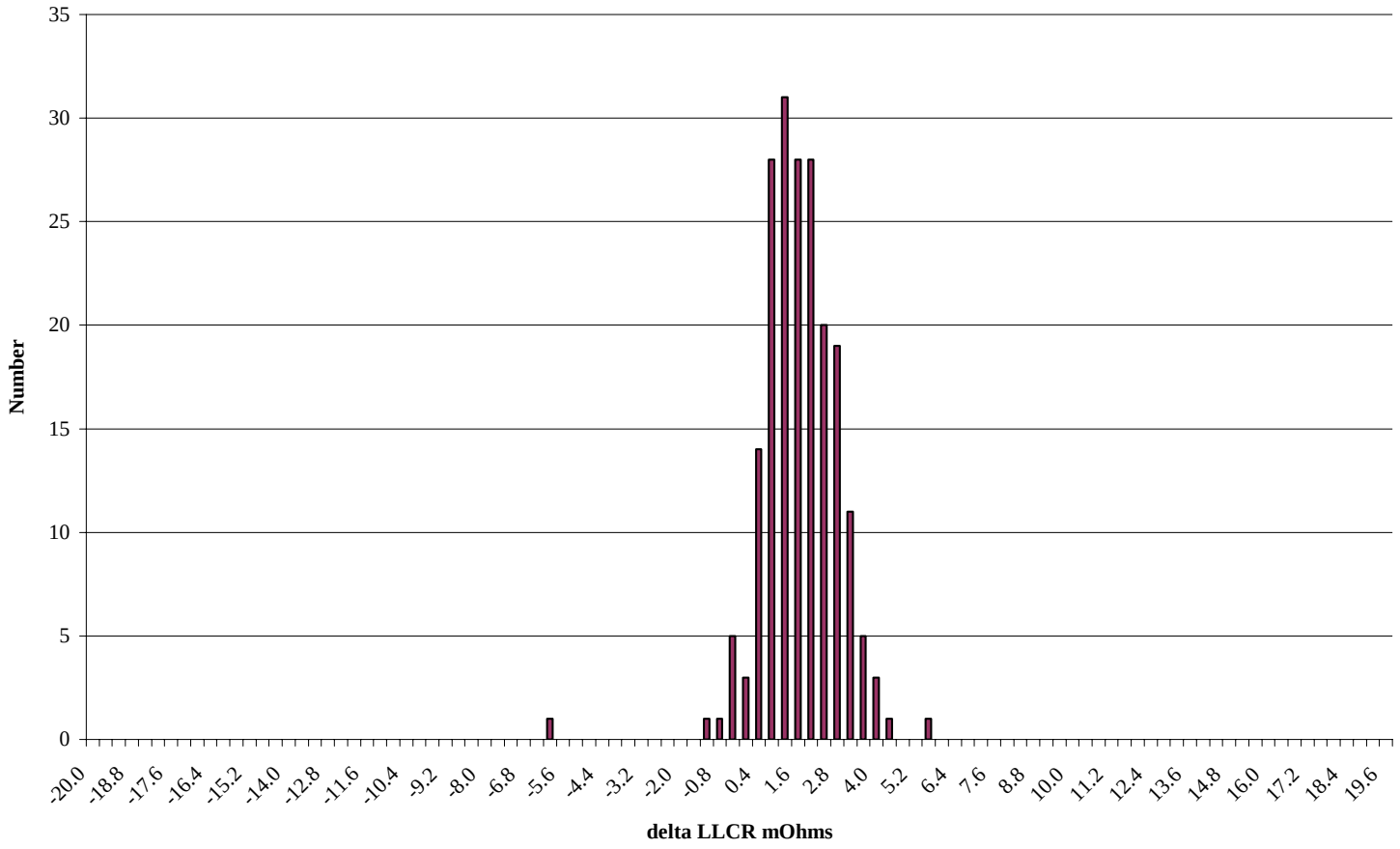
DATA SUMMARIES

LLCR, 250 Cycle Signal Contact Durability with Environmental Stressing:

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 Signal Contacts	Actual Initial	Delta 250 Cycles	Delta Thermal	Delta Humidity
Average	22.9	-0.3	1.6	1.5
St. Dev.	1.4	1.0	1.4	1.2
Min	19.8	-5.3	-1.9	-6.3
Max	31.4	2.0	10.3	5.4
Count	200	200	200	200

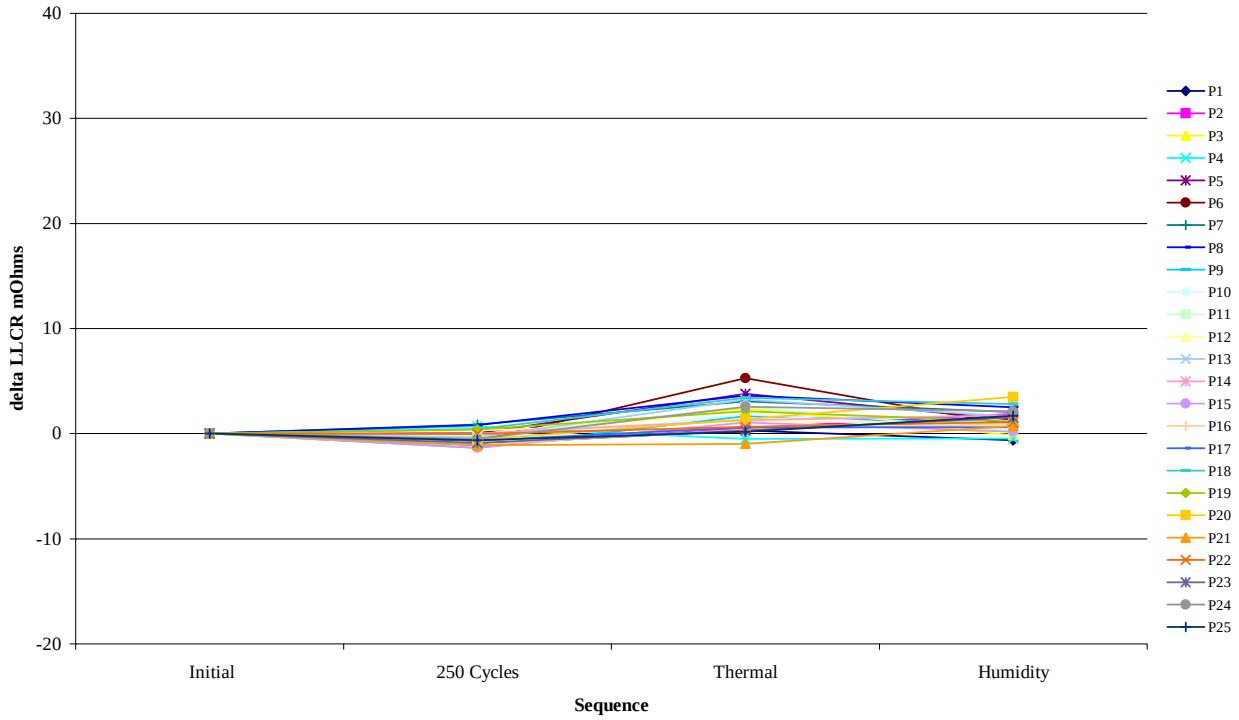
250 Cycle Signal Contact Durability after Environmental Stressing



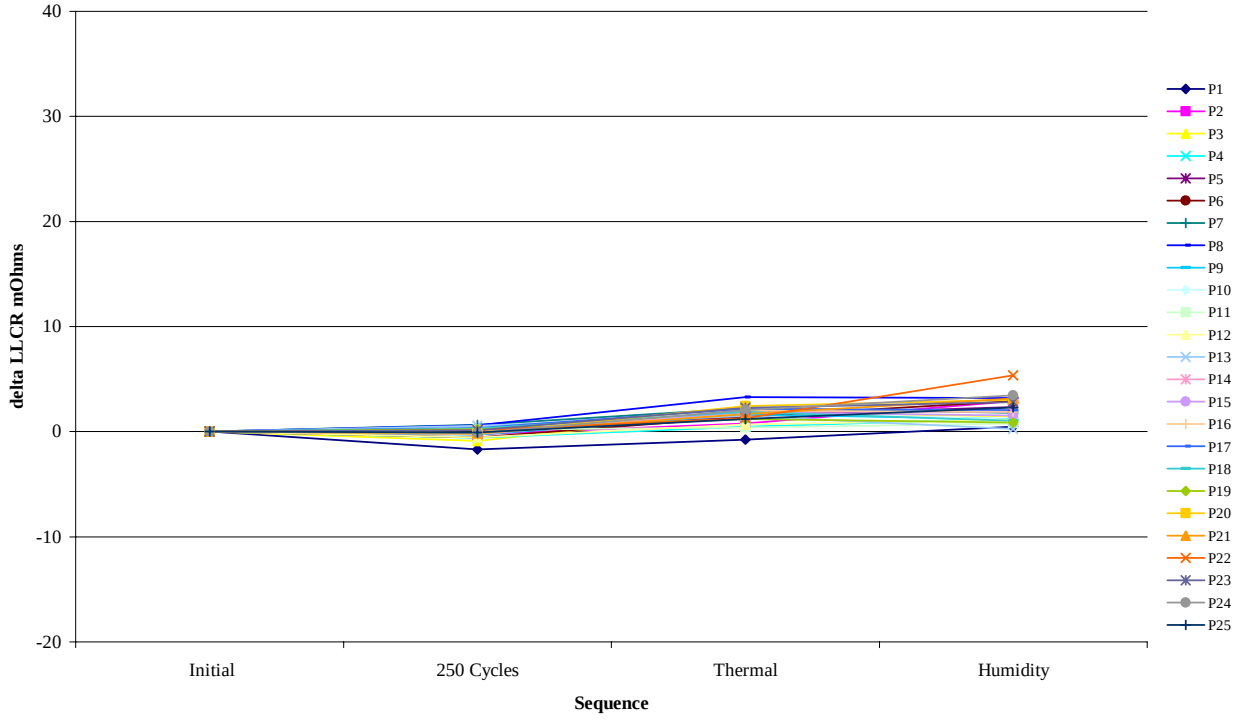
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Signal Contacts



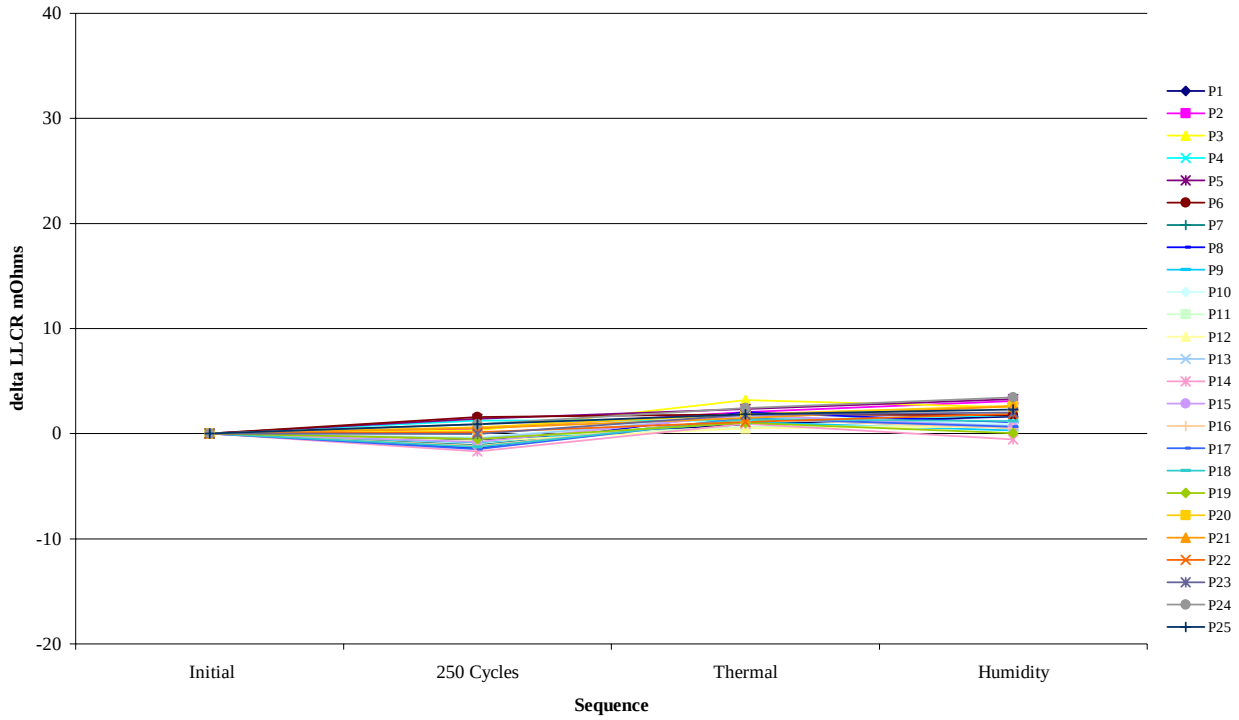
Board #2
Signal Contacts



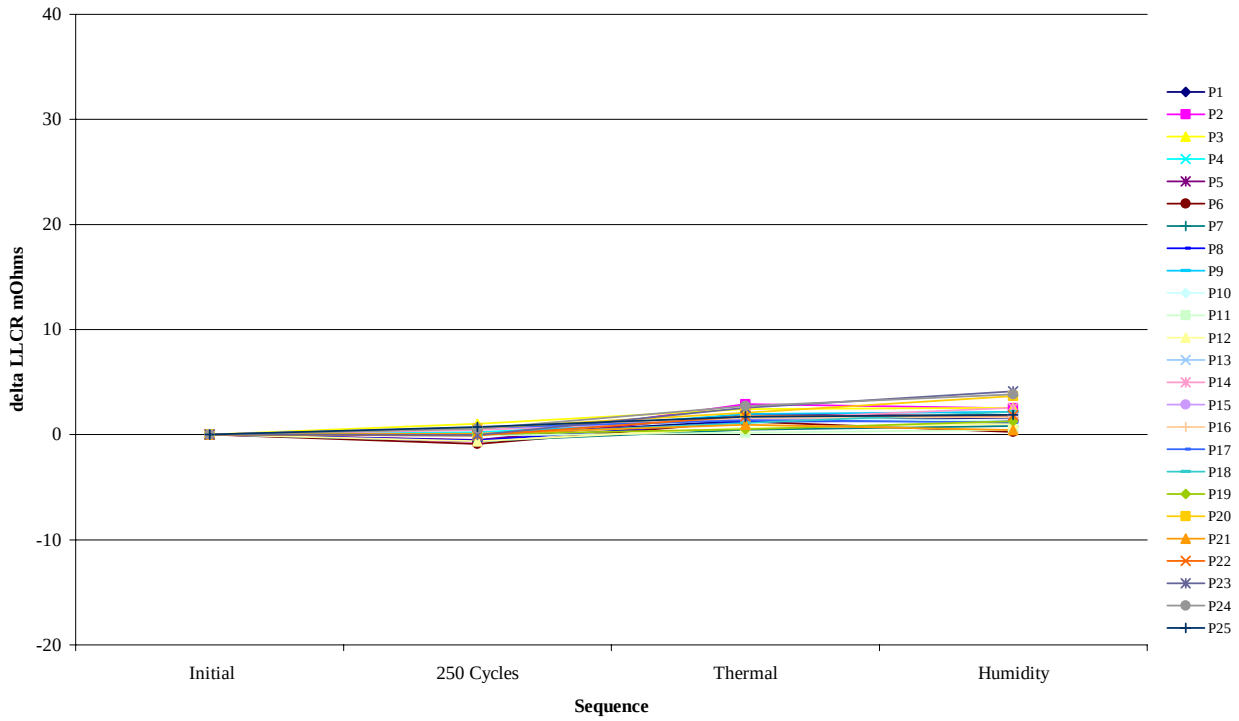
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Signal Contacts



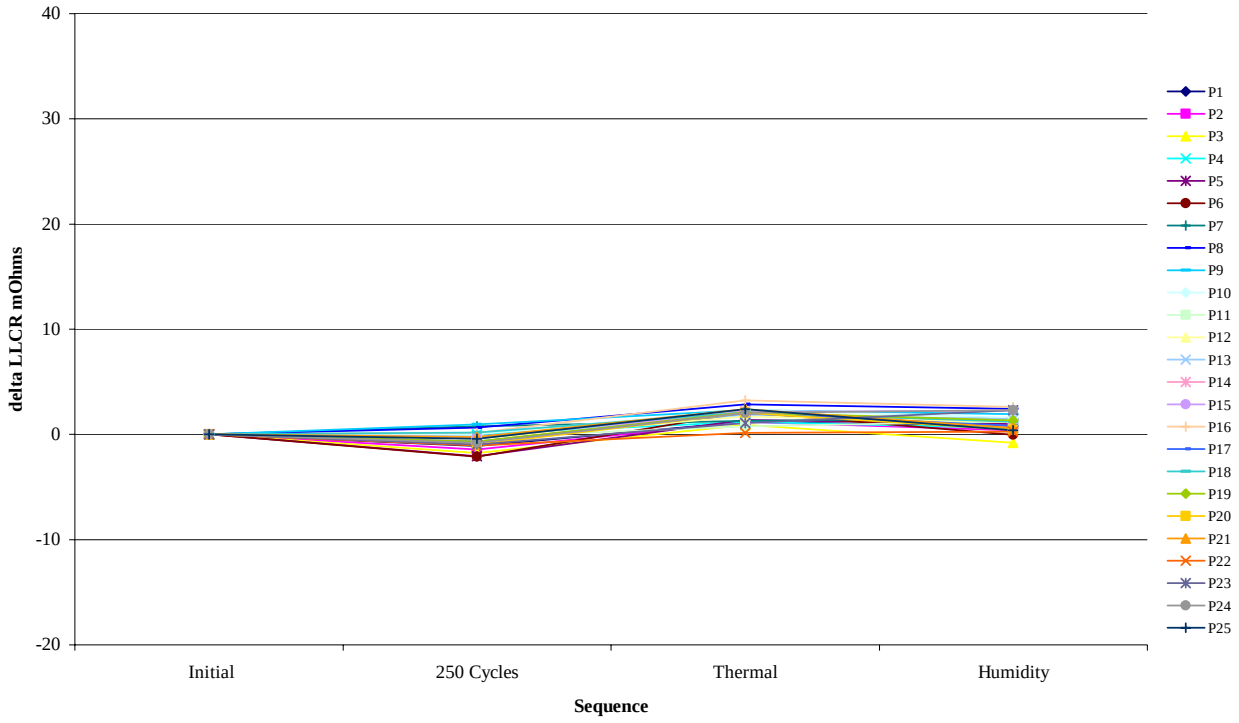
Board #4
Signal Contacts



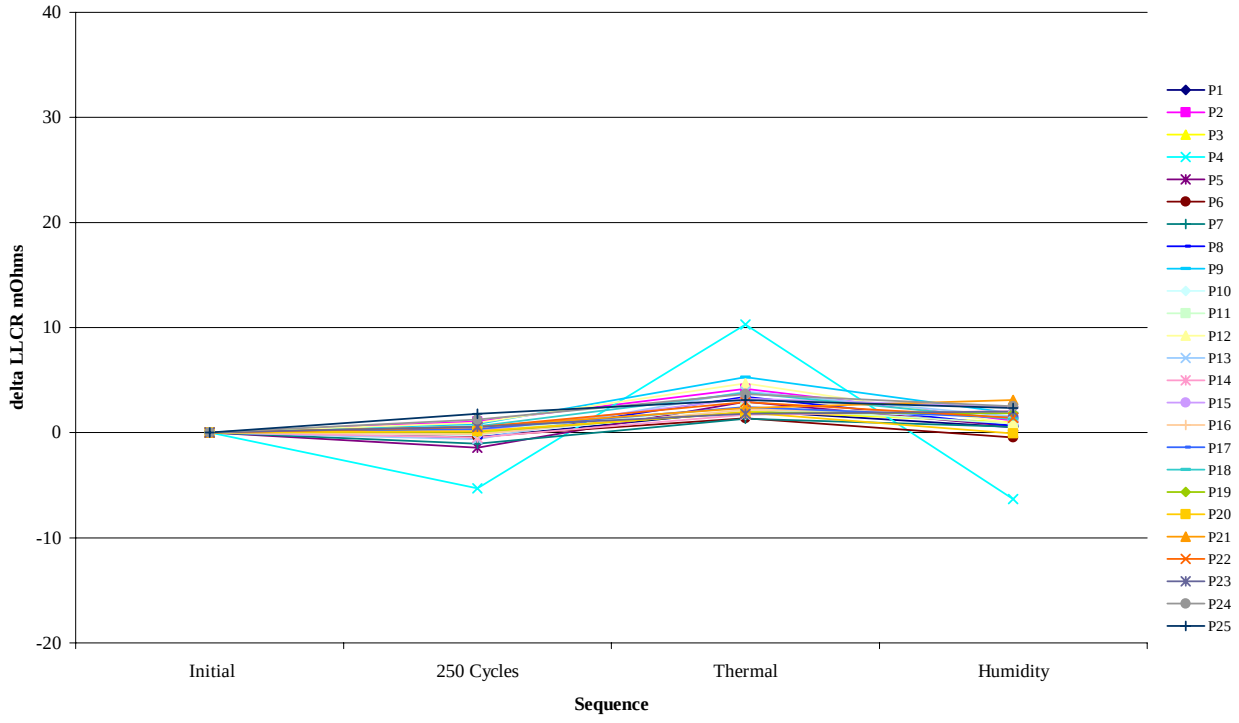
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #5
Signal Contacts



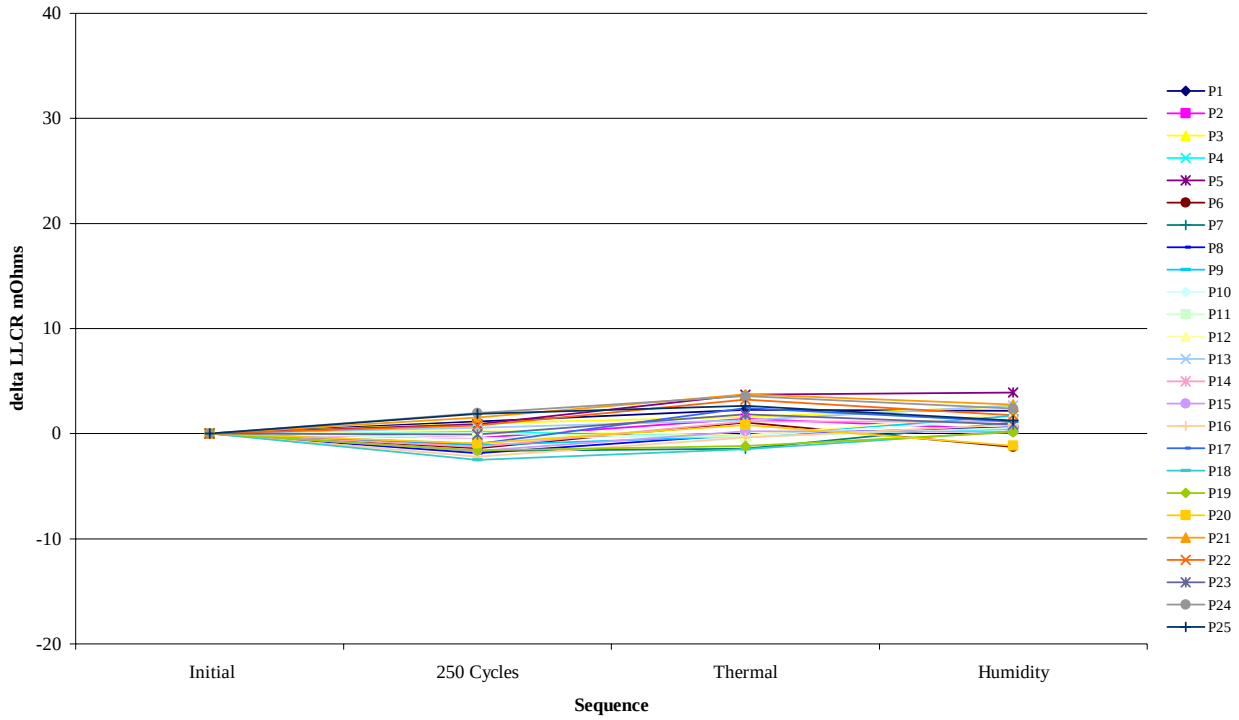
Board #6
Signal Contacts



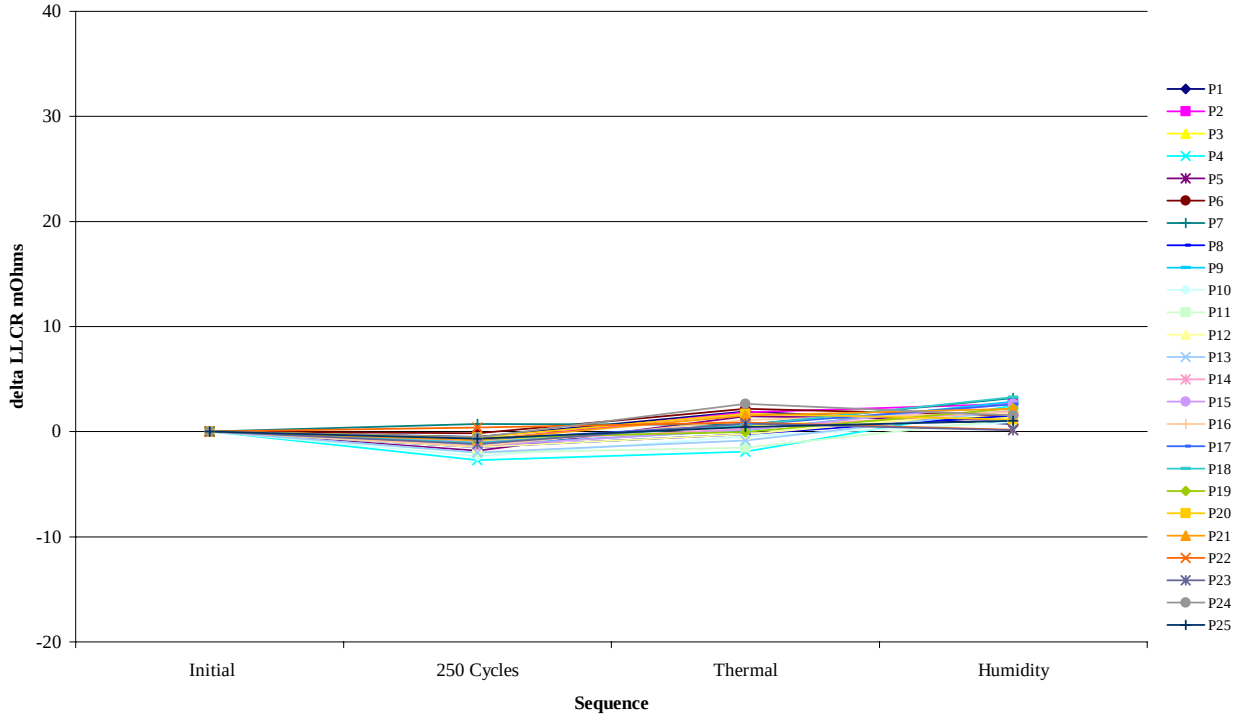
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #7
Signal Contacts



Board #8
Signal Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

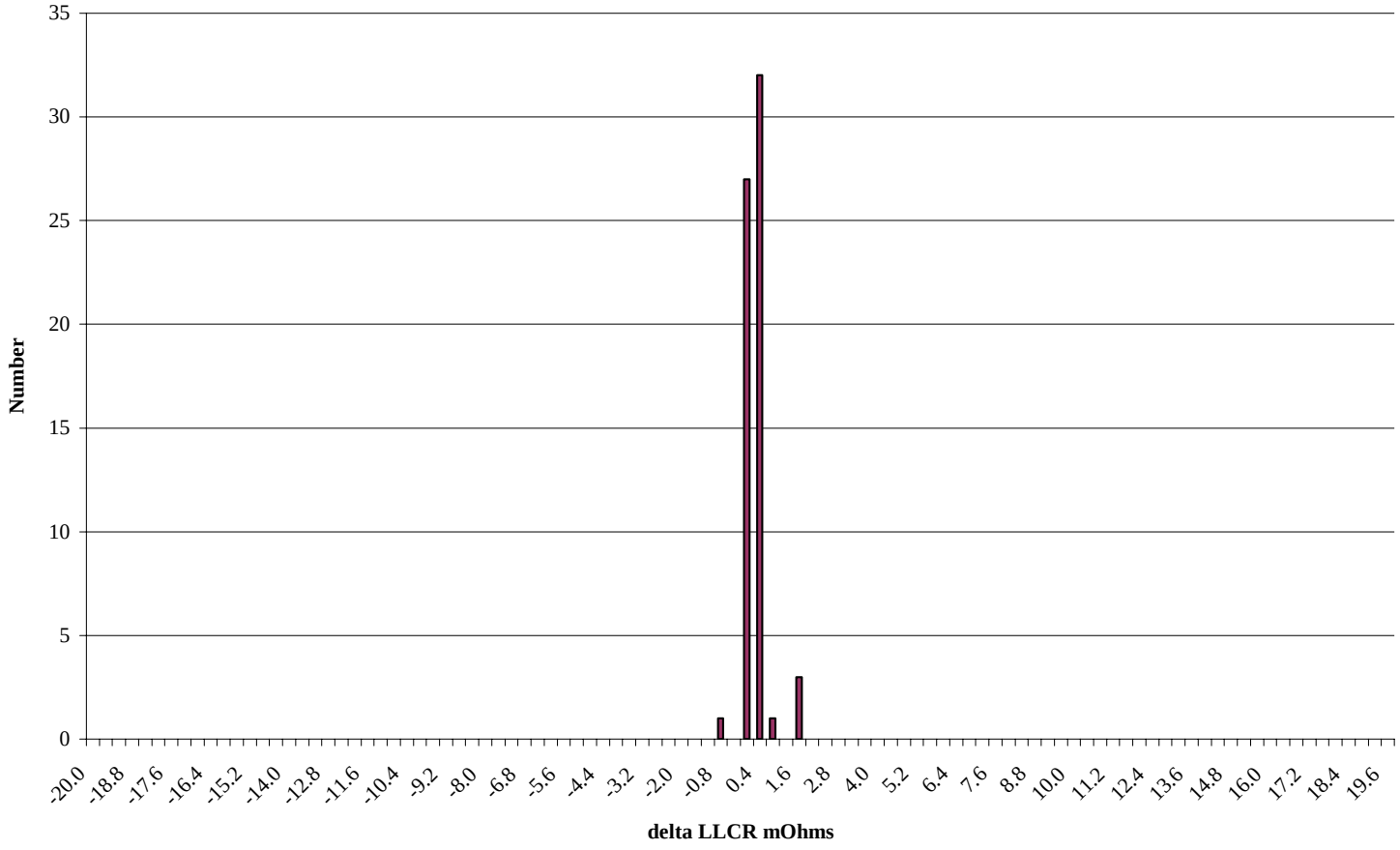
DATA SUMMARIES

LLCR, 250 Cycle Power Contact Durability with Environmental Stressing:

1) A total of 64 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 Power Contacts	Actual Initial	Delta 250 Cycles	Delta Thermal	Delta Humidity
Average	4.6	0.0	0.0	0.1
St. Dev.	0.1	0.2	0.2	0.3
Min	4.4	-0.8	-0.7	-0.8
Max	5.1	0.4	0.6	1.4
Count	64	64	64	64

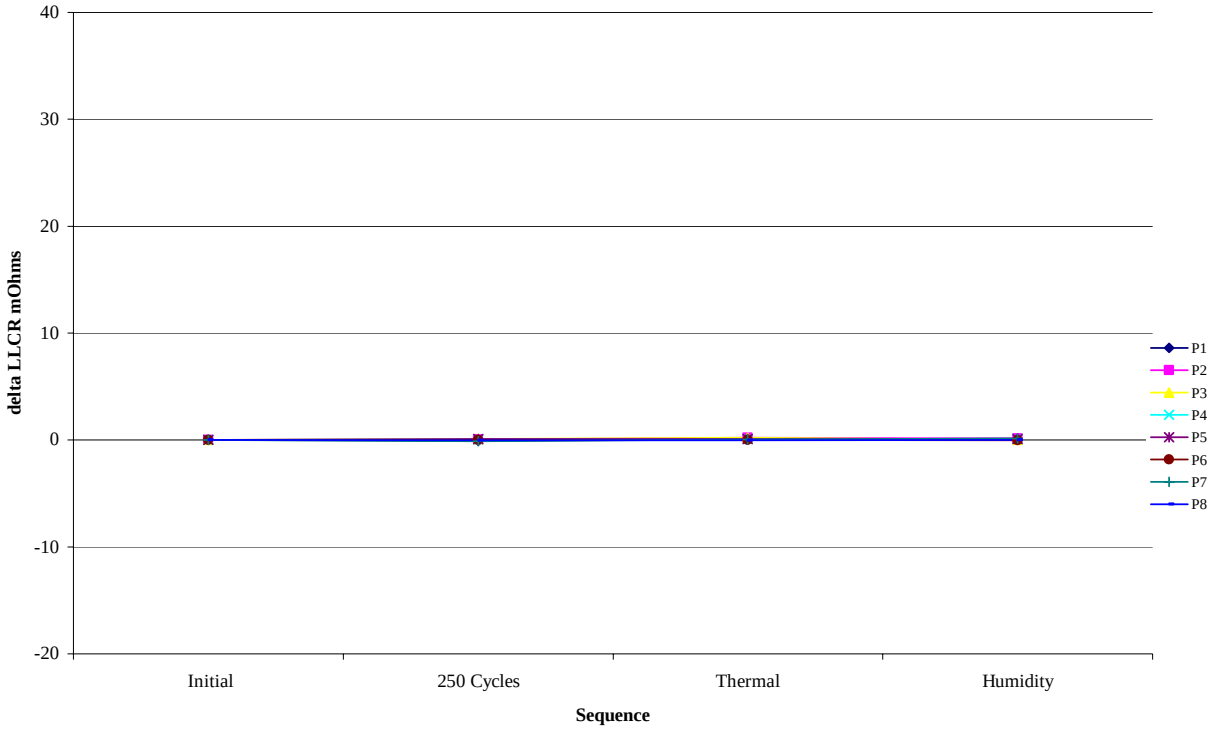
250 Cycle Power Contact Durability after Environmental Stressing



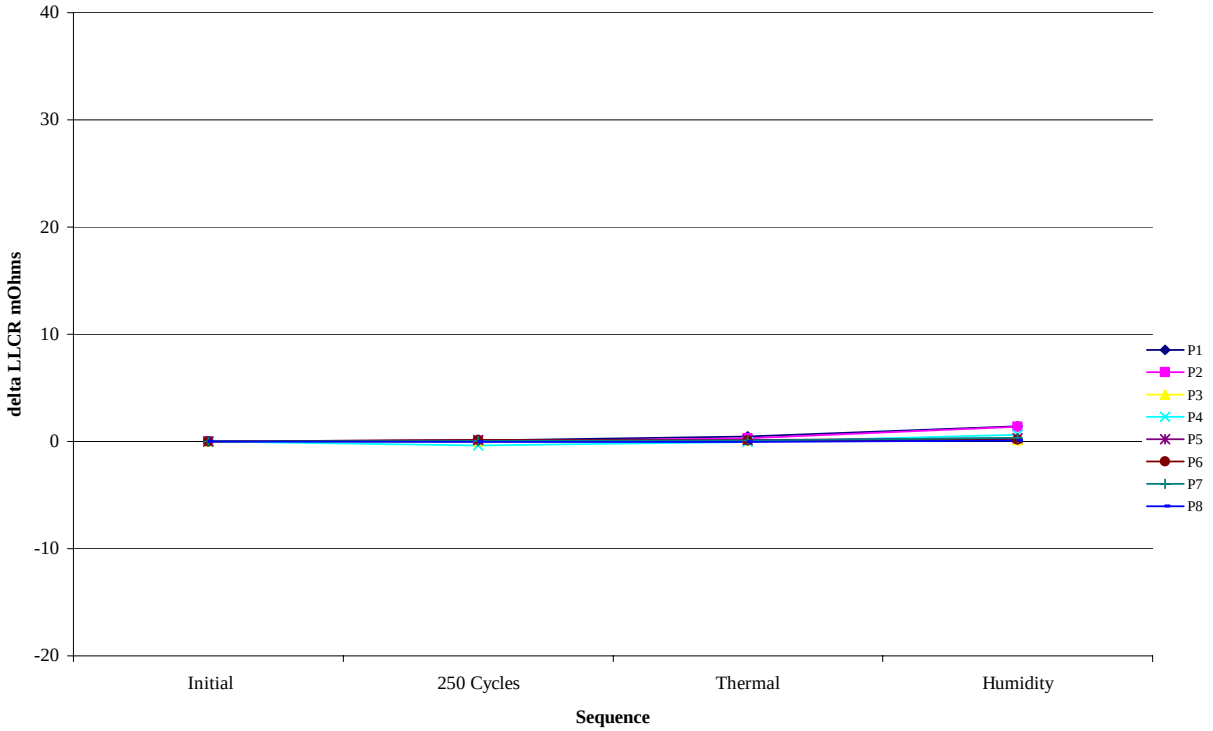
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Power Contacts



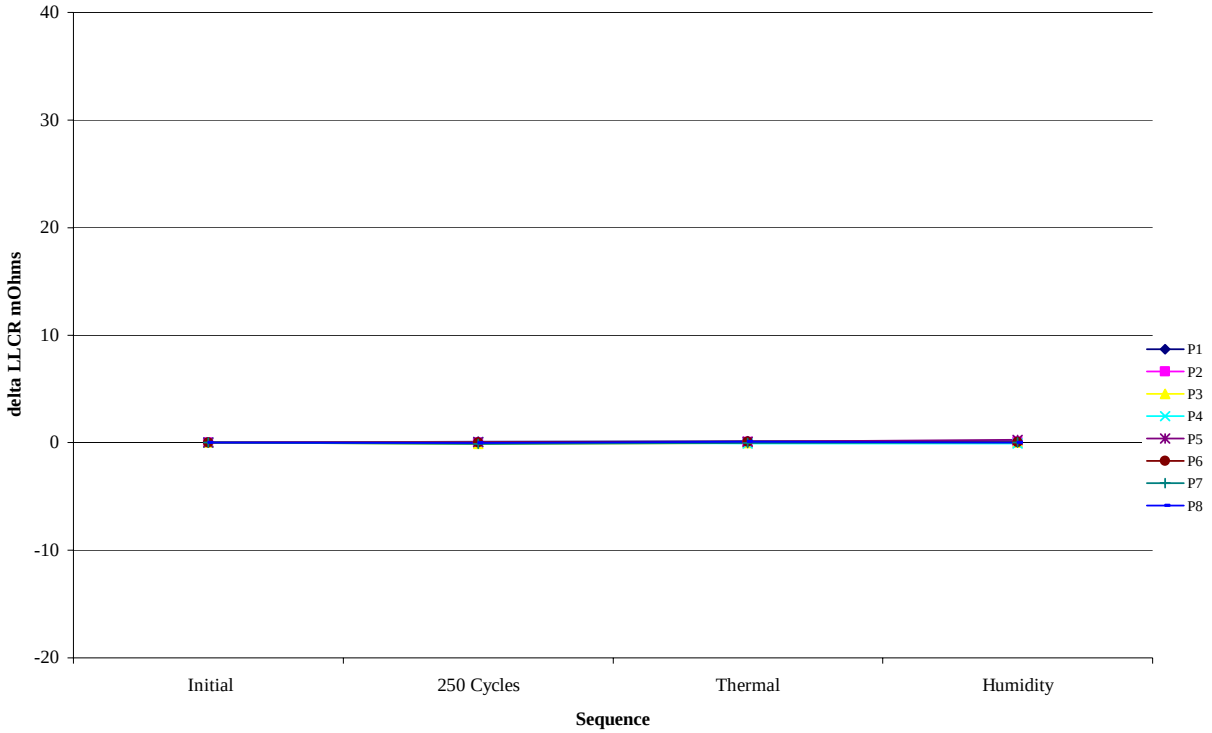
Board #2
Power Contacts



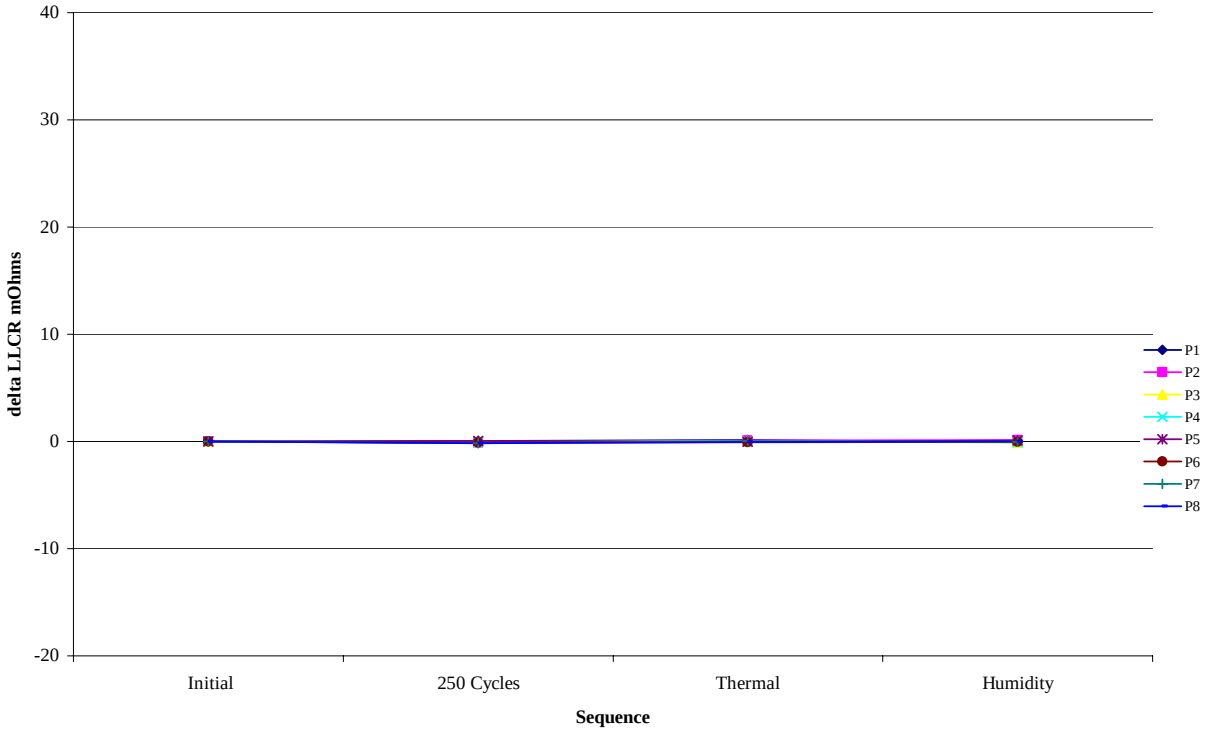
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Power Contacts



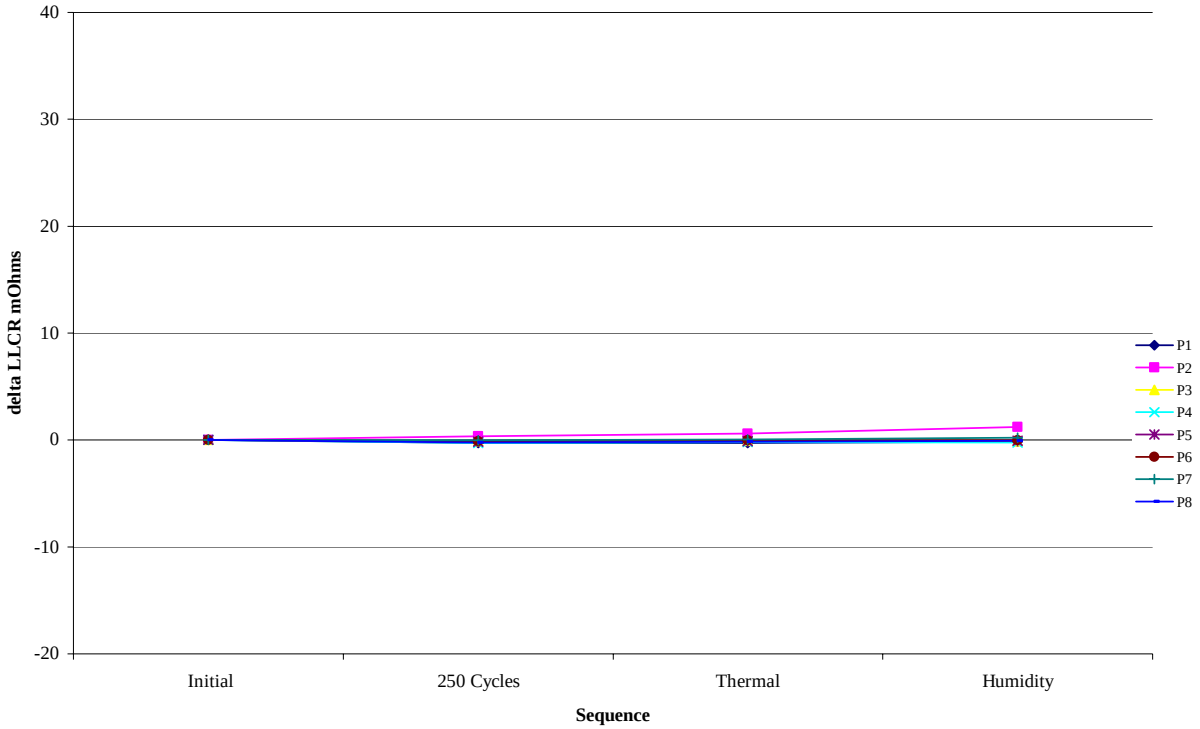
Board #4
Power Contacts



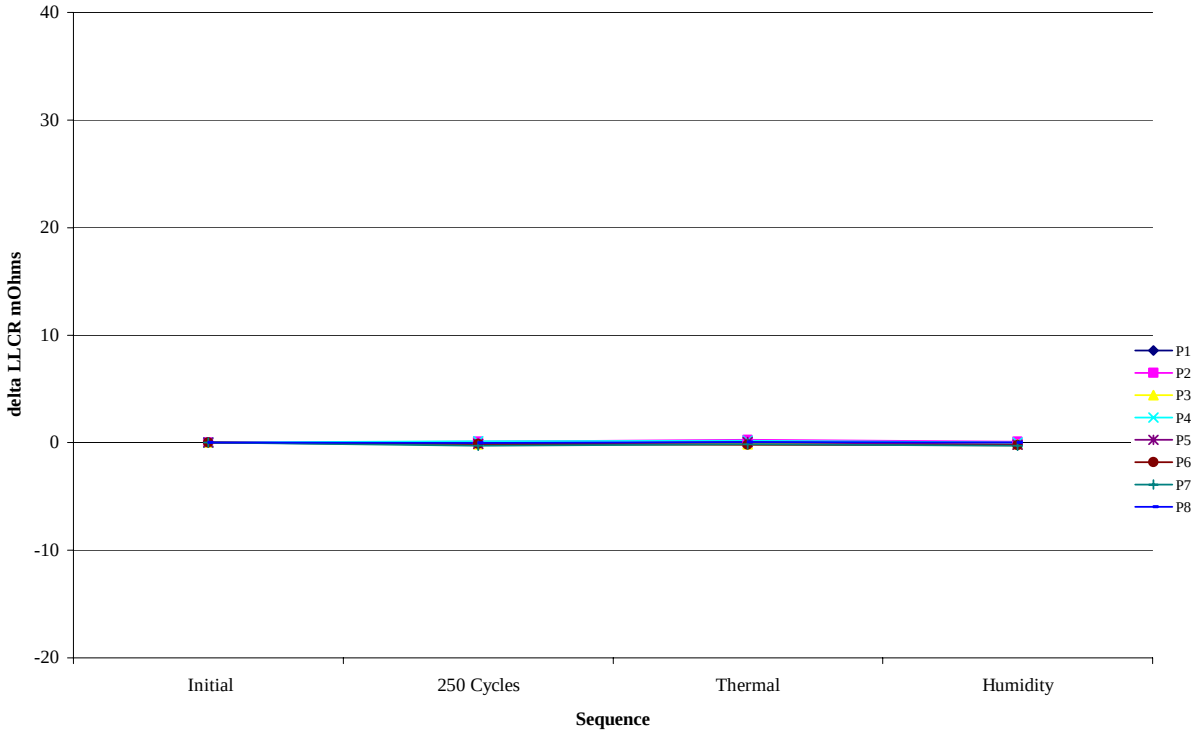
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #5
Power Contacts



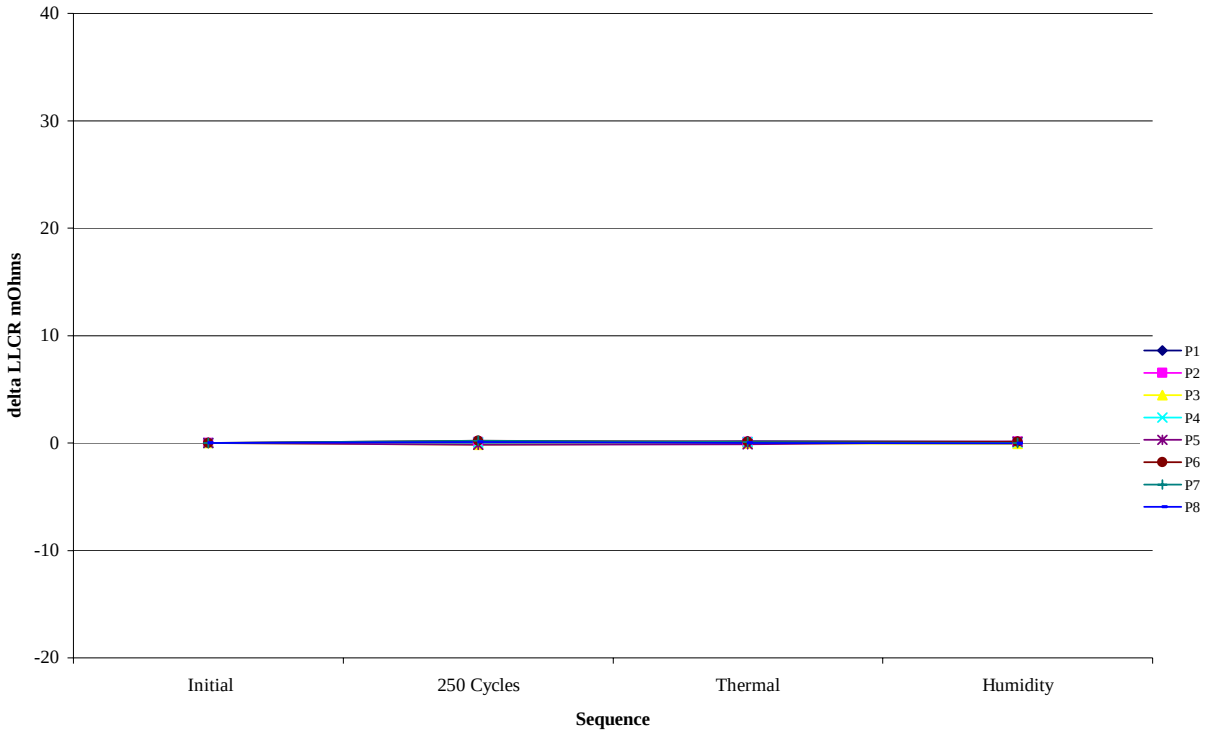
Board #6
Power Contacts



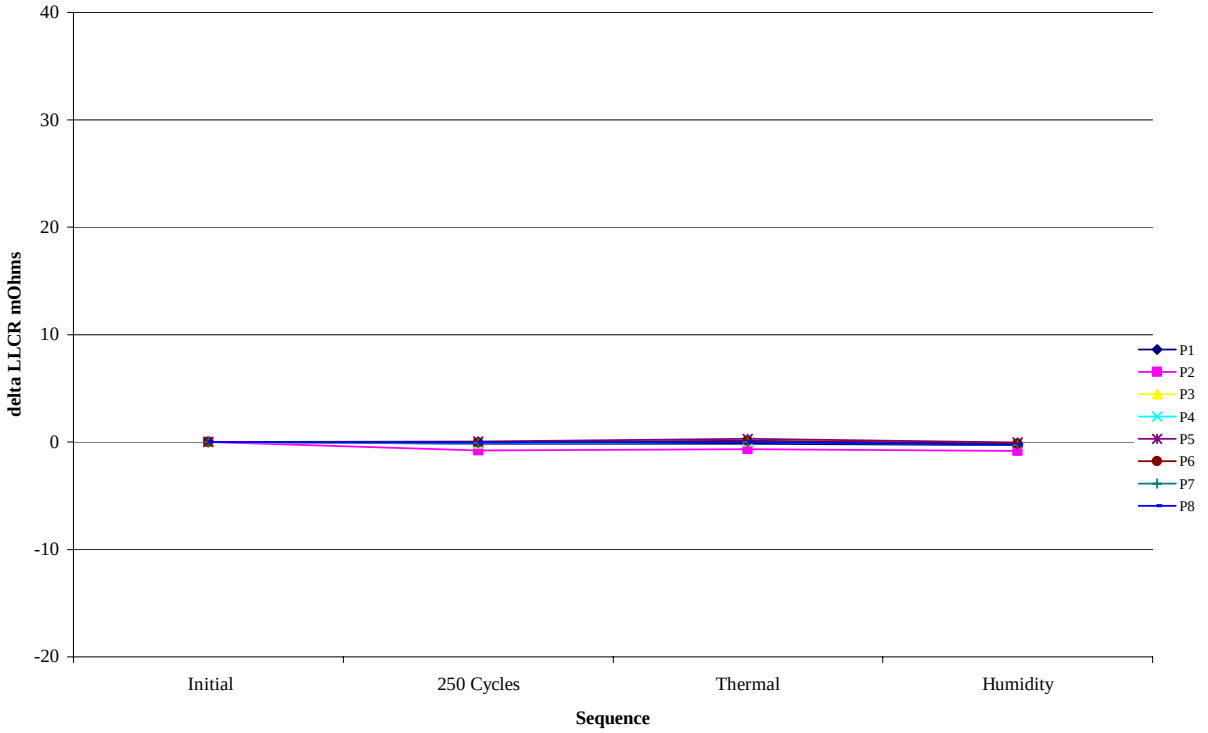
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #7
Power Contacts



Board #8
Power Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

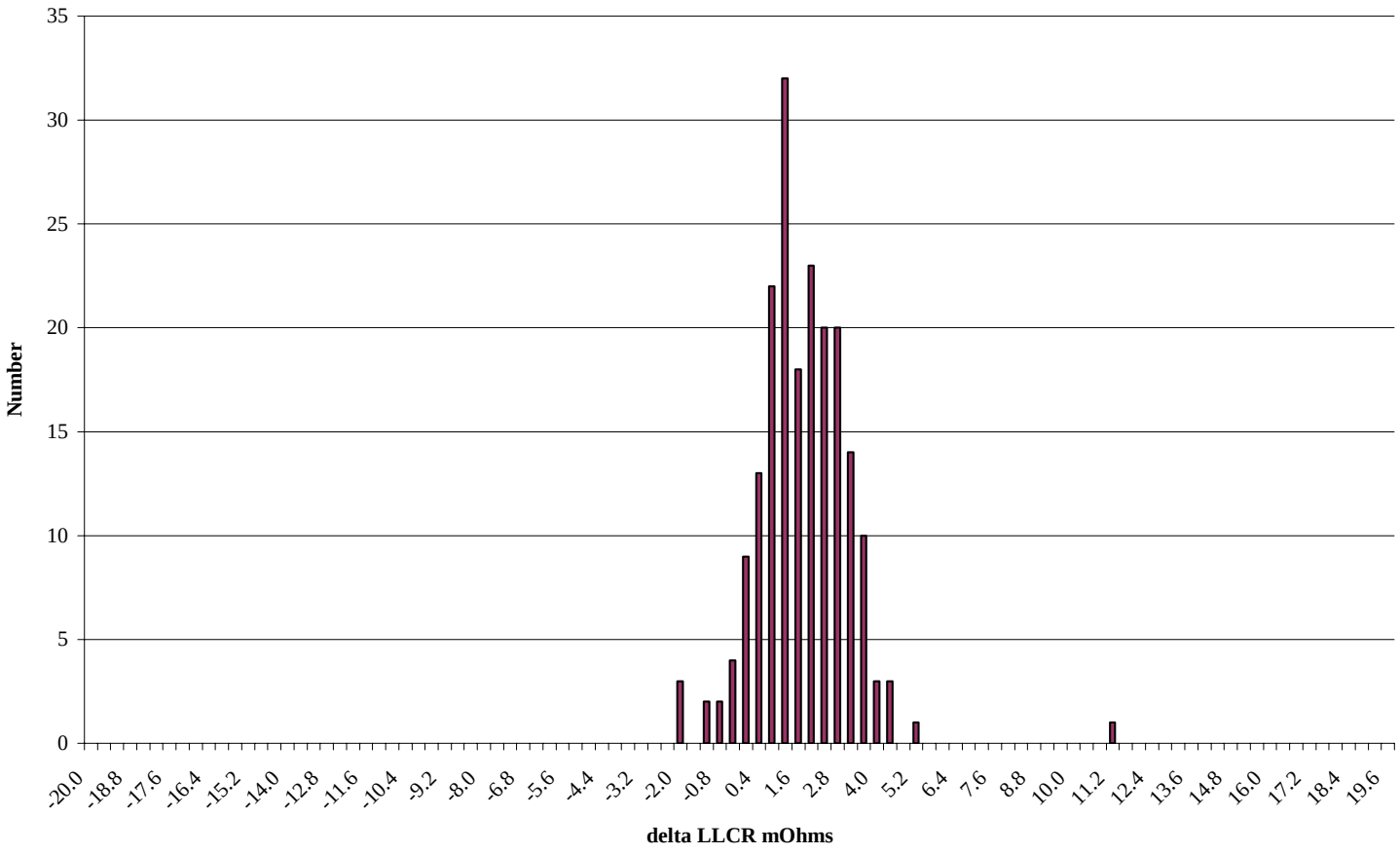
DATA SUMMARIES

LLCR, 500 Cycle Signal Contact Durability with Environmental Stressing:

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

Name	Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values Signal Contacts	**Actual Initial**	**Delta 500 Cycles**	**Delta Thermal**	**Delta Humidity**
Average	23.1	-0.1	1.7	1.6
St. Dev.	1.4	0.9	1.3	1.4
Min	20.5	-4.5	-1.7	-2.3
Max	28.4	2.6	7.9	11.1
Count	200	200	200	200

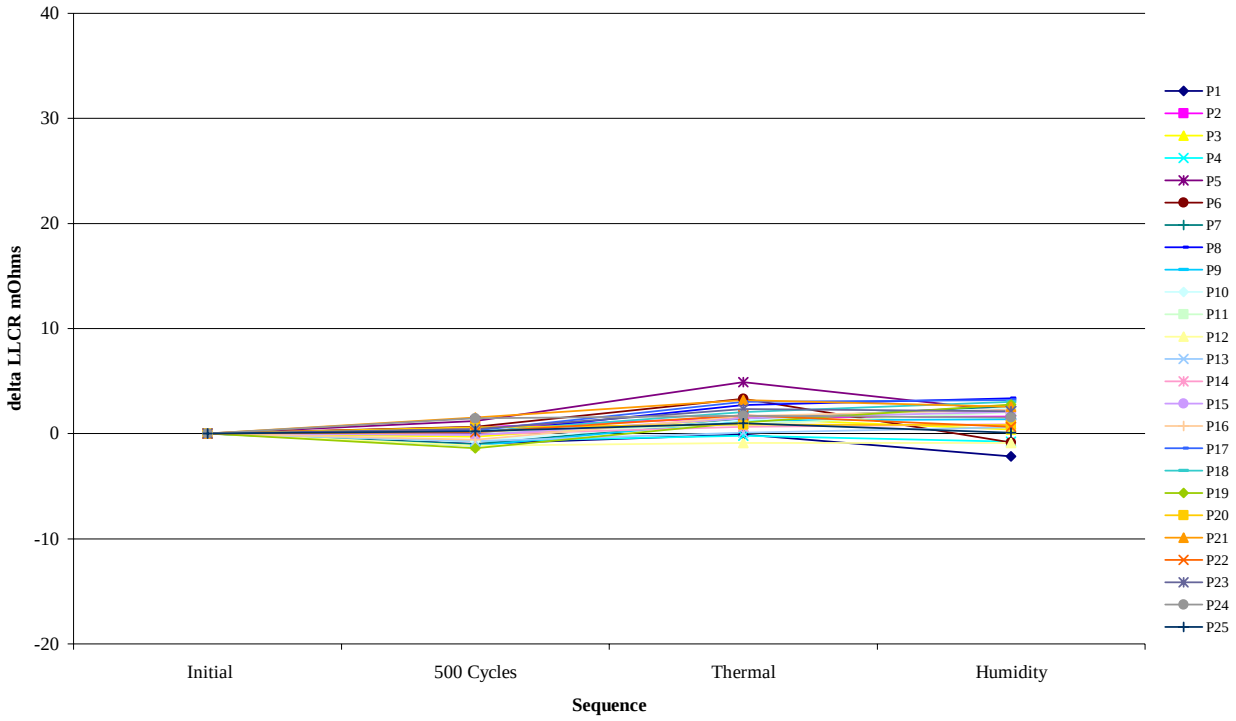
500 Cycle Signal Contact Durability after Environmental Stressing



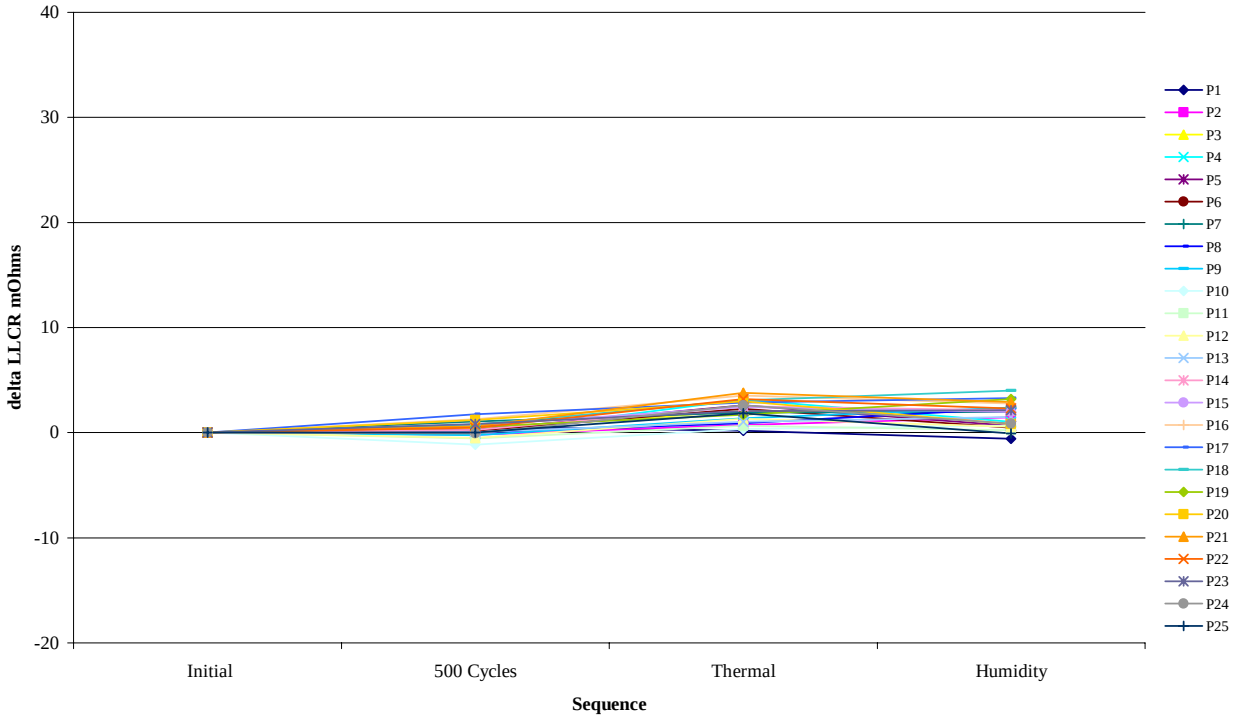
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Signal Contacts



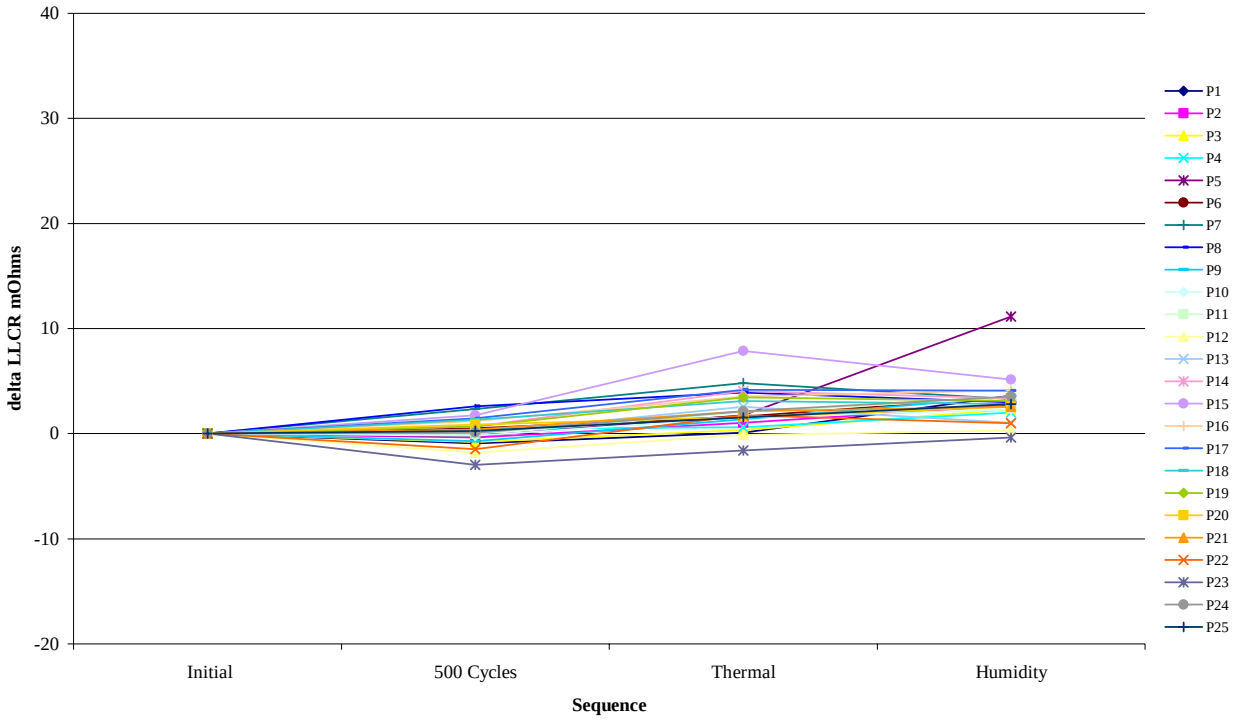
Board #2
Signal Contacts



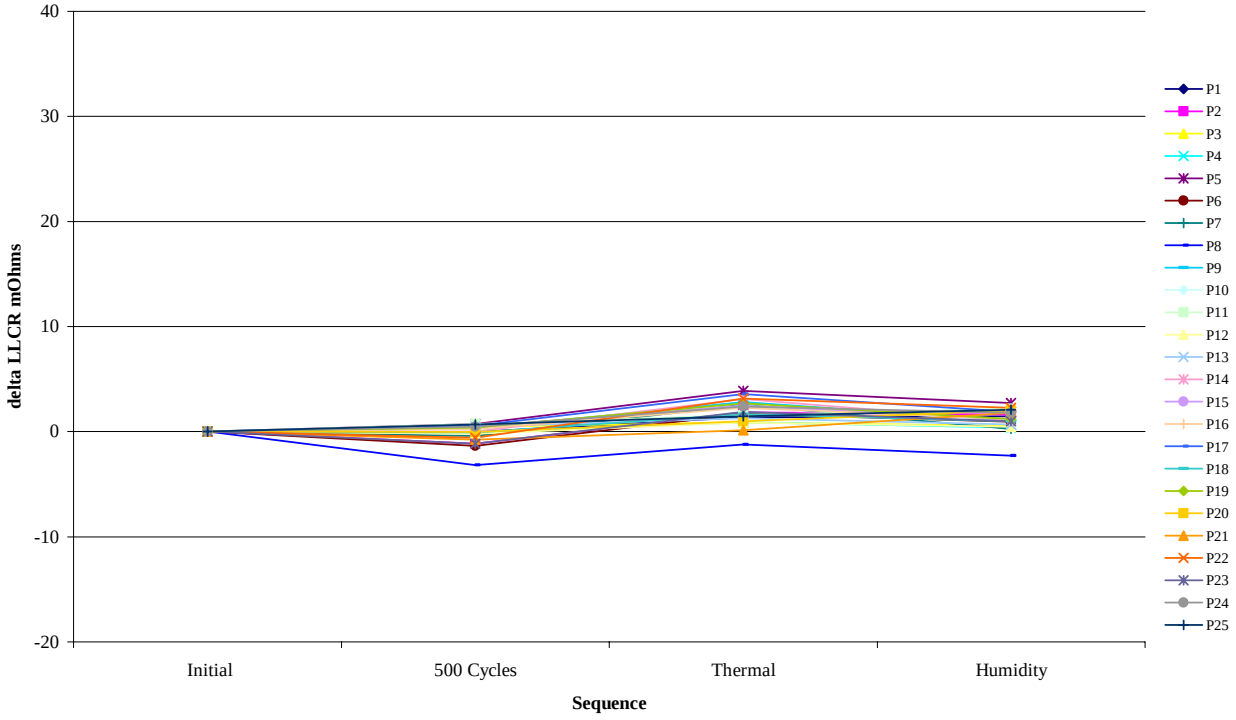
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Signal Contacts



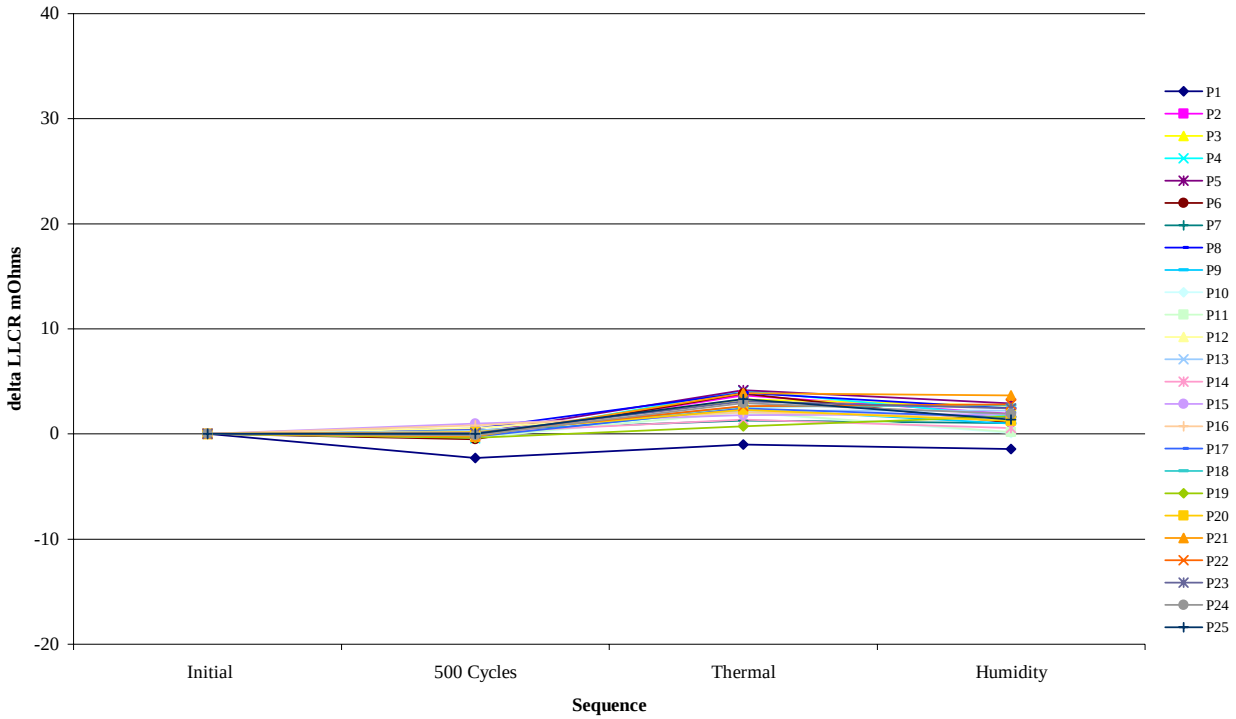
Board #4
Signal Contacts



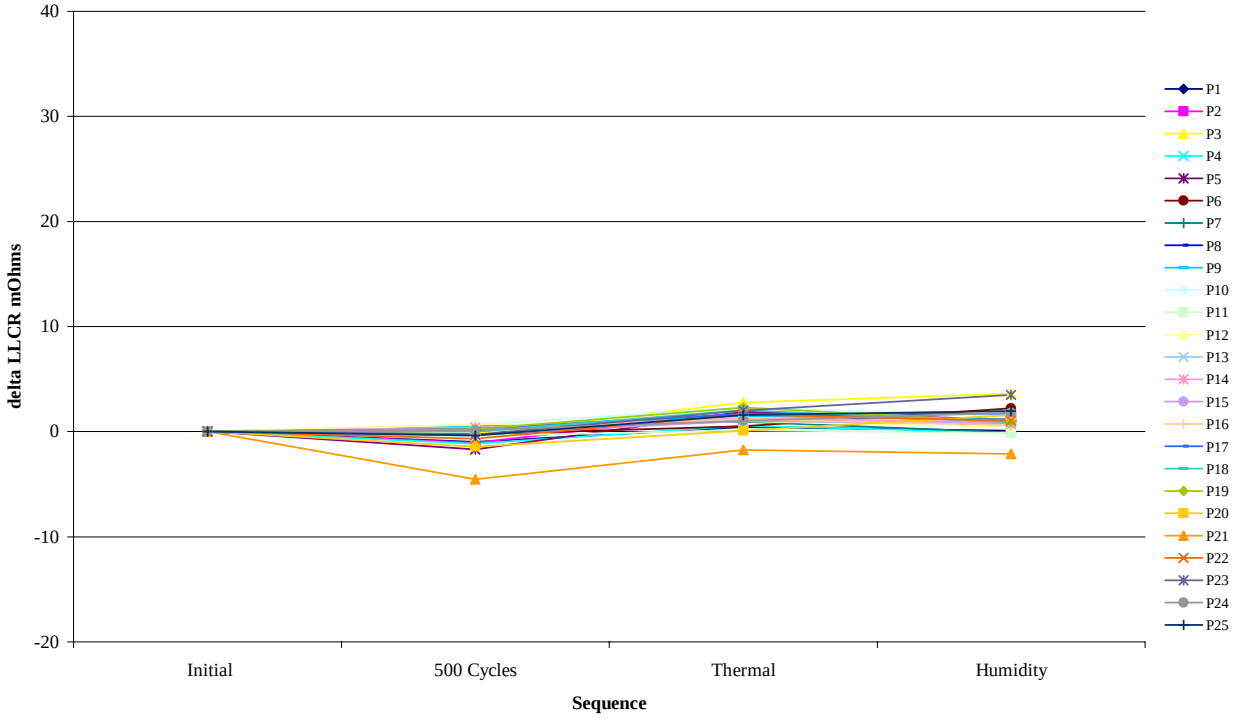
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #5
Signal Contacts



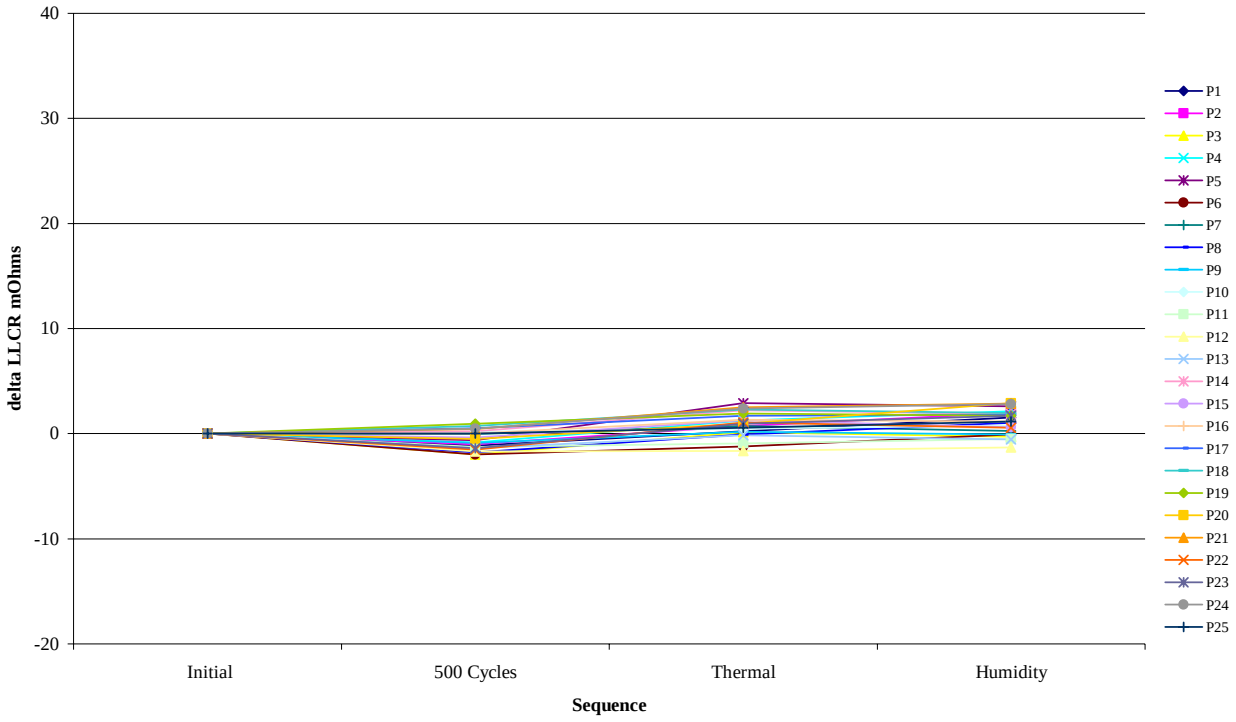
Board #6
Signal Contacts



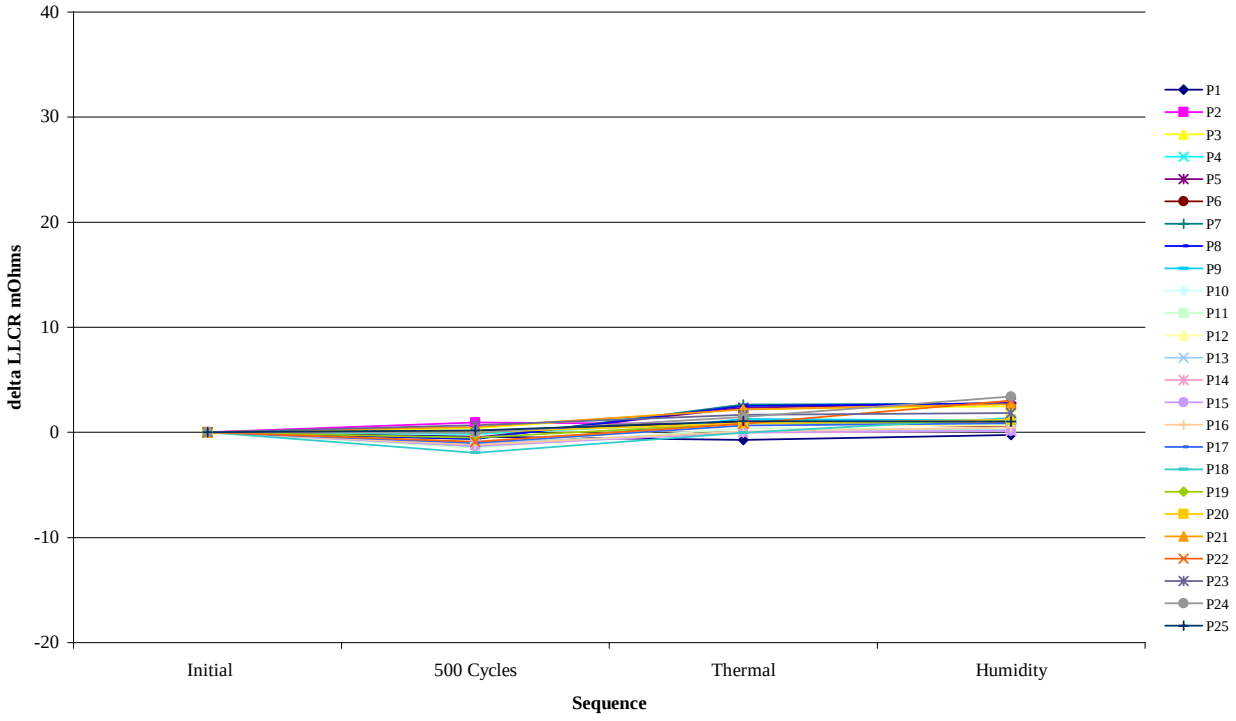
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #7
Signal Contacts



Board #8
Signal Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

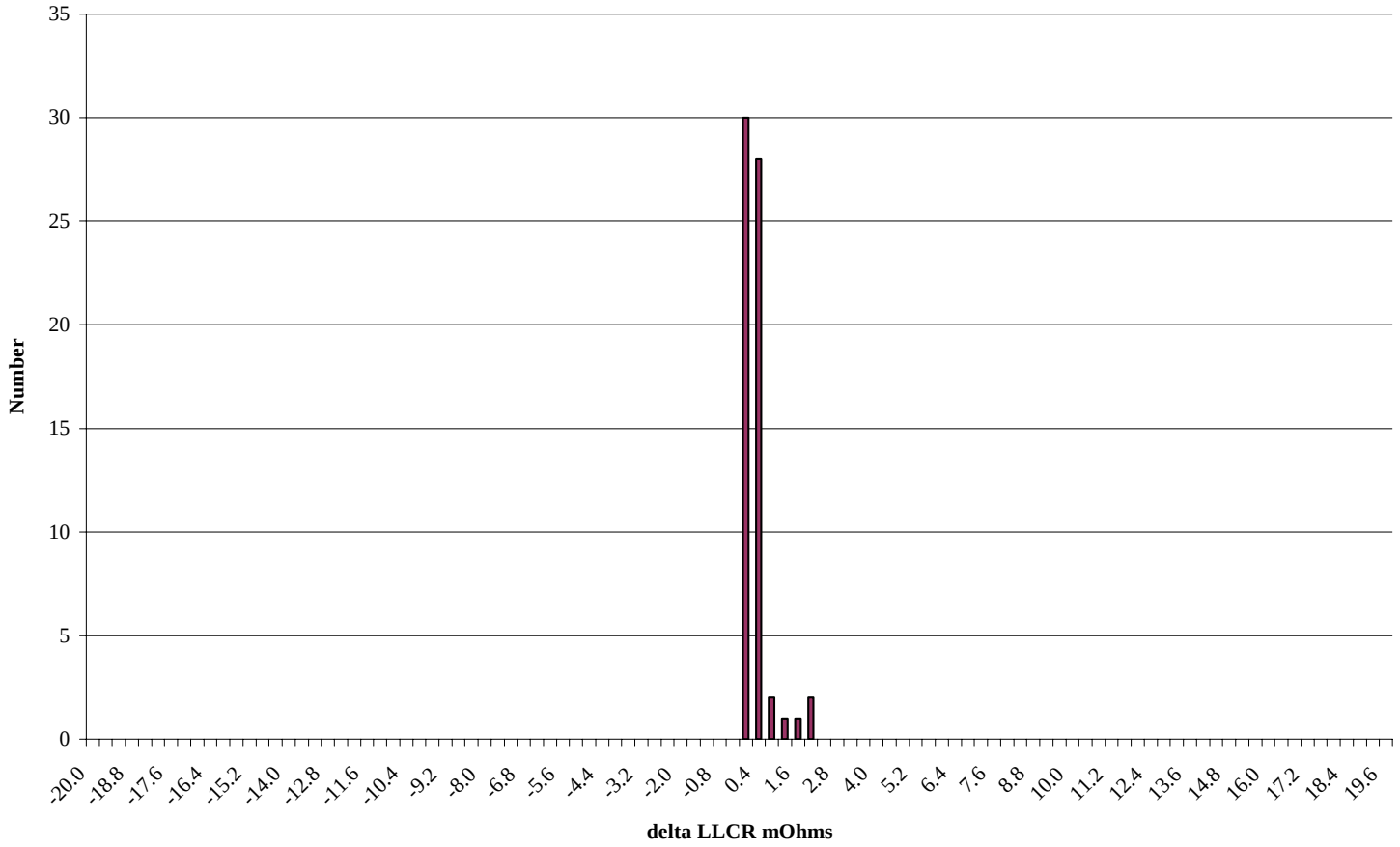
DATA SUMMARIES

LLCR, 500 Cycle Power Contact Durability with Environmental Stressing:

1) A total of 64 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 Power Contacts	Actual Initial	Delta 500 Cycles	Delta Thermal	Delta Humidity
Average	4.7	0.0	0.1	0.1
St. Dev.	0.1	0.1	0.4	0.4
Min	4.4	-0.4	-0.2	-0.3
Max	5.0	0.4	2.3	1.7
Count	64	64	64	64

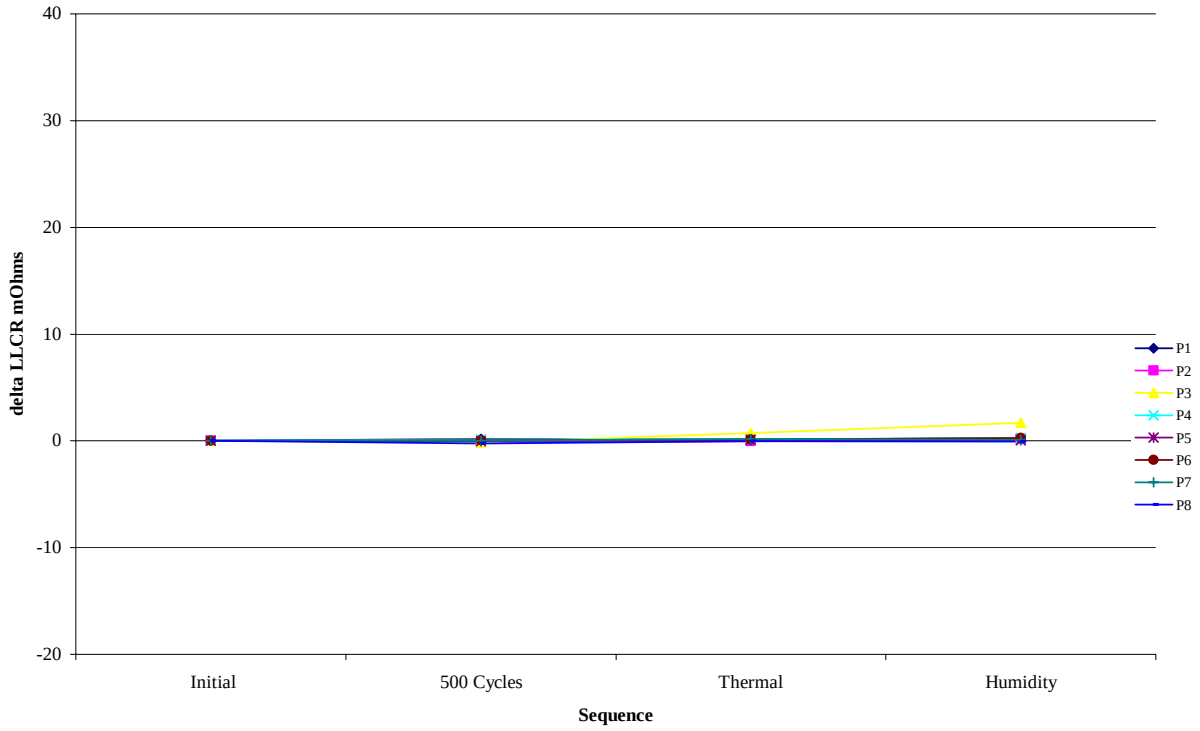
500 Cycle Power Contact Durablity after Environmental Stressing



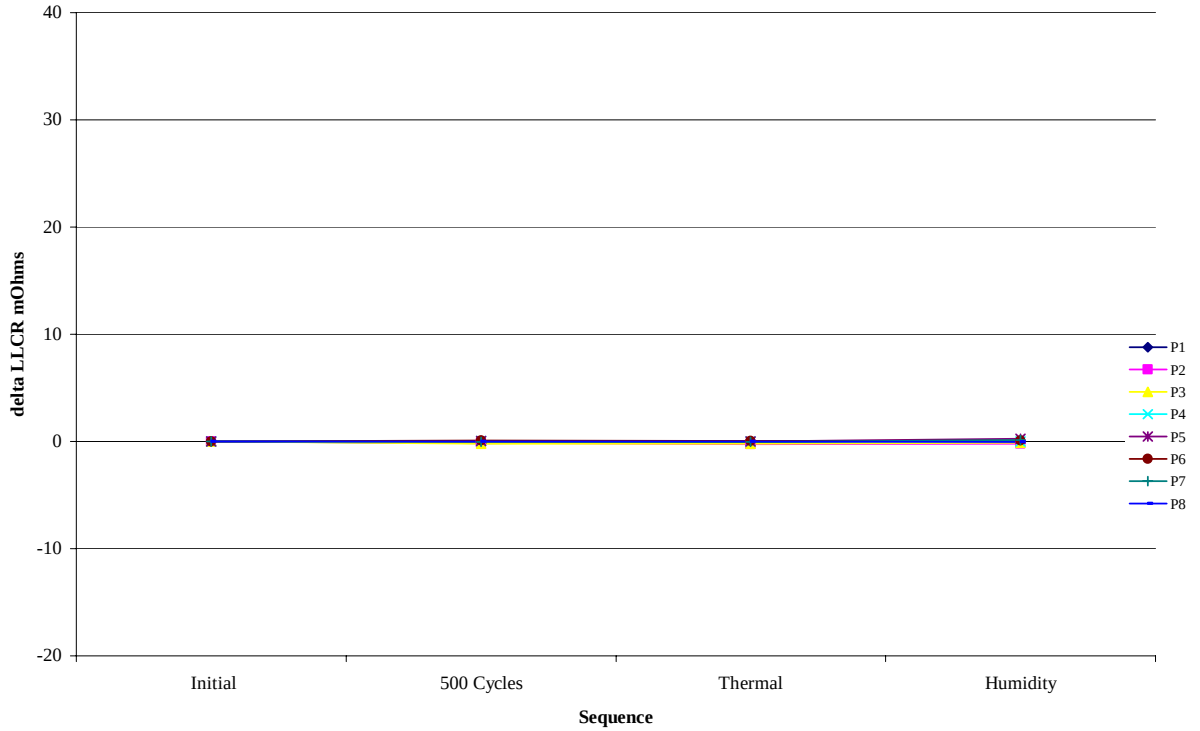
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Power Contacts



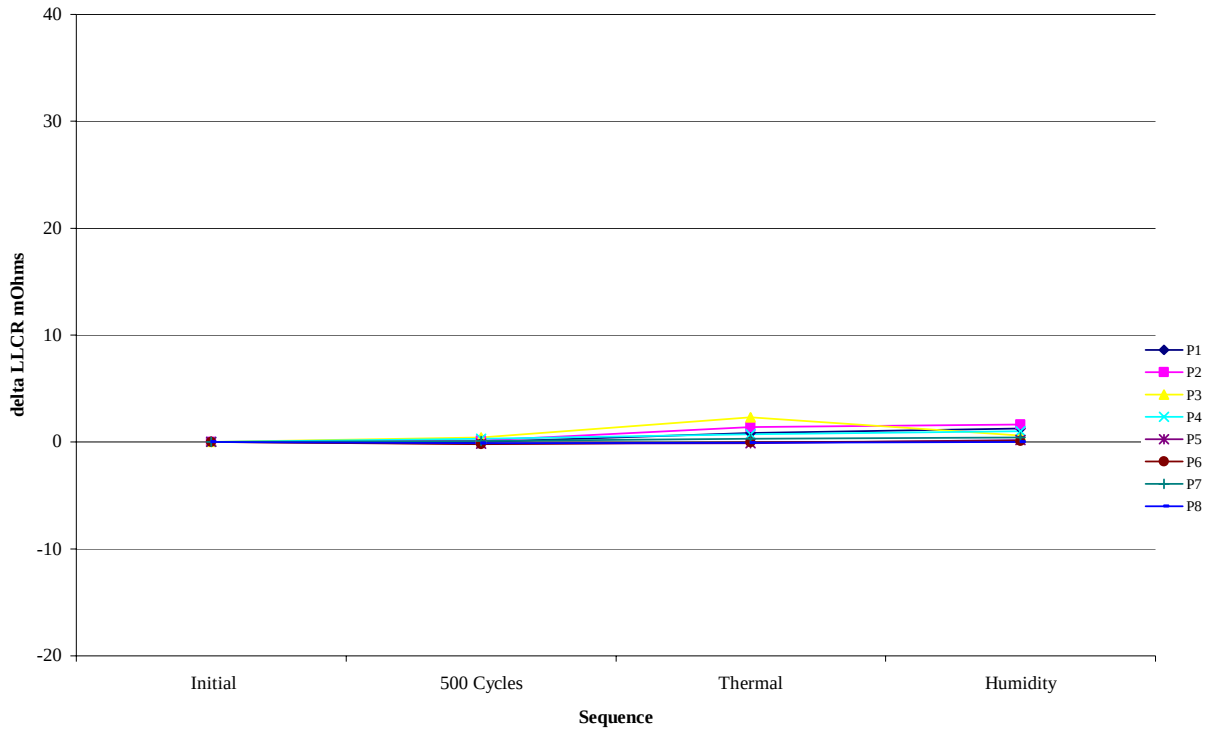
Board #2
Power Contacts



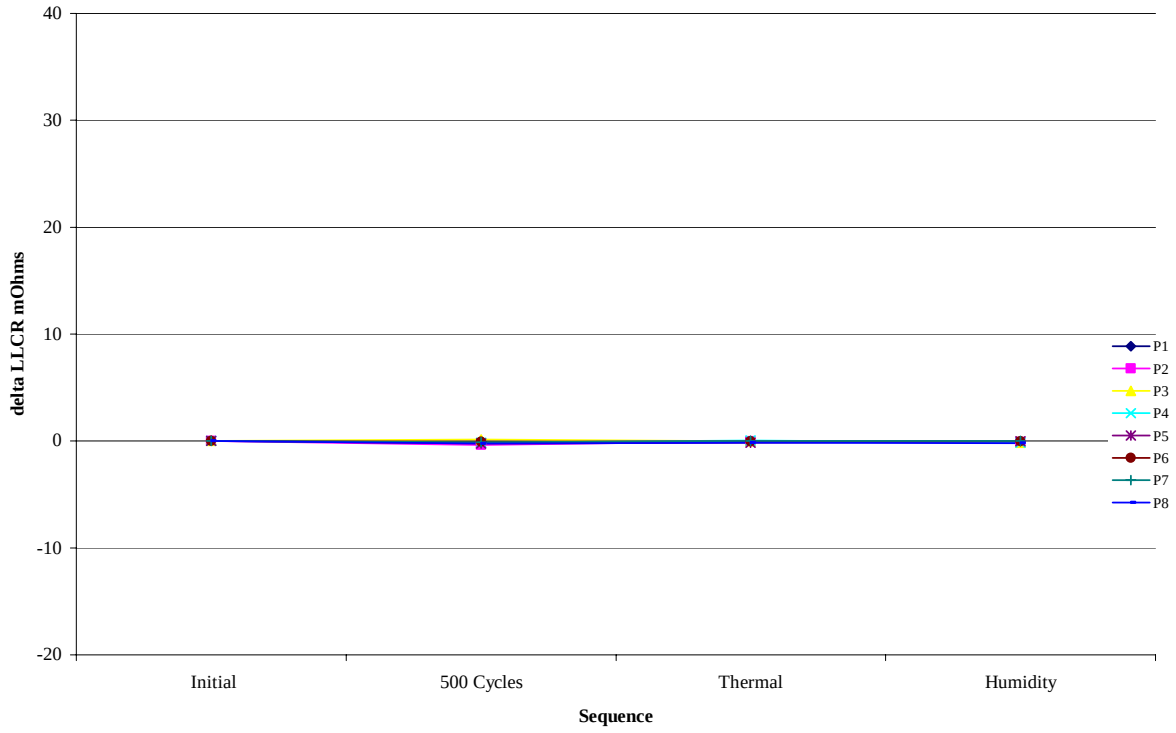
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Power Contacts



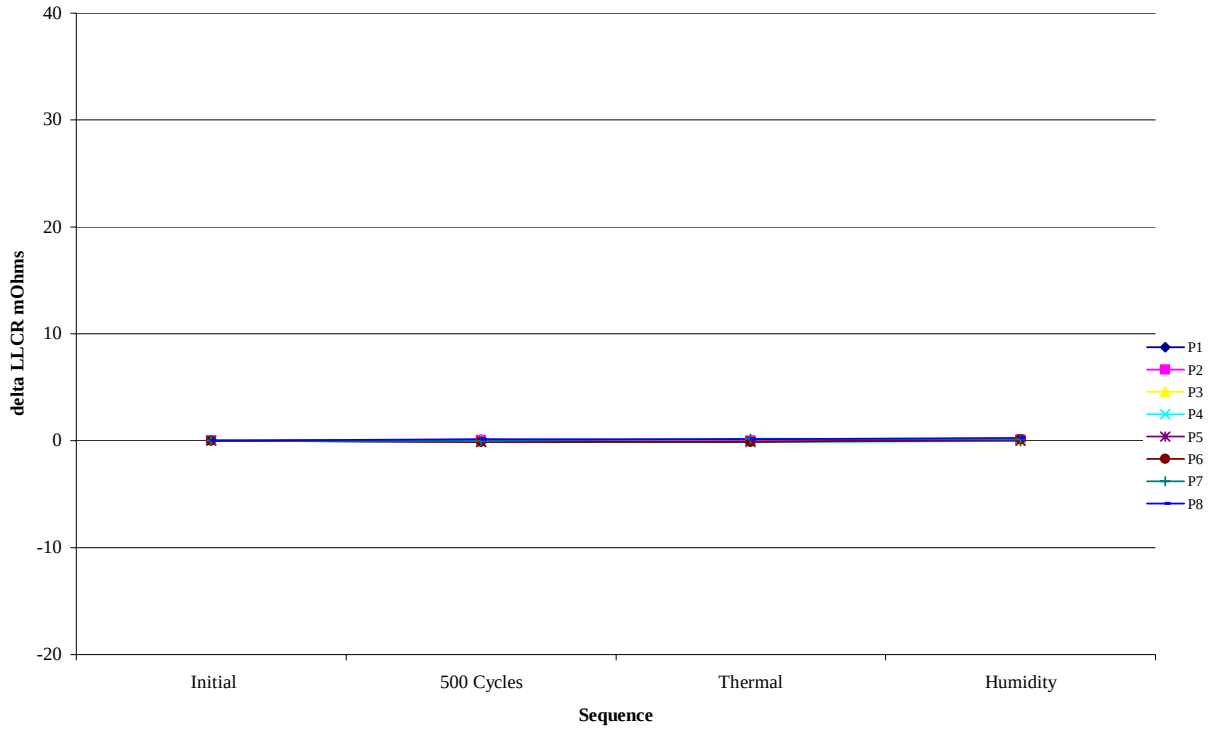
Board #4
Power Contacts



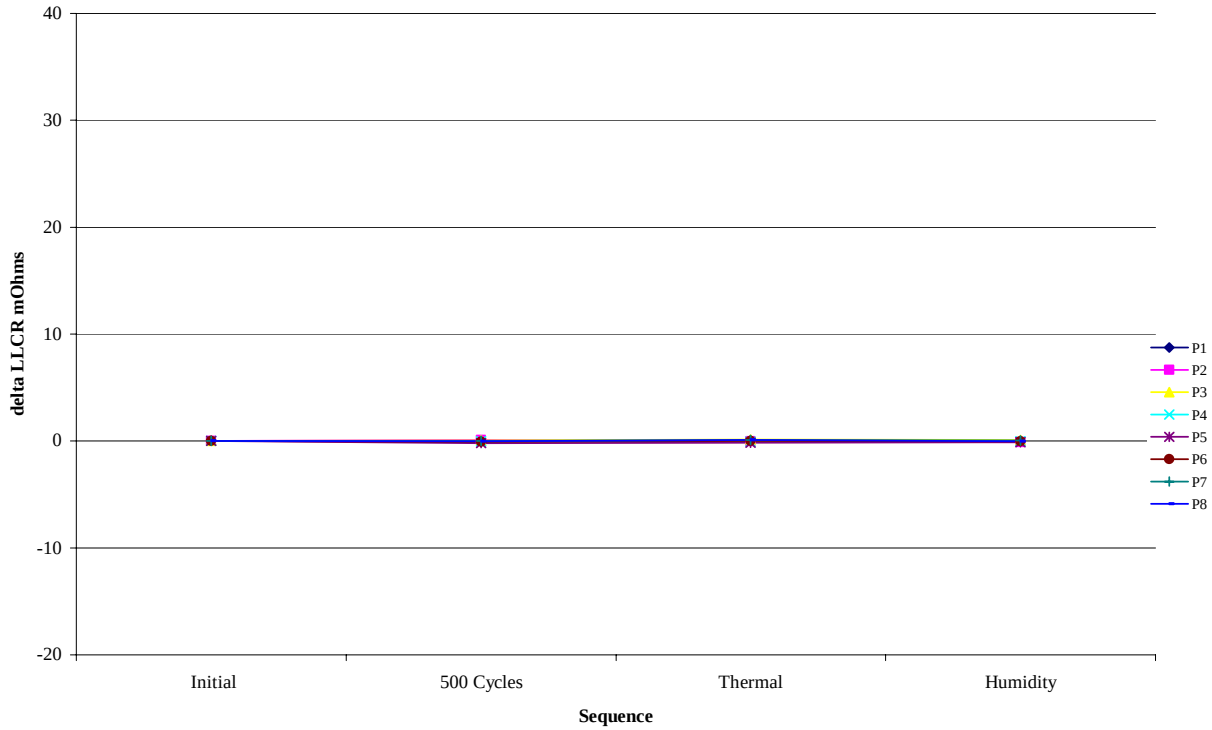
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #5
Power Contacts



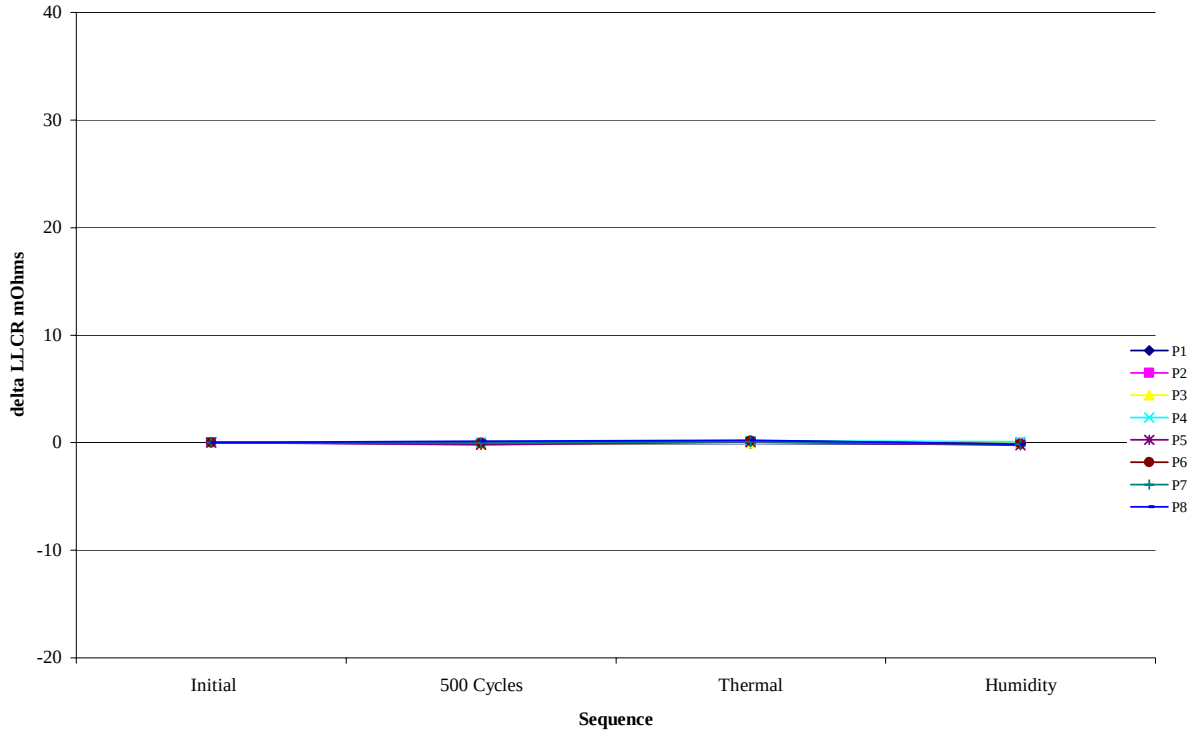
Board #6
Power Contacts



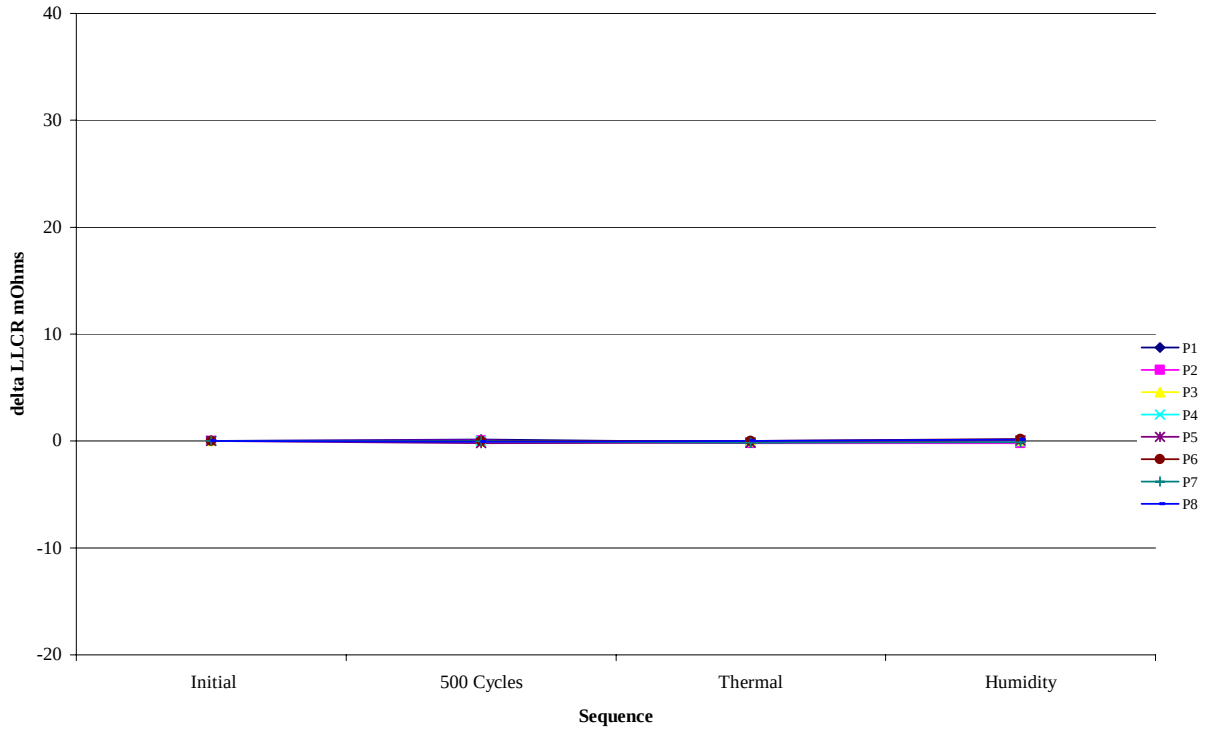
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #7
Power Contacts



Board #8
Power Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

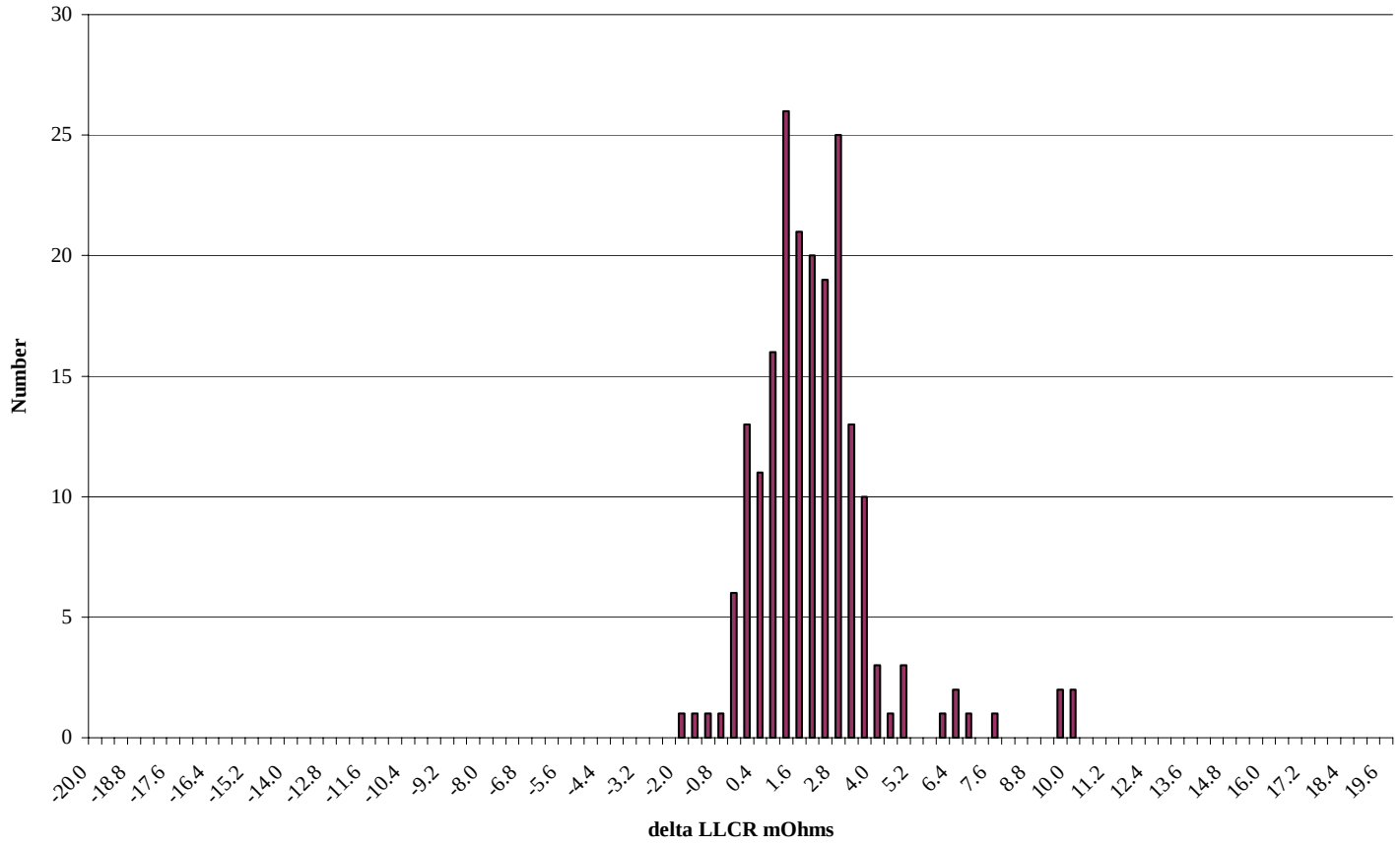
DATA SUMMARIES

LLCR, 1000 Cycle Signal Contact Durability with Environmental Stressing:

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 Signal Contacts	Actual Initial	Delta 1000 Cycles	Delta Thermal	Delta Humidity
Average	22.7	-0.1	1.2	1.9
St. Dev.	1.3	1.2	1.3	1.8
Min	20.4	-3.9	-3.0	-2.2
Max	25.9	4.4	5.2	9.8
Count	200	200	200	200

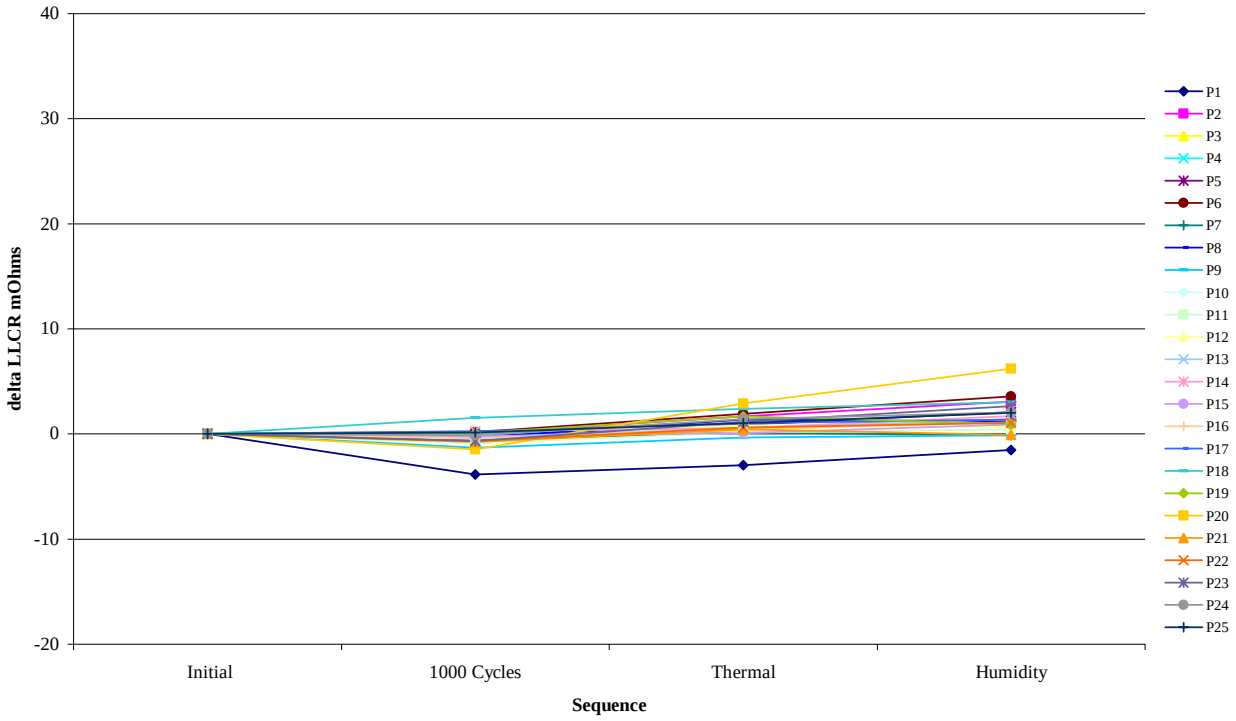
1000 Cycle Signal Contact Durability after Environmental Stressing



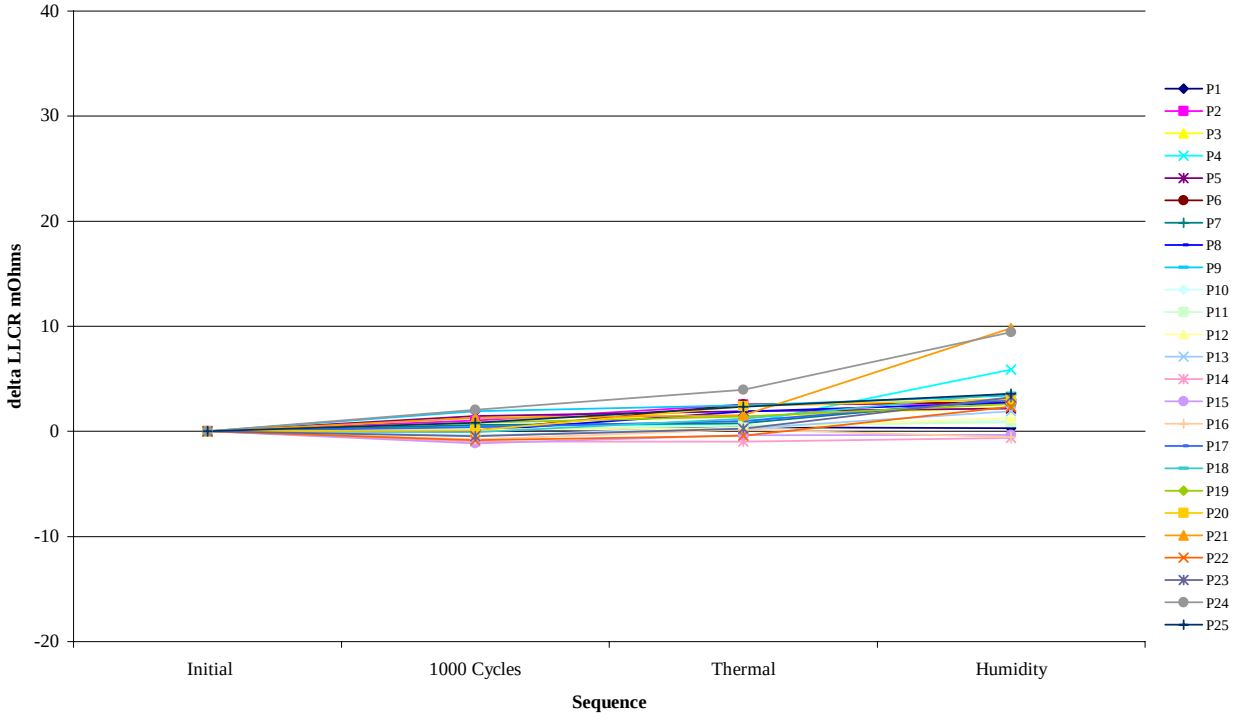
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Signal Contacts



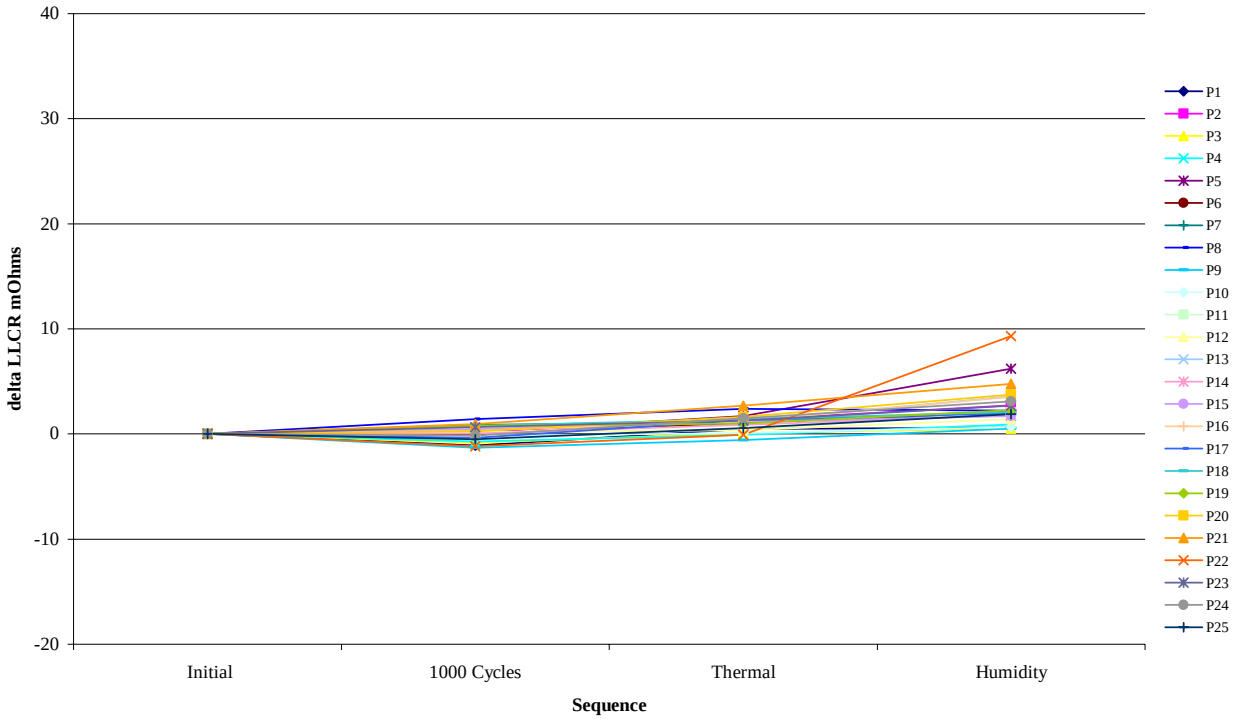
Board #2
Signal Contacts



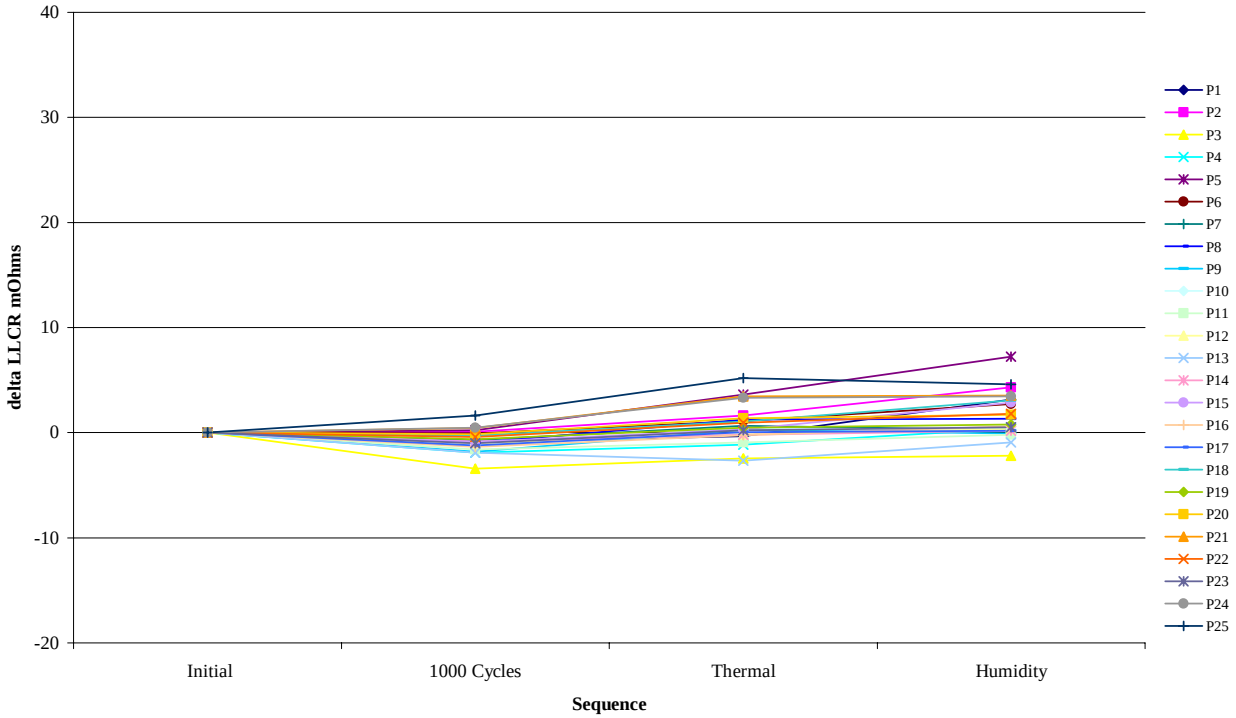
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Signal Contacts



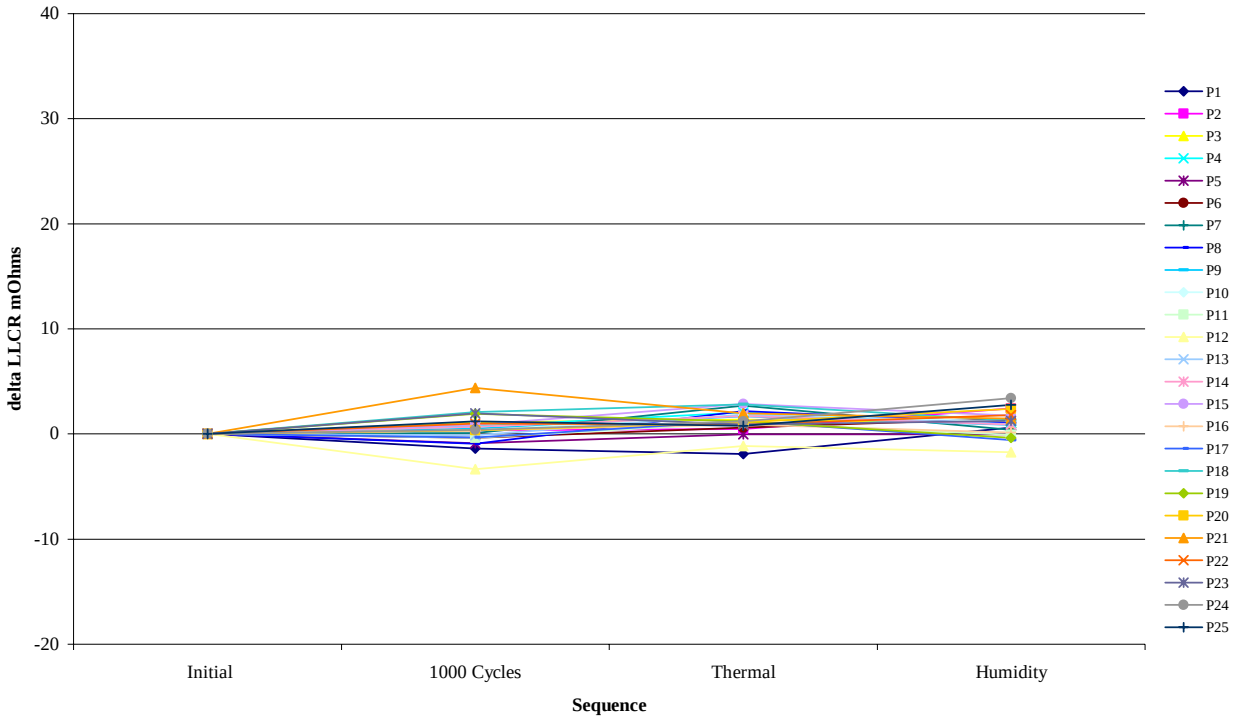
Board #4
Signal Contacts



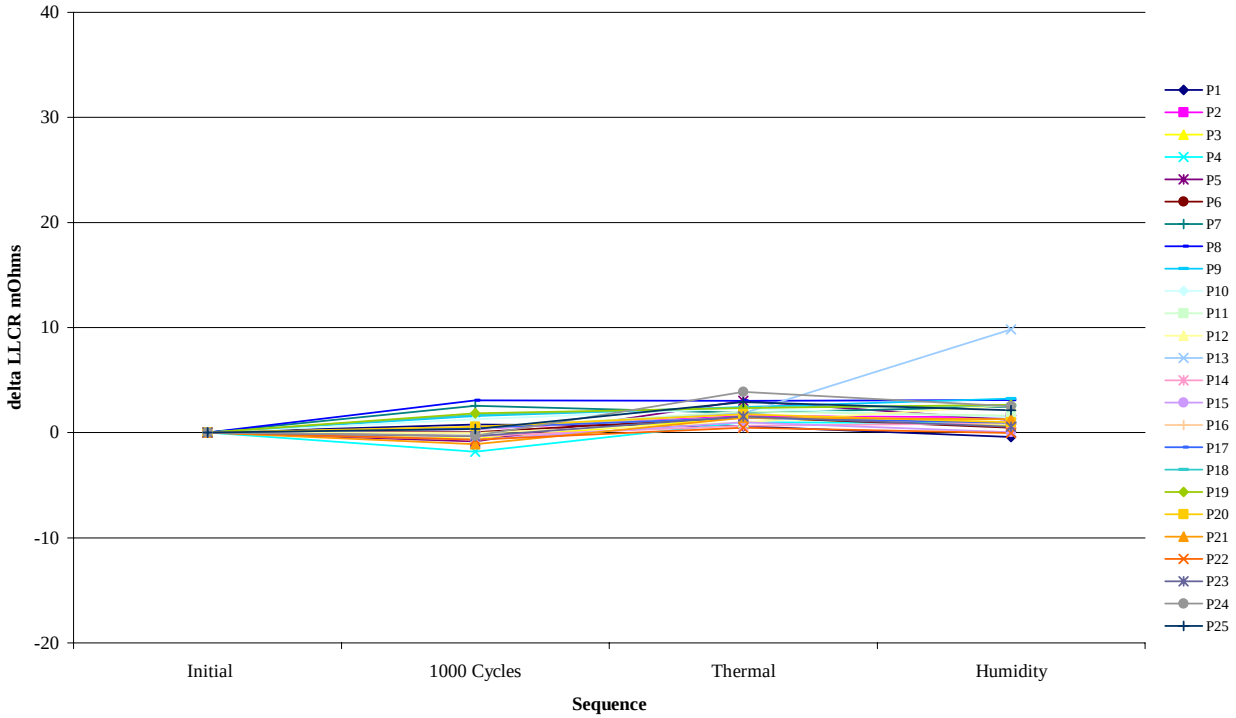
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #5
Signal Contacts



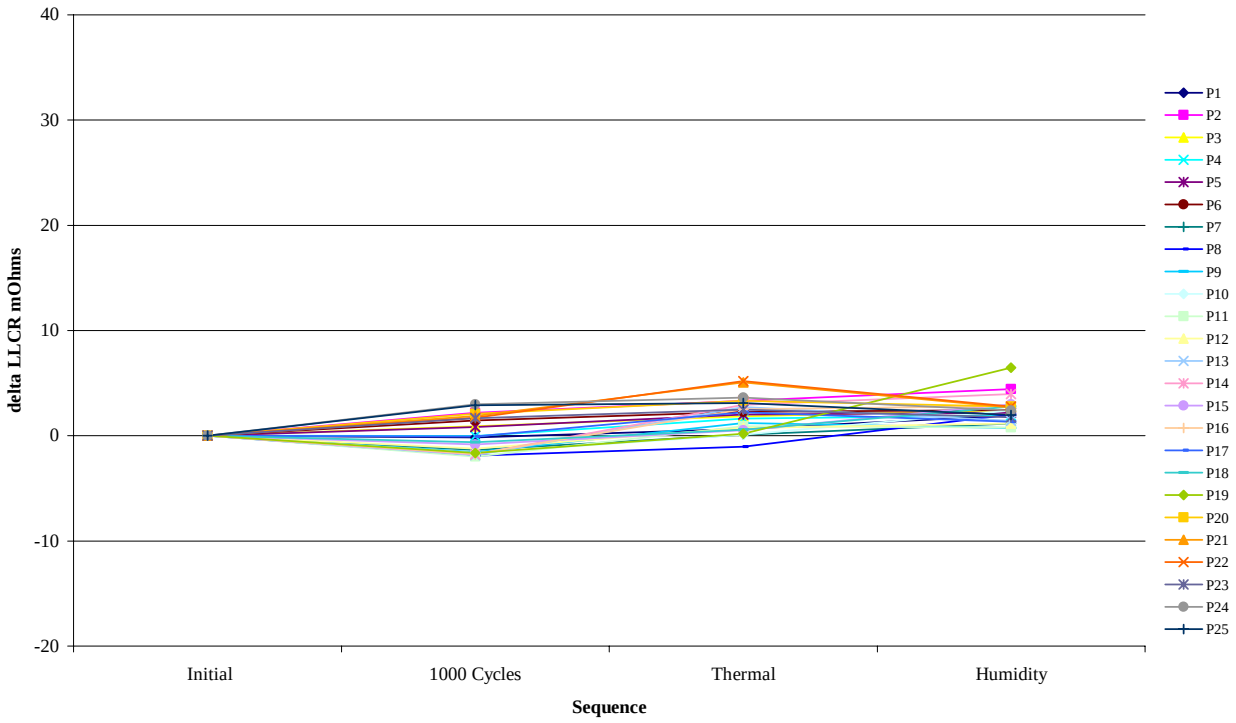
Board #6
Signal Contacts



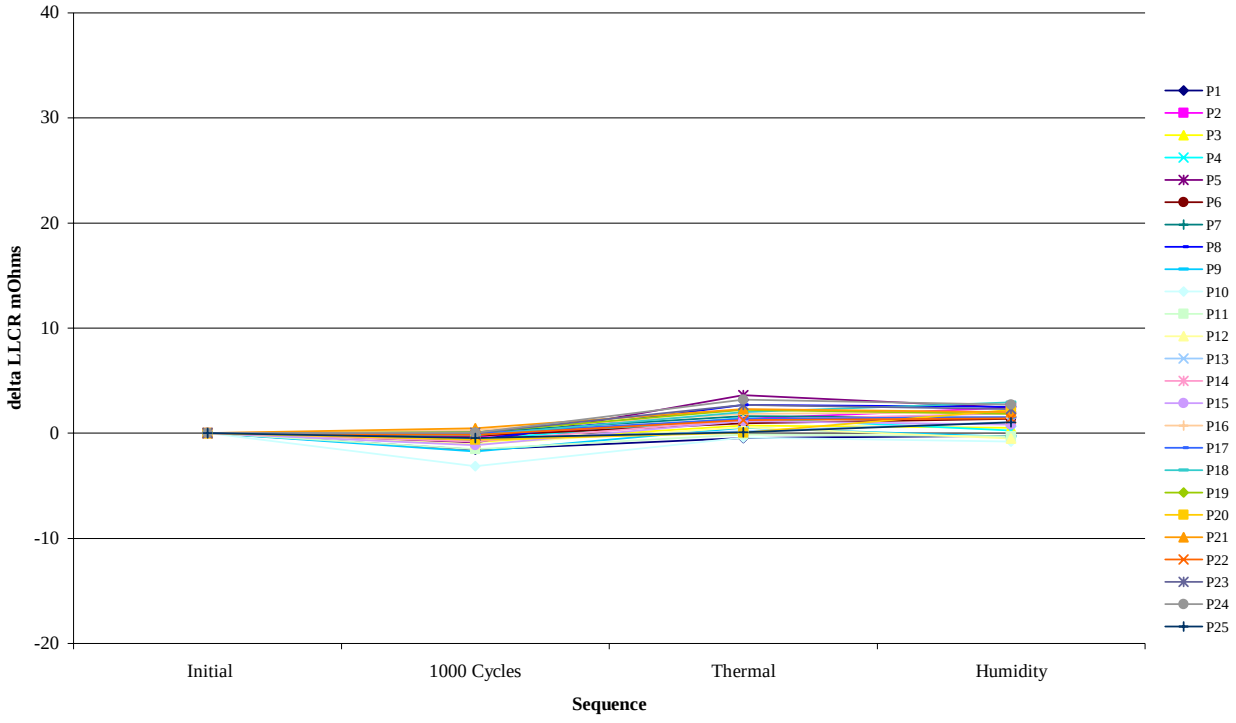
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #7
Signal Contacts



Board #8
Signal Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

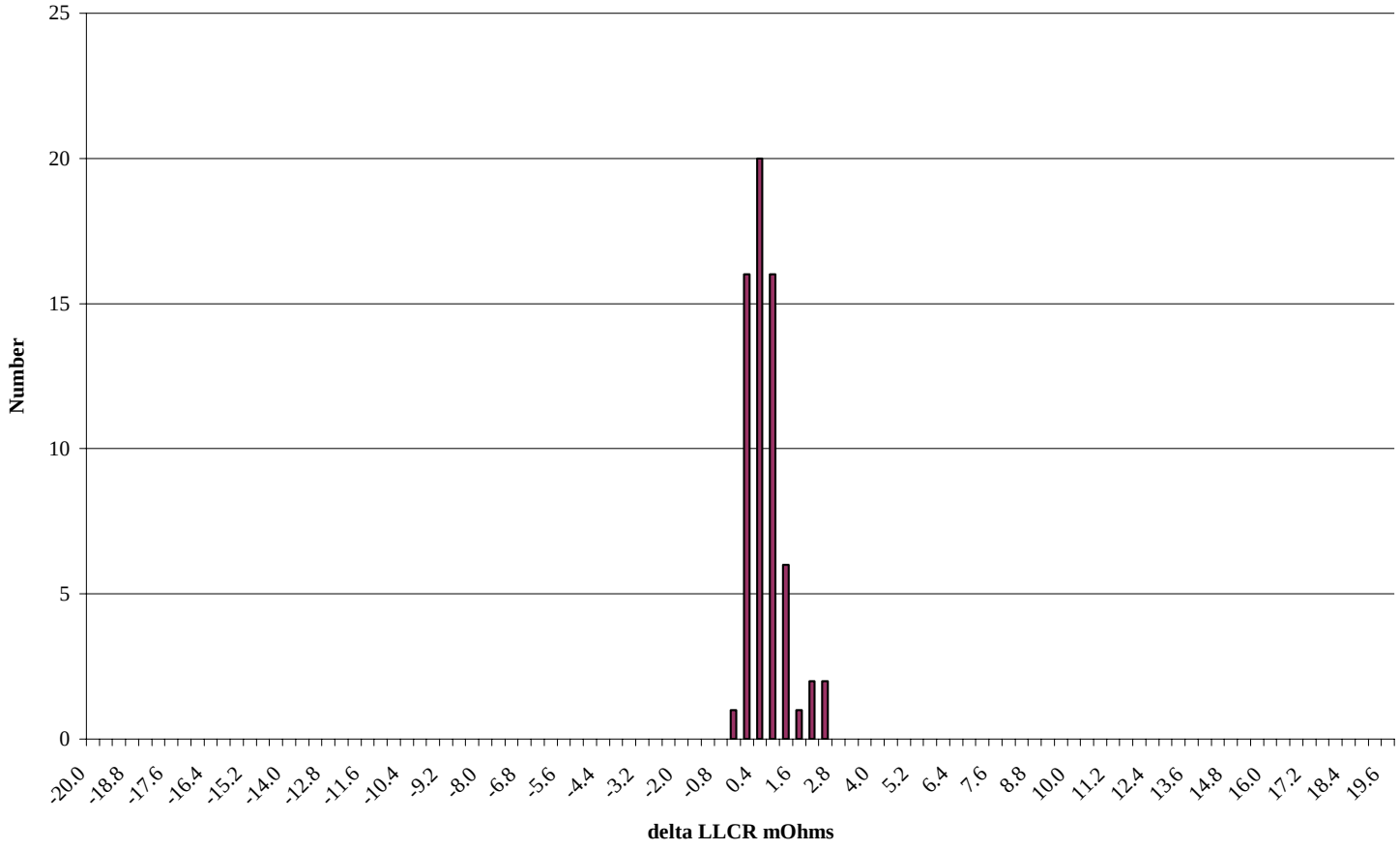
DATA SUMMARIES

LLCR, 1000 Cycle Power Contact Durability with Environmental Stressing:

1) A total of 64 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 Power Contacts	Actual Initial	Delta 1000 Cycles	Delta Thermal	Delta Humidity
Average	4.6	0.0	0.2	0.4
St. Dev.	0.1	0.2	0.3	0.5
Min	4.3	-0.5	-0.4	-0.4
Max	4.9	0.6	1.1	2.2
Count	64	64	64	64

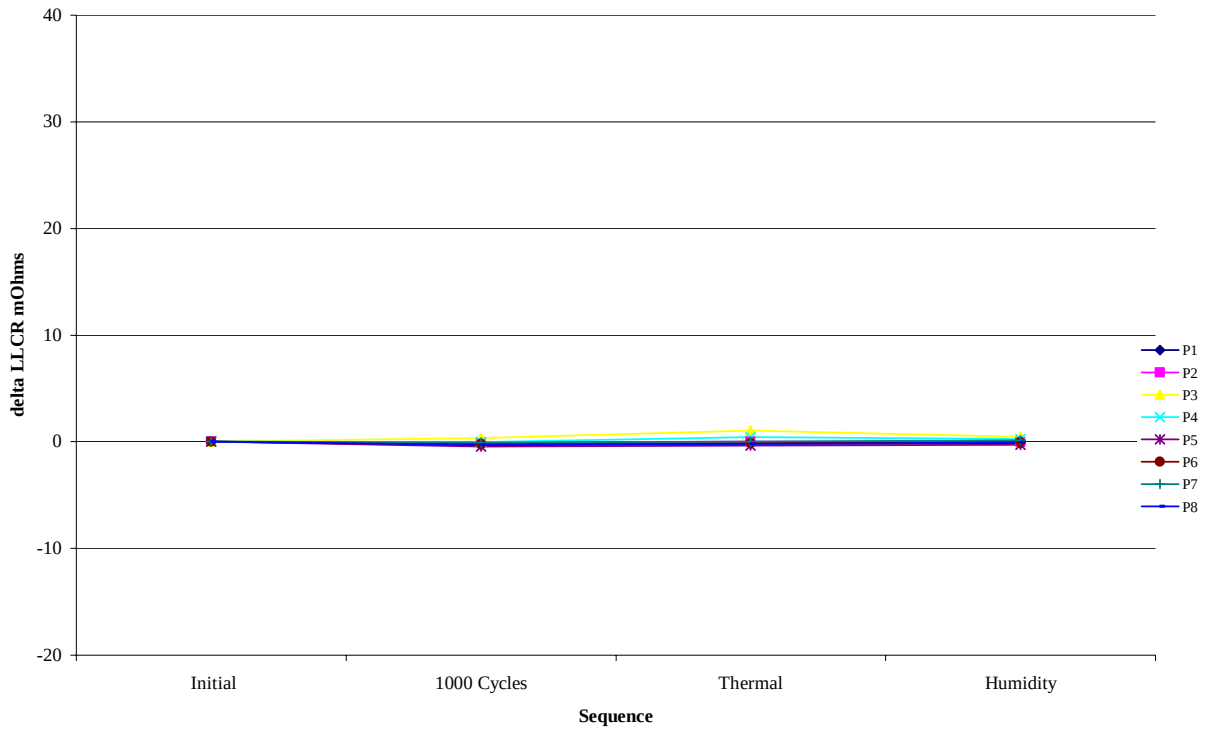
1000 Cycle Power Contact Durability after Environmental Stressing



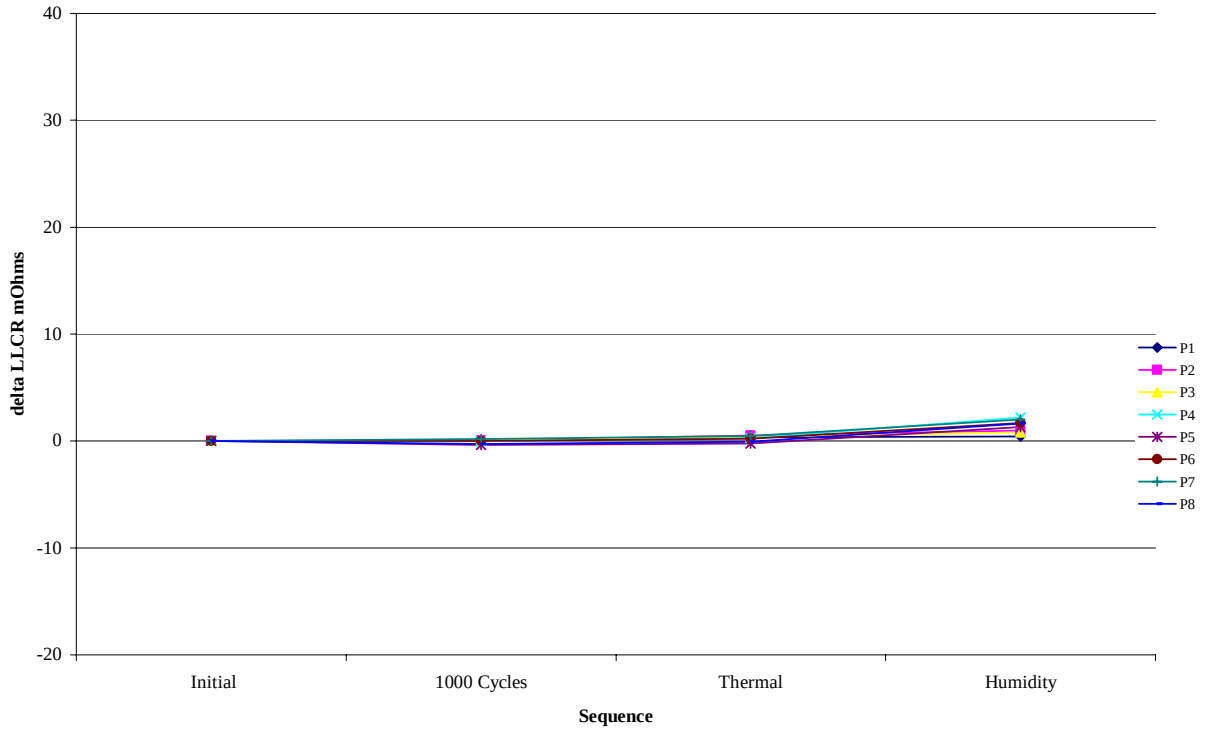
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #1
Power Contacts



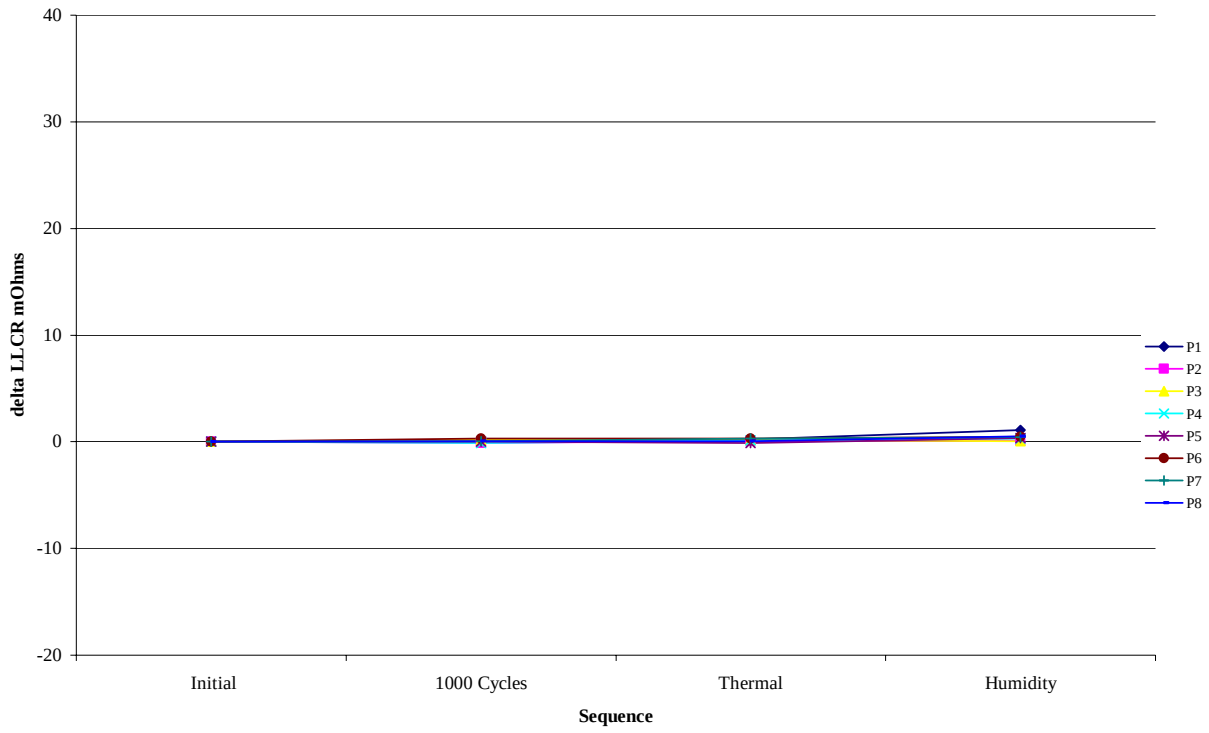
Board #2
Power Contacts



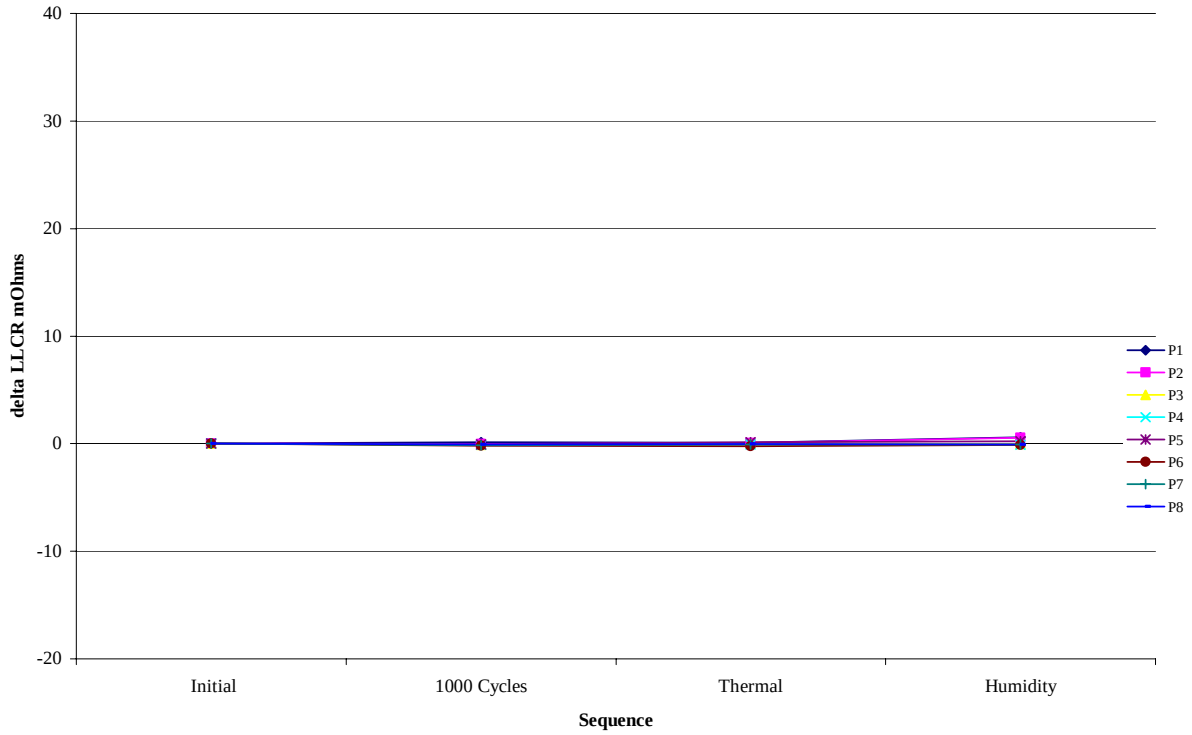
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #3
Power Contacts



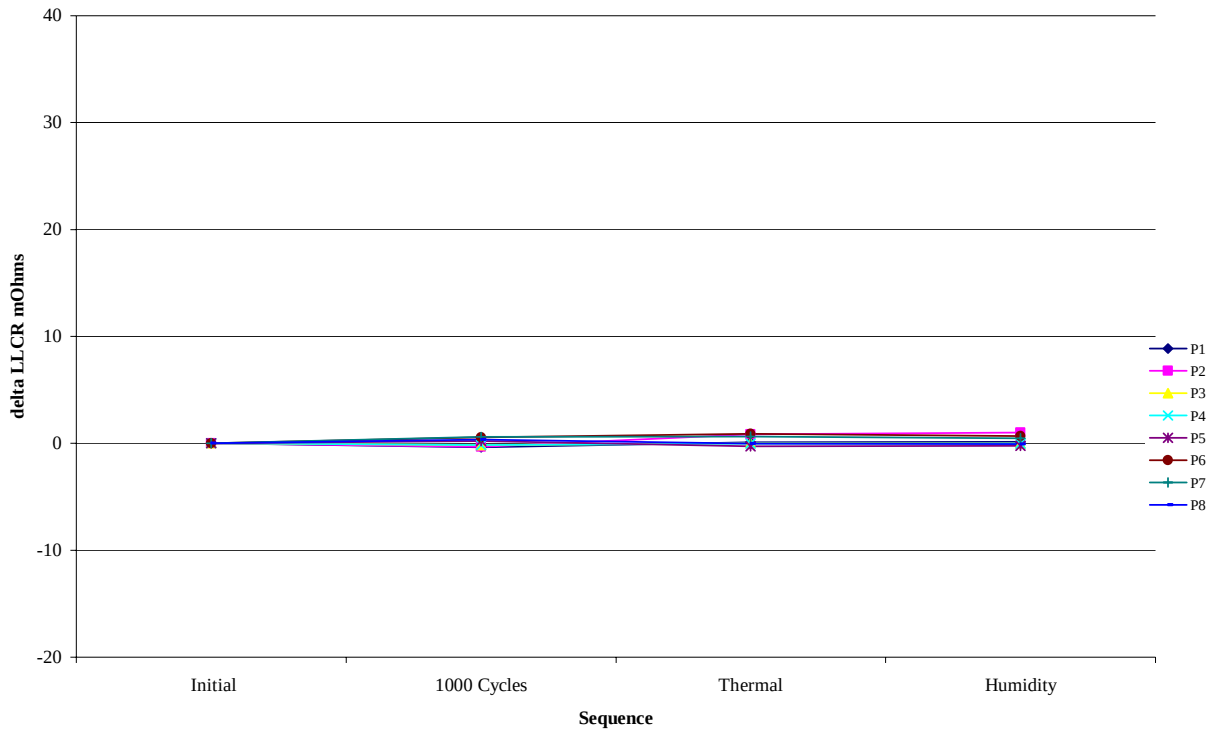
Board #4
Power Contacts



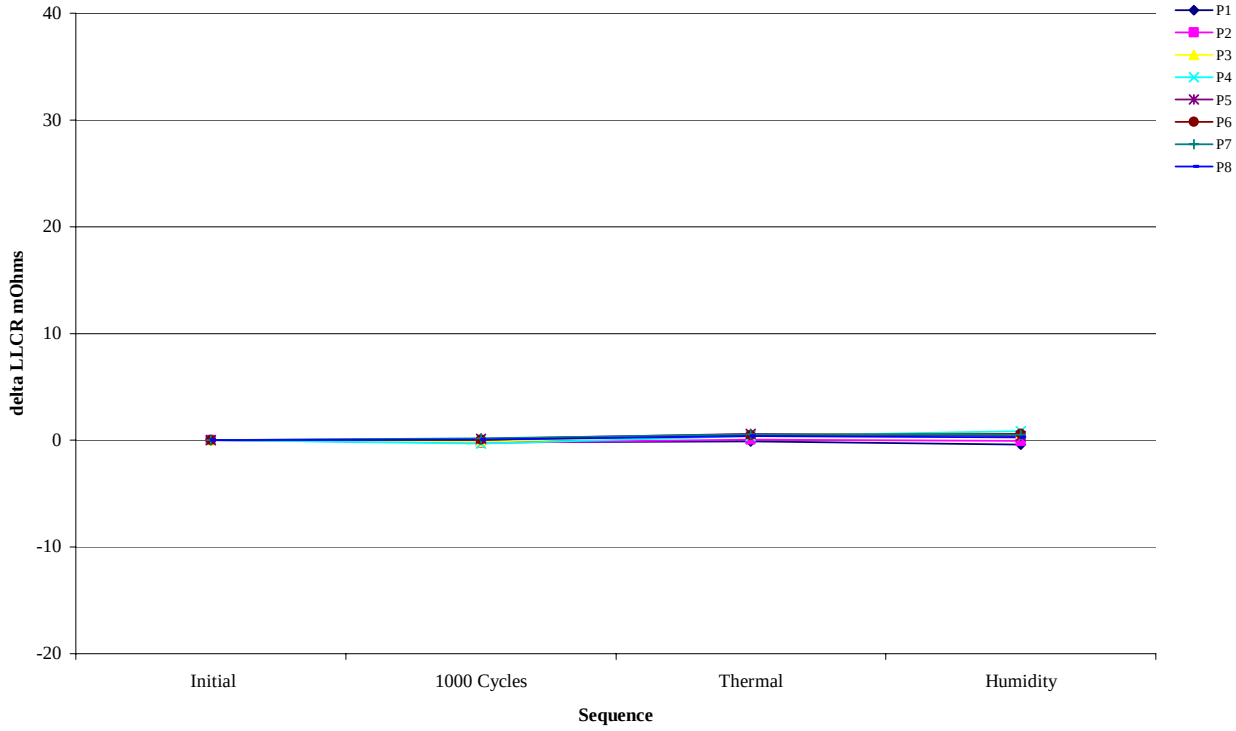
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #5
Power Contacts



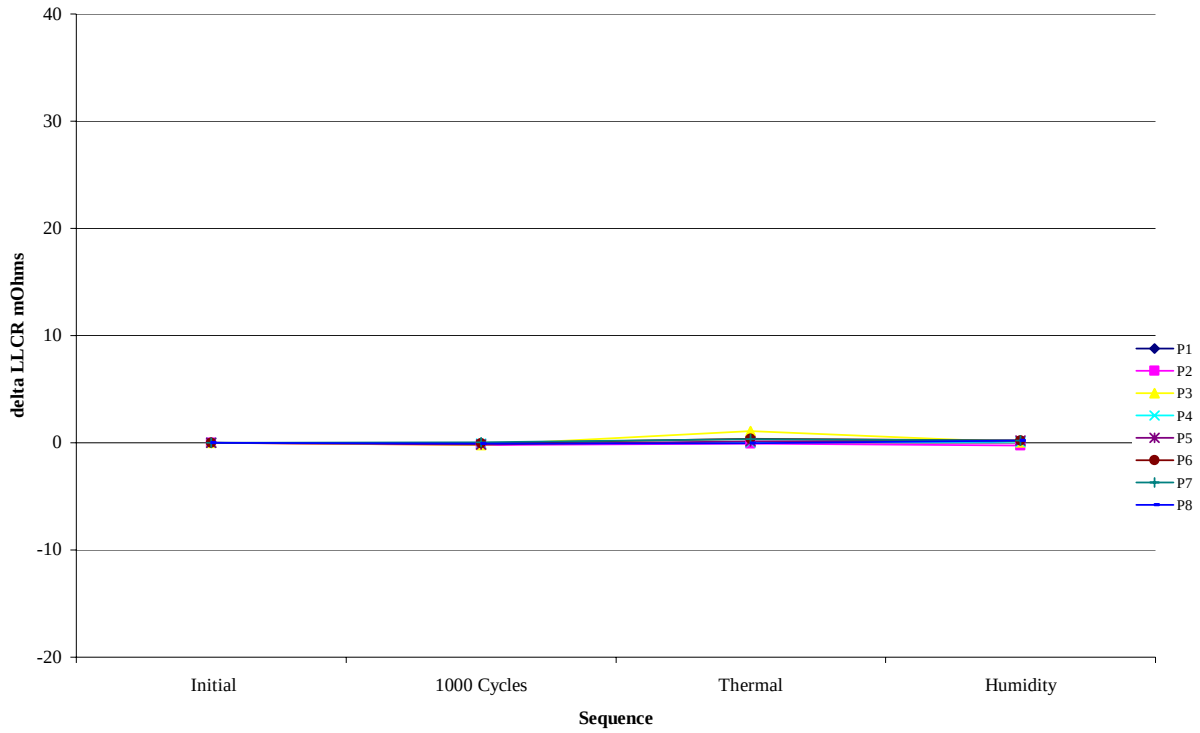
Board #6
Power Contacts



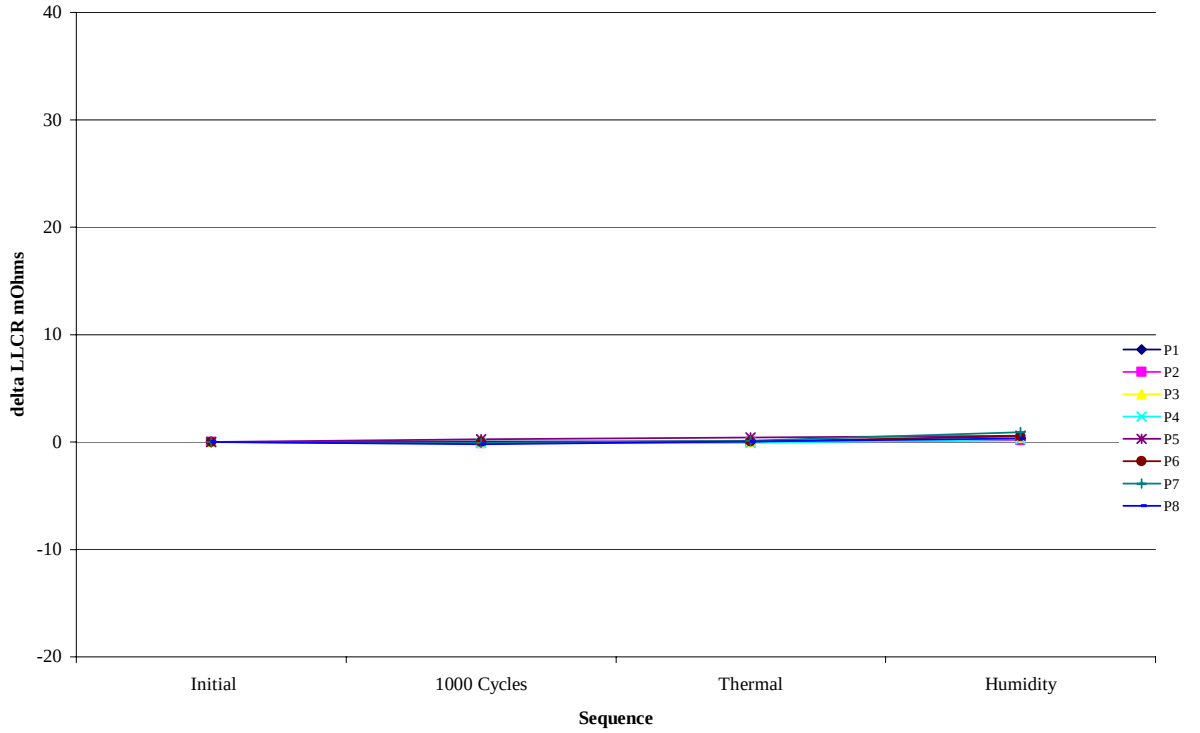
Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA SUMMARIES Continued

Board #7
Power Contacts



Board #8
Power Contacts



Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA

LLCR 1000 Cycle Signal Contact Durability:

	Date	Troy Cook	Jul. 01 2004	Jul. 06 2004	Jul. 08 2004	Jul. 08 2004	Jul. 12 2004	Jul. 14 2004
	Room Temp C	23	25	24	24	24	24	24
	RH	35%	53%	45%	45%	36%	52%	47%
	Name	Troy Cook	Troy Cook	Troy Cook	Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**25 Cycles**	**50 Cycles**	**100 Cycles**	**250 Cycles**	**500 Cycles**	**1000 Cycles**
1	P1	24.0	0.5	-0.6	-0.9	-1.7	-1.2	-0.8
1	P2	22.1	0.7	-0.3	0.6	0.6	1.3	0.0
1	P3	23.5	0.0	0.1	0.0	0.4	0.4	-0.8
1	P4	24.4	-0.9	-1.2	-0.9	-0.7	0.0	-0.1
1	P5	23.6	0.7	-1.3	-0.6	-0.3	-0.6	-0.2
1	P6	21.7	0.3	-0.1	-0.1	-0.1	0.0	-0.2
1	P7	22.6	-1.3	-1.0	-1.2	-0.8	-1.1	0.1
1	P8	23.1	-1.6	-0.5	-0.9	-0.6	-1.1	-0.2
1	P9	26.0	-3.0	-1.6	-2.1	-3.0	-2.5	-2.8
1	P10	23.5	-0.1	-0.5	-0.8	-0.6	-0.7	-0.9
1	P11	24.9	-0.9	-0.2	-0.9	-1.4	-1.4	-1.3
1	P12	26.0	-2.3	-1.1	-2.3	-2.4	-1.7	-1.7
1	P13	24.3	-1.9	-0.3	-0.8	-1.1	-0.6	-1.6
1	P14	24.1	-1.4	-0.4	-0.6	-0.6	-0.9	-1.0
1	P15	26.4	-3.5	-2.8	-3.1	-3.0	-2.3	-2.3
1	P16	24.6	-1.3	0.4	-0.2	-0.2	-0.4	-0.4
1	P17	24.6	-1.4	-0.4	-1.5	-1.1	-0.4	-0.9
1	P18	22.4	-0.4	0.0	0.5	-0.4	-0.3	-0.1
1	P19	22.3	-0.9	-0.1	0.0	0.0	-0.9	-0.1
1	P20	22.1	0.5	-0.5	-0.2	-0.3	0.1	-0.4
1	P21	22.7	0.8	0.1	0.8	1.3	1.7	1.0
1	P22	23.6	0.6	0.5	0.4	1.0	0.9	0.4
1	P23	24.4	0.5	-0.5	0.1	-0.2	0.6	-0.7
1	P24	23.0	0.7	0.5	1.1	0.9	1.2	-0.4
1	P25	22.1	0.5	0.7	1.4	1.3	0.2	0.2
2	P1	23.0	1.0	-0.2	-0.1	-1.5	-1.5	-1.0
2	P2	21.9	0.7	0.2	0.5	0.5	0.2	0.0
2	P3	23.7	0.0	-0.3	0.0	-0.5	-0.8	1.6
2	P4	23.9	0.5	0.6	0.4	-0.5	-0.7	0.0
2	P5	22.2	0.5	0.2	0.1	0.1	-0.3	-0.4
2	P6	21.1	1.5	1.1	1.2	0.1	0.0	0.0
2	P7	23.0	-0.8	-0.2	0.3	-0.1	-0.3	0.3
2	P8	22.9	-0.7	-1.1	-0.7	0.1	-0.4	0.2
2	P9	23.5	-0.1	-0.5	-0.3	-0.6	0.7	0.9
2	P10	23.9	-0.4	-0.5	-0.4	-0.2	-0.1	0.5
2	P11	24.7	-0.7	-0.9	-0.8	-0.6	-0.6	-0.6
2	P12	23.1	0.5	0.3	0.2	-0.1	0.2	0.1
2	P13	23.6	0.3	0.0	0.0	0.0	-0.2	-0.8

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

2	P14	22.8	0.4	0.5	0.6	0.8	-0.1	0.7
2	P15	24.2	-0.7	-0.3	0.0	-0.2	-1.3	-0.3
2	P16	23.4	-0.2	0.1	0.3	0.9	0.3	0.0
2	P17	24.2	0.4	0.7	0.8	0.6	1.0	-0.2
2	P18	22.6	-0.2	0.2	-0.2	0.4	0.7	-0.5
2	P19	21.6	-0.6	0.4	0.4	0.5	1.2	1.5
2	P20	21.7	-0.2	0.1	0.0	0.4	0.0	0.0
2	P21	22.9	0.4	0.8	0.7	0.9	0.4	0.4
2	P22	24.2	1.1	1.0	1.2	0.4	0.2	1.2
2	P23	24.5	0.1	-0.1	0.1	-0.2	-0.2	0.7
2	P24	21.9	0.4	1.2	1.2	1.1	0.7	0.7
2	P25	21.8	0.3	0.7	0.4	1.0	1.6	0.2
3	P1	21.9	0.2	0.4	0.7	0.0	0.5	-1.2
3	P2	21.1	0.6	1.7	1.0	1.1	0.9	0.1
3	P3	22.8	0.1	0.5	-0.1	-0.3	0.3	-0.9
3	P4	23.9	-0.8	-0.5	-1.2	-1.2	-1.1	-1.3
3	P5	23.0	-0.5	-0.6	-0.6	-0.6	-0.5	-1.5
3	P6	21.1	0.3	0.6	0.0	-0.1	0.2	0.2
3	P7	23.1	-0.8	-0.1	-0.6	-0.7	-0.9	-0.2
3	P8	23.3	0.2	-0.8	0.1	-0.1	-0.3	-0.2
3	P9	23.2	-0.2	1.0	0.4	0.4	0.3	-0.1
3	P10	23.7	-0.6	0.1	-0.3	0.1	0.0	0.3
3	P11	22.9	0.3	0.2	0.2	0.4	0.6	0.5
3	P12	23.3	0.1	0.1	-0.1	-0.2	-0.1	-0.3
3	P13	23.3	0.6	0.6	0.1	0.3	0.2	0.4
3	P14	24.6	-1.2	-1.0	-1.1	-1.2	-1.0	-1.0
3	P15	24.0	-0.8	-0.6	-0.2	-0.2	-0.4	-0.1
3	P16	23.9	-1.4	-0.6	-0.1	0.1	-0.3	0.1
3	P17	23.6	-0.8	-0.7	-0.3	-0.3	-0.4	0.6
3	P18	22.3	-0.6	0.5	-0.1	0.0	-0.2	1.1
3	P19	21.4	-0.2	0.1	0.5	0.6	0.4	1.0
3	P20	21.1	0.2	0.3	0.1	0.0	1.0	0.1
3	P21	22.9	0.8	0.6	0.1	0.2	0.8	-0.2
3	P22	23.7	0.6	0.8	0.3	-0.1	1.3	-0.6
3	P23	24.3	-0.6	-0.1	-0.4	-0.8	0.2	-1.4
3	P24	21.5	0.6	1.2	0.8	0.1	1.1	0.1
3	P25	22.8	0.2	0.0	0.9	-0.4	0.3	-1.2
5	P1	22.7	1.1	1.3	1.6	0.9	-1.0	1.6
5	P2	22.4	1.7	2.2	2.3	1.2	0.4	1.2
5	P3	24.8	0.4	0.3	0.5	0.2	0.2	-0.9
5	P4	25.5	0.3	0.0	-0.3	0.3	-0.2	-0.7
5	P5	22.6	2.0	1.3	2.6	2.7	1.8	0.9
5	P6	22.2	2.2	1.6	1.7	1.9	1.8	1.5
5	P7	23.1	-1.5	0.1	0.6	0.3	2.2	0.8
5	P8	23.4	-1.4	-1.5	-1.6	-0.2	1.5	-0.3
5	P9	25.2	0.0	-1.6	0.1	-1.0	1.5	-0.5
5	P10	23.5	-1.2	-0.2	-1.4	-0.4	0.9	-0.3
5	P11	24.2	-0.8	0.1	-1.0	-0.1	0.9	0.7
5	P12	24.3	-1.2	-0.8	-1.4	-1.0	0.7	0.5
5	P13	24.1	-1.1	-0.4	-0.3	-0.7	0.6	-0.7

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

5	P14	23.3	-0.7	-0.4	-0.7	-0.5	1.8	1.0
5	P15	23.8	-0.7	-0.5	-0.9	-1.0	1.9	0.4
5	P16	24.8	-1.3	0.0	-1.6	-1.9	0.5	-1.3
5	P17	22.6	0.7	0.6	0.7	0.3	2.6	1.1
5	P18	23.4	-1.6	-0.4	-0.9	0.3	1.6	-0.3
5	P19	22.9	-0.6	3.1	0.3	0.2	1.7	1.1
5	P20	21.6	1.7	1.2	2.3	1.6	2.3	1.4
5	P21	23.3	2.2	1.1	2.1	2.4	3.9	1.8
5	P22	24.2	1.1	1.2	0.9	1.5	3.4	0.9
5	P23	24.7	1.2	0.6	1.1	0.7	4.1	0.8
5	P24	21.6	2.5	2.1	3.0	2.5	6.9	2.4
5	P25	22.1	2.5	0.2	2.1	1.3	7.1	0.4
6	P1	24.4	-0.9	-1.7	-1.4	-2.0	-1.9	-0.8
6	P2	23.3	-1.1	-1.2	-1.2	3.1	-1.1	0.0
6	P3	24.5	0.2	-1.2	-0.8	-0.2	-1.0	-0.9
6	P4	24.3	1.5	0.1	-0.1	-0.6	-0.7	-0.7
6	P5	22.4	0.0	-0.2	-0.1	0.9	0.0	1.1
6	P6	22.9	-0.9	-1.6	-1.4	-1.7	-1.6	-1.0
6	P7	23.8	-2.2	-1.0	-1.1	-0.8	-0.7	-1.7
6	P8	22.7	-1.4	-0.3	-0.8	-1.0	-0.1	-0.6
6	P9	24.1	-0.1	-0.4	-0.9	-0.6	-0.1	0.0
6	P10	24.1	-0.8	0.0	-0.4	-0.5	-0.3	-0.4
6	P11	24.3	-0.7	-0.6	-0.7	-0.4	-0.6	-0.5
6	P12	24.3	-0.5	-0.4	-0.7	-0.5	-0.2	-0.2
6	P13	25.5	-1.1	-1.5	-2.2	-2.0	-2.6	-2.0
6	P14	23.8	0.0	0.0	0.1	-0.5	-0.3	-1.3
6	P15	24.0	-0.5	-0.3	-0.6	-0.7	-0.1	-1.2
6	P16	22.8	-0.2	0.4	0.5	0.2	0.8	0.3
6	P17	22.2	0.1	0.2	0.1	0.1	0.6	-0.3
6	P18	22.4	0.3	-0.2	-0.6	0.0	-0.2	-0.5
6	P19	21.1	-0.3	0.5	0.2	0.7	0.7	1.4
6	P20	21.1	0.0	0.8	-0.2	-0.1	0.1	-0.1
6	P21	22.6	0.7	-0.3	0.0	0.6	0.8	-0.1
6	P22	24.2	-0.5	-0.8	-0.3	0.2	-0.2	-0.7
6	P23	24.0	-0.8	-1.2	-0.4	-0.7	-0.4	-0.5
6	P24	21.1	0.8	0.2	0.4	1.3	1.2	0.1
6	P25	21.9	0.3	-0.1	0.1	0.3	0.7	0.4
7	P1	21.8	0.1	0.9	1.9	0.6	0.4	0.2
7	P2	21.3	0.6	1.2	1.4	0.3	0.8	0.5
7	P3	22.2	-0.2	0.6	1.3	0.9	1.0	1.8
7	P4	23.6	-0.1	1.1	0.7	0.7	0.1	-0.4
7	P5	21.2	0.7	1.3	2.2	0.8	1.0	0.9
7	P6	20.8	-0.3	1.2	2.3	0.5	0.7	0.8
7	P7	21.4	-0.2	0.3	-0.7	0.5	1.6	0.9
7	P8	22.1	-0.8	-0.7	-1.2	-0.1	-0.8	-0.1
7	P9	24.4	-1.5	-1.7	-2.1	-1.3	-1.5	-2.2
7	P10	22.7	0.0	-0.1	-0.5	0.2	-0.2	-0.1
7	P11	24.2	-0.1	-0.1	-0.8	-0.7	-1.2	-0.4
7	P12	23.6	-0.7	-0.3	-1.3	-0.7	-0.8	-0.7
7	P13	23.3	-0.5	-0.1	-0.9	-0.4	0.3	0.2

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

7	P14	24.8	-1.0	-1.0	-2.2	-1.7	-1.4	-1.8
7	P15	23.7	0.0	-0.5	-0.1	-0.7	-0.8	-1.3
7	P16	23.5	-0.5	-0.8	-0.7	-0.8	-0.5	-0.5
7	P17	23.5	-0.9	-1.2	-1.4	-1.1	-0.5	-1.2
7	P18	22.2	-0.1	-0.3	-0.7	0.0	-0.3	0.3
7	P19	21.7	0.0	-0.1	-0.7	0.5	0.1	0.3
7	P20	20.5	0.2	0.9	1.8	1.2	0.9	1.1
7	P21	23.0	-0.9	-0.1	1.2	-0.4	-0.5	-0.6
7	P22	24.8	-1.9	-1.1	-0.7	-1.3	-1.6	-0.9
7	P23	23.9	-1.3	-1.4	0.5	-0.9	-0.7	-0.5
7	P24	21.6	-0.1	0.4	1.4	0.3	1.0	1.7
7	P25	21.5	0.2	0.5	1.4	0.7	1.4	1.4
8	P1	24.4	-1.4	-1.2	-1.2	-3.5	-0.9	-1.0
8	P2	22.4	-0.5	0.0	-0.9	-1.4	-0.1	0.2
8	P3	23.1	1.7	1.5	0.6	-1.3	0.8	0.2
8	P4	26.7	-0.1	-1.4	-1.6	-3.3	-2.2	-3.6
8	P5	22.5	-0.6	-0.2	-0.5	-1.6	-0.7	-0.8
8	P6	22.5	-1.4	-1.4	-1.4	-0.9	-1.4	-1.7
8	P7	22.7	-1.0	-0.5	-0.2	1.1	-0.4	0.4
8	P8	22.8	-1.9	-0.6	-0.4	0.2	-0.3	-0.4
8	P9	23.9	-0.9	-1.3	-1.0	1.1	0.1	0.0
8	P10	23.8	-0.6	-0.9	-0.6	1.0	-0.4	-0.8
8	P11	24.8	0.6	-0.6	-0.5	-0.1	-1.0	-1.6
8	P12	24.5	1.3	0.8	0.0	-0.1	-0.5	-0.4
8	P13	23.4	0.3	0.8	0.4	-0.1	-0.5	-0.3
8	P14	23.4	0.3	0.3	0.2	0.0	0.3	-0.3
8	P15	23.3	0.6	0.3	0.4	0.0	1.0	0.0
8	P16	23.4	0.0	0.5	0.3	0.0	0.7	0.0
8	P17	23.2	-0.3	0.0	0.4	-0.2	0.3	-0.4
8	P18	22.6	-1.8	-1.0	-0.7	0.3	-0.3	0.1
8	P19	22.4	-0.9	-0.4	-0.3	0.0	-0.5	-0.4
8	P20	22.3	-1.0	-1.0	-1.0	-0.8	-0.6	-1.0
8	P21	22.0	0.3	0.2	0.2	-0.2	1.1	0.6
8	P22	24.7	-0.5	-0.6	-0.4	-1.2	0.4	-0.9
8	P23	24.0	0.1	0.2	-0.2	-0.9	0.0	-0.5
8	P24	21.4	2.0	2.0	1.1	-0.1	1.6	1.7
8	P25	21.5	0.9	1.1	1.0	0.2	2.4	1.1

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA Continued

LLCR 1000 Cycle Power Contact Durability:

	Date	Troy Cook	Jul. 01 2004	Jul. 06 2004	Jul. 08 2004	Jul. 08 2004	Jul. 12 2004	Jul. 14 2004
	Room Temp C	23	25	24	25	24	25	24
	RH	35%	57%	43%	50%	36%	56%	46%
	Name	Troy Cook	Troy Cook	Troy Cook	Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**25 Cycles**	**50 Cycles**	**100 Cycles**	**250 Cycles**	**500 Cycles**	**1000 Cycles**
1	P1	4.6	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3
1	P2	4.8	-0.3	-0.3	-0.1	-0.2	-0.3	-0.4
1	P3	4.5	-0.2	-0.2	0.0	-0.1	0.0	-0.3
1	P4	4.5	-0.1	-0.1	-0.1	0.0	0.0	-0.1
1	P5	4.3	-0.1	-0.1	0.0	0.0	0.0	-0.1
1	P6	4.5	-0.2	-0.1	0.1	0.0	0.0	-0.2
1	P7	4.4	-0.1	0.0	0.0	0.0	0.0	-0.1
1	P8	4.5	0.0	0.0	0.0	0.1	0.0	0.1
2	P1	4.9	-0.2	-0.1	-0.1	-0.4	-0.5	-0.6
2	P2	4.6	-0.1	0.1	0.1	-0.4	-0.3	-0.4
2	P3	4.6	0.0	0.0	0.0	0.1	0.0	-0.1
2	P4	4.6	-0.1	-0.1	0.0	-0.1	-0.1	-0.3
2	P5	4.9	-0.1	0.0	0.0	0.0	0.0	0.1
2	P6	4.7	-0.1	-0.1	0.0	0.0	-0.1	-0.1
2	P7	4.8	-0.1	0.0	0.0	0.0	0.0	-0.1
2	P8	4.7	-0.1	0.0	0.0	0.0	-0.1	-0.2
3	P1	4.7	0.1	-0.1	-0.2	-0.2	-0.2	0.0
3	P2	4.6	0.0	0.1	0.1	0.0	0.2	0.4
3	P3	4.6	-0.2	0.0	0.0	0.0	0.0	0.2
3	P4	4.9	0.0	-0.2	-0.3	-0.3	-0.2	-0.3
3	P5	4.7	0.0	0.2	0.1	0.0	0.1	0.1
3	P6	4.9	0.0	0.1	0.0	-0.1	0.0	-0.1
3	P7	5.1	-0.4	-0.3	-0.3	-0.4	-0.4	-0.5
3	P8	4.6	0.0	0.1	0.2	0.0	0.3	0.0
5	P1	4.6	0.3	0.2	0.6	0.4	0.0	-0.1
5	P2	4.7	0.1	0.2	0.2	0.2	0.2	0.0
5	P3	4.7	-0.1	-0.1	0.0	-0.1	-0.2	0.0
5	P4	4.7	0.1	-0.1	-0.2	-0.1	-0.2	0.0
5	P5	4.5	-0.2	0.0	0.1	0.1	-0.1	-0.1
5	P6	4.6	0.1	0.1	0.2	0.2	0.0	-0.5
5	P7	4.7	-0.2	-0.1	-0.1	-0.1	-0.5	0.0
5	P8	4.6	0.2	0.8	0.6	0.5	-0.1	0.0
6	P1	4.7	0.1	0.2	0.2	0.1	0.2	0.4
6	P2	4.6	0.2	0.3	0.3	0.2	0.2	0.1
6	P3	4.6	0.2	0.1	0.0	0.1	0.0	0.1
6	P4	4.6	0.0	0.2	0.0	0.0	0.0	0.1
6	P5	4.6	0.2	0.1	0.1	0.0	0.0	0.1
6	P6	4.5	0.1	0.2	0.2	0.1	0.1	0.1

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

6	P7	4.6	0.1	0.2	0.1	0.0	0.0	0.0
6	P8	4.6	0.0	0.0	-0.1	0.0	-0.2	-0.2
7	P1	4.7	-0.1	0.0	-0.2	0.2	0.0	-0.1
7	P2	4.4	0.0	0.0	0.0	0.0	0.1	0.0
7	P3	4.6	0.0	0.0	0.0	0.0	0.0	-0.1
7	P4	4.7	0.0	-0.1	-0.1	0.1	0.1	-0.1
7	P5	4.7	-0.1	0.0	0.2	0.2	0.7	0.2
7	P6	4.6	0.0	0.0	0.1	0.2	0.2	0.0
7	P7	4.6	-0.1	-0.1	-0.1	0.1	0.0	0.0
7	P8	4.7	-0.1	-0.1	0.0	0.1	-0.1	-0.1
8	P1	4.5	0.0	0.2	0.2	0.1	0.2	0.1
8	P2	4.4	0.2	0.3	0.3	0.2	0.1	0.1
8	P3	4.5	0.0	0.0	0.0	0.0	0.1	-0.1
8	P4	4.5	0.1	0.1	0.1	0.1	0.1	0.0
8	P5	4.8	0.0	0.0	0.0	-0.1	0.0	-0.1
8	P6	4.6	0.0	0.0	0.0	0.0	0.0	0.1
8	P7	4.7	0.1	0.2	0.3	0.2	0.1	-0.2
8	P8	4.5	0.0	0.0	0.0	0.0	0.0	0.0

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA Continued

LLCR 100 Cycle Signal Contact Durability with Environmental Stressing:

		Jun. 29 2004	Jun. 30 2004	Jul. 13 2004	Jul. 30 2004
Date					
Room Temp C		23	24	24	23
RH		37%	43%	44%	40%
Name		Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**100 Cycles**	**Thermal**	**Humidity**
1	P1	23.2	-1.4	2.5	-0.9
1	P2	21.9	0.3	3.4	1.8
1	P3	22.9	-0.6	2.6	1.6
1	P4	25.5	-0.8	1.8	-0.1
1	P5	24.5	-2.3	2.9	1.5
1	P6	21.4	-0.7	4.4	1.0
1	P7	21.9	0.2	0.6	0.9
1	P8	21.4	0.0	0.5	1.9
1	P9	22.7	-0.1	1.4	1.4
1	P10	23.0	-0.8	0.5	2.9
1	P11	23.2	0.1	1.5	2.0
1	P12	22.7	-0.3	1.7	2.2
1	P13	23.5	-0.1	4.0	2.1
1	P14	23.3	0.9	1.3	0.9
1	P15	23.2	0.6	1.3	1.9
1	P16	23.4	2.1	2.6	2.3
1	P17	22.5	0.2	1.2	2.4
1	P18	22.7	-0.8	0.5	0.7
1	P19	21.9	-0.9	0.6	1.3
1	P20	20.9	0.0	3.2	0.7
1	P21	23.8	-1.8	3.9	1.1
1	P22	23.9	-1.1	1.6	1.1
1	P23	24.2	-0.6	2.0	1.7
1	P24	21.3	0.3	4.5	3.5
1	P25	21.4	1.4	3.6	1.4
2	P1	23.2	-0.5	0.0	2.0
2	P2	22.0	0.3	1.1	1.3
2	P3	22.9	0.7	2.1	2.6
2	P4	25.0	-0.4	1.0	0.5
2	P5	24.6	-1.8	0.2	0.4
2	P6	21.3	0.2	0.8	0.8
2	P7	21.8	-0.2	0.5	0.2
2	P8	21.3	-0.7	1.5	1.4
2	P9	22.9	0.3	2.0	1.9
2	P10	23.5	0.0	1.4	1.4
2	P11	23.3	0.3	1.4	1.4
2	P12	23.0	0.6	2.0	1.6
2	P13	22.8	-0.1	2.2	2.2

2	P14	24.5	-1.4	-0.9	-0.7
2	P15	23.1	0.4	1.1	1.4
2	P16	22.8	-0.2	1.4	1.5
2	P17	23.7	-0.6	0.6	1.4
2	P18	20.7	0.2	2.2	2.3
2	P19	21.2	0.5	1.5	1.4
2	P20	21.2	-0.6	0.2	1.0
2	P21	22.8	0.0	0.5	0.3
2	P22	23.9	-1.1	0.8	1.1
2	P23	23.4	-0.3	1.1	3.5
2	P24	23.6	-0.3	0.8	0.8
2	P25	21.8	0.0	0.3	0.6
3	P1	23.2	-0.2	0.6	0.0
3	P2	21.5	0.7	3.4	1.7
3	P3	30.9	-6.5	-5.2	-6.5
3	P4	24.1	1.6	1.8	1.3
3	P5	23.4	0.2	2.9	0.8
3	P6	21.8	-0.1	2.8	1.6
3	P7	21.3	-0.5	1.0	1.5
3	P8	21.3	-0.3	1.4	1.5
3	P9	25.1	-1.5	-0.3	-0.8
3	P10	23.8	-0.8	1.5	0.9
3	P11	23.7	0.2	0.8	0.2
3	P12	23.8	-0.6	1.1	0.3
3	P13	24.7	-1.7	0.5	-0.1
3	P14	24.2	-0.5	0.4	-0.1
3	P15	23.3	-0.5	1.3	1.1
3	P16	23.5	-0.1	1.4	1.5
3	P17	22.9	-0.2	1.3	1.3
3	P18	21.0	0.8	1.3	1.6
3	P19	22.1	0.3	1.1	0.6
3	P20	21.4	-0.7	2.3	1.1
3	P21	23.3	-0.6	3.7	1.4
3	P22	24.2	-0.9	0.7	2.3
3	P23	23.9	-0.7	1.5	3.0
3	P24	22.2	0.7	2.9	1.4
3	P25	22.3	0.8	1.4	0.4
4	P1	23.3	-0.4	1.8	0.8
4	P2	22.3	-0.8	1.7	0.9
4	P3	23.2	-0.7	2.1	1.7
4	P4	25.1	-0.9	1.7	0.5
4	P5	22.3	-0.6	2.5	1.0
4	P6	21.7	-0.7	1.6	0.2
4	P7	22.3	-0.6	1.1	0.5
4	P8	22.4	0.7	3.3	0.7
4	P9	23.2	-0.1	2.3	1.2
4	P10	23.0	-0.7	1.5	1.2
4	P11	23.4	0.3	2.5	0.9
4	P12	23.9	0.1	0.9	-0.4
4	P13	22.9	-0.3	1.4	0.8

4	P14	23.0	0.1	2.0	1.2
4	P15	23.2	-0.1	2.3	1.4
4	P16	23.4	-0.1	1.7	1.3
4	P17	22.8	0.2	2.9	1.8
4	P18	22.5	0.3	2.9	0.6
4	P19	21.3	0.2	0.9	1.1
4	P20	21.1	-0.4	2.0	1.1
4	P21	22.7	-0.9	2.6	0.4
4	P22	24.0	-0.9	1.8	0.4
4	P23	23.5	0.6	5.0	2.0
4	P24	22.2	0.3	4.9	1.5
4	P25	21.5	1.4	2.2	1.3
5	P1	22.4	0.0	0.8	1.2
5	P2	22.4	-0.4	0.5	1.9
5	P3	23.7	-0.5	1.6	0.8
5	P4	23.6	0.4	1.1	1.1
5	P5	26.1	-2.2	-0.8	-0.6
5	P6	21.4	-0.6	0.3	0.6
5	P7	22.3	-0.2	1.0	0.5
5	P8	23.6	-1.7	1.3	0.6
5	P9	24.0	-0.8	2.0	1.1
5	P10	25.5	-2.1	0.1	-1.3
5	P11	24.5	-0.9	0.7	-0.1
5	P12	23.2	0.1	1.8	0.5
5	P13	22.7	0.4	2.4	1.2
5	P14	29.2	-3.6	-2.3	-2.2
5	P15	22.7	-10.7	-9.7	-10.1
5	P16	23.0	-1.4	1.5	0.2
5	P17	22.9	-1.3	1.8	0.5
5	P18	20.8	-1.0	2.3	1.5
5	P19	21.1	0.5	2.4	2.4
5	P20	21.3	0.0	0.3	0.9
5	P21	23.0	-0.5	0.4	2.8
5	P22	22.9	0.4	1.7	1.6
5	P23	24.2	-0.6	1.6	0.6
5	P24	21.9	0.5	1.6	2.0
5	P25	21.5	0.0	0.7	1.0
6	P1	22.6	0.9	1.0	1.3
6	P2	23.2	-0.1	0.8	0.7
6	P3	24.4	1.2	1.0	1.4
6	P4	26.7	-0.2	-0.6	-1.5
6	P5	24.7	-1.4	-0.6	0.2
6	P6	22.9	-1.3	-1.4	-0.4
6	P7	22.3	0.7	2.1	1.0
6	P8	24.0	0.0	0.6	-0.2
6	P9	25.8	-0.2	0.6	-0.1
6	P10	24.9	-1.0	0.9	0.2
6	P11	25.6	-0.7	-0.6	-0.4
6	P12	25.6	-0.8	-0.3	-0.8
6	P13	24.4	0.7	1.2	0.4

6	P14	24.0	0.0	0.9	1.1
6	P15	23.5	0.9	1.0	1.4
6	P16	23.6	0.0	1.3	1.2
6	P17	23.7	-0.1	1.6	2.1
6	P18	21.9	-0.1	2.8	3.0
6	P19	22.0	-0.2	1.6	2.0
6	P20	21.4	-0.5	0.2	0.4
6	P21	22.7	-0.5	1.5	2.4
6	P22	23.2	0.1	2.4	2.4
6	P23	25.4	-0.1	0.5	1.4
6	P24	22.4	0.8	1.5	2.2
6	P25	20.6	1.5	2.2	2.7
7	P1	24.7	-1.6	-0.9	-1.0
7	P2	23.7	-1.7	1.1	1.3
7	P3	25.0	-2.2	1.5	0.6
7	P4	24.1	-0.9	2.6	1.5
7	P5	22.5	-0.5	5.0	3.2
7	P6	21.5	-0.1	15.3	3.8
7	P7	22.4	0.2	1.3	1.0
7	P8	22.7	0.2	1.3	2.7
7	P9	24.8	-1.4	0.5	1.4
7	P10	23.8	-0.4	0.2	1.2
7	P11	24.9	-1.5	-0.8	0.5
7	P12	24.9	-1.5	-0.9	0.6
7	P13	24.2	-1.4	-0.4	0.7
7	P14	24.0	-0.5	0.0	0.2
7	P15	24.4	-0.6	-0.4	0.3
7	P16	23.1	0.4	1.0	2.0
7	P17	23.0	0.7	1.8	1.6
7	P18	22.2	-0.1	0.3	1.0
7	P19	22.4	-0.3	0.1	0.0
7	P20	21.3	0.3	3.2	2.8
7	P21	23.6	-1.1	3.1	2.6
7	P22	25.3	-1.2	-0.4	0.2
7	P23	23.6	0.0	3.3	3.0
7	P24	22.8	-0.3	3.4	3.8
7	P25	21.8	-0.5	2.4	2.1
8	P1	23.0	-0.3	0.2	-0.1
8	P2	21.3	1.9	3.1	1.9
8	P3	22.2	0.8	1.0	1.6
8	P4	23.7	-0.1	0.7	1.0
8	P5	22.0	0.2	1.8	2.2
8	P6	21.0	-0.4	0.8	0.5
8	P7	22.4	-0.7	0.9	0.3
8	P8	22.0	-1.7	1.1	2.6
8	P9	23.3	-0.9	0.9	2.2
8	P10	23.5	-1.1	0.8	1.2
8	P11	24.4	-1.3	-0.9	-0.4
8	P12	23.7	-1.0	-0.3	0.8
8	P13	23.8	-0.9	0.2	1.1

8	P14	25.7	-2.7	-1.7	-2.0
8	P15	24.6	-2.0	-0.3	0.0
8	P16	24.3	-1.7	-0.6	-0.3
8	P17	23.8	-0.8	0.3	0.4
8	P18	21.6	0.0	1.4	1.9
8	P19	22.2	-0.4	0.8	0.7
8	P20	20.8	-0.3	1.2	0.6
8	P21	22.3	-0.9	1.7	0.9
8	P22	23.2	-0.4	0.6	0.5
8	P23	22.3	0.1	1.6	1.7
8	P24	20.9	0.8	2.2	1.8
8	P25	21.7	-0.4	1.3	1.1

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA Continued

LLCR 100 Cycle Power Contact Durability with Environmental Stressing:

		Jun. 29 2004	Jun. 30 2004	Jul. 13 2004	Jul. 30 2004
Date					
Room Temp C		23	24	24	23
RH		36%	30%	43%	34%
Name		Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**100 Cycles**	**Thermal**	**Humidity**
1	P1	4.8	0.0	-0.2	-0.2
1	P2	4.6	0.0	0.0	0.0
1	P3	4.6	0.1	0.0	-0.1
1	P4	5.3	-0.1	0.0	-0.1
1	P5	4.5	0.1	0.2	0.0
1	P6	4.6	0.0	0.1	-0.1
1	P7	4.7	0.0	0.4	-0.2
1	P8	4.7	0.0	0.3	-0.1
2	P1	4.6	-0.3	-0.1	-0.1
2	P2	4.6	-0.1	-0.1	-0.1
2	P3	4.6	0.0	0.0	-0.1
2	P4	4.8	-0.2	-0.1	-0.1
2	P5	4.8	-0.2	-0.3	-0.1
2	P6	4.7	-0.1	-0.1	0.0
2	P7	4.7	-0.3	-0.3	-0.2
2	P8	4.9	-0.4	-0.3	-0.2
3	P1	4.8	-0.2	-0.2	-0.1
3	P2	4.7	-0.1	-0.2	-0.2
3	P3	4.8	-0.3	-0.3	-0.3
3	P4	4.8	-0.2	-0.3	-0.4
3	P5	4.7	0.0	0.1	0.1
3	P6	4.5	-0.1	0.0	-0.1
3	P7	4.6	0.1	0.1	0.1
3	P8	4.6	0.0	0.0	0.0
4	P1	4.6	-0.2	-0.2	-0.2
4	P2	4.5	-0.1	-0.1	-0.2
4	P3	4.6	0.0	0.0	-0.1
4	P4	4.8	-0.3	-0.2	-0.3
4	P5	4.7	0.0	0.0	0.1
4	P6	4.7	-0.2	-0.1	-0.3
4	P7	4.7	-0.3	0.0	-0.3
4	P8	4.4	0.0	0.5	0.1
5	P1	4.5	-0.1	0.0	-0.1
5	P2	4.6	0.0	0.2	-0.1
5	P3	4.4	0.0	0.2	0.1
5	P4	4.4	0.0	0.0	-0.1
5	P5	4.7	-0.1	0.0	-0.2
5	P6	4.6	0.0	0.1	0.0

5	P7	4.7	-0.2	0.0	-0.2
5	P8	4.6	0.0	0.1	-0.1
6	P1	4.7	0.0	-0.1	0.0
6	P2	4.4	0.0	0.0	0.1
6	P3	4.5	0.0	0.0	0.1
6	P4	4.5	0.0	0.0	0.0
6	P5	4.8	0.1	0.0	0.1
6	P6	4.5	0.0	0.0	0.1
6	P7	4.8	-0.1	-0.1	0.0
6	P8	4.6	-0.2	-0.2	-0.1
7	P1	4.8	0.0	-0.1	0.0
7	P2	4.8	-0.2	-0.2	0.0
7	P3	4.4	0.0	0.1	0.0
7	P4	4.5	-0.1	0.0	-0.1
7	P5	4.8	-0.1	-0.2	-0.2
7	P6	4.8	0.0	-0.2	-0.2
7	P7	4.6	0.2	0.2	0.0
7	P8	4.6	-0.1	0.1	0.0
8	P1	4.7	-0.1	-0.1	-0.2
8	P2	4.5	-0.1	-0.1	-0.1
8	P3	4.6	-0.1	-0.1	-0.1
8	P4	4.4	0.1	0.1	0.0
8	P5	4.5	0.2	0.1	0.0
8	P6	4.6	0.1	0.2	0.0
8	P7	4.5	0.2	0.2	0.0
8	P8	4.6	0.0	0.2	-0.1

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA Continued

LLCR 250 Cycle Signal Contact Durability with Environmental Stressing:

		Jun. 29 2004	Jun. 30 2004	Jul. 13 2004	Jul. 30 2004
Date					
Room Temp C		24	24	24	23
RH		45%	36%	43%	43%
Name		Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**250 Cycles**	**Thermal**	**Humidity**
1	P1	23.1	-1.0	0.3	-0.6
1	P2	22.2	-1.1	0.5	1.9
1	P3	23.7	-0.4	2.4	-0.2
1	P4	26.9	0.7	-0.5	-0.5
1	P5	23.6	0.0	3.8	1.3
1	P6	21.4	-0.7	5.3	0.8
1	P7	20.8	0.9	3.1	2.1
1	P8	20.7	0.8	3.6	2.5
1	P9	23.9	-1.4	1.7	0.9
1	P10	23.1	-0.9	1.8	0.4
1	P11	24.4	-0.2	2.6	0.2
1	P12	23.1	0.3	1.2	1.0
1	P13	22.5	-0.4	3.2	1.6
1	P14	22.4	0.0	1.3	1.8
1	P15	24.2	-1.3	1.1	0.2
1	P16	23.3	-1.1	0.4	0.9
1	P17	23.0	-0.7	0.6	0.6
1	P18	21.0	0.4	3.4	2.8
1	P19	21.3	0.4	2.1	1.2
1	P20	19.8	-0.6	1.4	3.5
1	P21	22.7	-1.1	-1.0	0.7
1	P22	22.3	0.0	0.6	1.1
1	P23	23.1	-0.9	0.3	1.6
1	P24	21.5	-0.5	2.6	2.1
1	P25	21.9	-0.6	0.2	1.7
2	P1	23.6	-1.7	-0.7	0.5
2	P2	21.6	-0.2	0.8	2.9
2	P3	23.8	-0.9	1.9	1.5
2	P4	23.5	-0.6	0.5	1.3
2	P5	22.3	-0.2	1.5	2.3
2	P6	21.0	-0.5	1.4	2.9
2	P7	21.1	0.7	2.2	1.8
2	P8	20.9	0.6	3.3	3.2
2	P9	23.3	-0.3	1.6	1.2
2	P10	22.8	-0.2	1.9	1.2
2	P11	23.8	0.2	0.4	0.8
2	P12	23.0	-0.5	0.7	1.1
2	P13	23.6	0.6	1.5	0.3

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

2	P14	23.3	-0.2	1.9	1.9
2	P15	23.0	-0.1	1.8	1.5
2	P16	22.8	-0.1	2.0	1.9
2	P17	22.3	0.4	2.2	2.0
2	P18	21.5	0.3	1.9	1.1
2	P19	21.5	0.2	1.2	0.9
2	P20	20.5	-0.2	2.5	3.1
2	P21	21.9	-0.2	1.7	3.2
2	P22	22.8	0.2	1.3	5.4
2	P23	23.0	0.2	2.3	2.8
2	P24	21.0	-0.1	2.1	3.4
2	P25	21.9	-0.1	1.2	2.3
3	P1	21.9	-0.7	0.9	1.6
3	P2	20.3	0.5	2.1	3.1
3	P3	22.4	0.3	3.2	2.5
3	P4	22.7	1.3	1.3	1.8
3	P5	21.3	1.4	2.4	3.3
3	P6	20.5	1.6	1.8	1.8
3	P7	21.9	-1.1	1.4	0.6
3	P8	22.1	-1.4	2.0	1.0
3	P9	23.8	-0.8	1.1	0.3
3	P10	23.0	-0.3	1.7	0.9
3	P11	23.5	-0.4	0.6	0.8
3	P12	23.2	-0.7	0.5	0.7
3	P13	23.4	-0.4	1.7	0.7
3	P14	24.2	-1.7	0.9	-0.6
3	P15	23.0	-0.8	1.8	0.6
3	P16	23.3	-1.2	1.4	0.5
3	P17	23.0	-1.5	1.5	0.7
3	P18	22.0	-1.3	1.4	1.2
3	P19	21.6	-0.5	1.1	0.0
3	P20	21.0	0.6	1.8	2.6
3	P21	22.0	0.5	1.5	2.6
3	P22	23.0	0.2	1.1	1.9
3	P23	23.4	0.0	1.8	2.0
3	P24	20.6	0.9	2.4	3.4
3	P25	21.2	0.9	1.8	2.3
4	P1	22.7	-0.1	1.3	1.6
4	P2	22.0	-0.7	2.9	2.5
4	P3	22.8	1.1	2.4	2.6
4	P4	24.1	0.2	1.5	1.7
4	P5	23.3	-0.5	2.0	1.7
4	P6	23.2	-0.9	1.2	0.3
4	P7	22.9	-0.6	0.5	0.8
4	P8	23.5	-0.5	1.3	1.3
4	P9	23.2	0.0	2.0	2.2
4	P10	23.7	0.7	1.6	1.3
4	P11	24.2	-0.1	0.2	0.5
4	P12	23.8	-0.6	0.6	1.0
4	P13	23.2	0.6	1.6	1.9

4	P14	23.2	0.4	1.5	2.6
4	P15	23.2	0.6	1.5	1.9
4	P16	23.0	0.7	1.6	1.7
4	P17	23.8	0.7	1.4	1.1
4	P18	22.4	0.0	1.1	2.2
4	P19	22.4	0.0	0.5	1.3
4	P20	21.3	0.6	2.1	3.7
4	P21	23.8	0.1	0.9	0.4
4	P22	23.6	-0.1	1.7	1.8
4	P23	23.3	0.0	2.6	4.2
4	P24	21.6	0.6	2.7	3.9
4	P25	21.5	0.7	1.7	1.9
5	P1	23.2	-1.1	1.2	0.8
5	P2	23.6	-1.4	1.2	0.4
5	P3	25.2	-1.8	0.9	-0.8
5	P4	25.3	0.0	1.2	0.6
5	P5	25.5	-2.0	1.4	1.0
5	P6	24.1	-2.1	2.1	0.0
5	P7	22.4	0.8	1.3	1.5
5	P8	22.5	0.7	2.8	2.4
5	P9	24.2	0.9	2.3	1.9
5	P10	23.5	0.0	2.3	1.6
5	P11	25.5	-0.2	0.8	1.2
5	P12	24.2	-0.4	1.7	1.2
5	P13	24.1	-0.2	1.9	1.4
5	P14	24.5	-0.8	2.2	0.6
5	P15	23.0	-0.3	2.1	2.3
5	P16	22.8	0.2	3.3	2.6
5	P17	23.7	-0.7	2.0	0.8
5	P18	22.9	0.2	2.1	1.2
5	P19	22.8	-0.7	2.1	1.3
5	P20	22.6	-1.0	2.0	0.4
5	P21	24.4	-0.3	2.4	0.6
5	P22	26.0	-1.0	0.1	0.3
5	P23	25.7	-1.0	1.1	2.3
5	P24	22.7	-0.8	2.0	2.3
5	P25	22.2	-0.4	2.4	0.4
6	P1	23.7	-0.4	2.1	0.5
6	P2	22.0	1.1	4.2	1.2
6	P3	23.4	-0.1	2.0	1.0
6	P4	31.4	-5.3	10.3	-6.3
6	P5	24.6	-1.4	2.9	0.6
6	P6	22.8	-0.4	1.4	-0.5
6	P7	22.4	-1.0	1.3	0.6
6	P8	21.9	-0.5	3.4	0.7
6	P9	22.4	0.8	5.3	1.9
6	P10	22.8	-0.2	2.2	1.5
6	P11	23.1	0.2	2.4	0.8
6	P12	23.0	0.9	4.7	0.9
6	P13	23.2	-0.6	3.9	1.6

6	P14	22.6	-0.5	1.7	2.1
6	P15	22.6	0.2	3.2	2.5
6	P16	23.2	-0.2	2.2	1.9
6	P17	22.2	0.4	2.5	1.4
6	P18	21.5	0.6	3.8	1.3
6	P19	20.6	0.1	1.9	1.8
6	P20	21.5	0.1	1.9	-0.1
6	P21	21.8	0.6	2.4	3.1
6	P22	22.8	0.5	2.9	1.4
6	P23	22.8	0.6	1.8	2.0
6	P24	20.9	1.3	3.6	2.5
6	P25	20.3	1.8	3.1	2.3
7	P1	21.8	1.2	2.3	2.2
7	P2	22.7	-0.4	1.4	0.4
7	P3	22.2	1.0	1.6	2.6
7	P4	25.3	0.2	-0.2	0.4
7	P5	21.7	0.9	3.7	3.9
7	P6	22.3	-1.4	1.1	-1.3
7	P7	24.2	-1.6	-1.4	1.1
7	P8	24.2	-1.9	-0.1	0.6
7	P9	25.1	-1.1	-0.2	1.7
7	P10	25.2	-0.4	-0.2	1.4
7	P11	24.8	0.1	-0.3	0.6
7	P12	24.2	0.4	-0.2	1.9
7	P13	23.6	0.6	1.3	2.7
7	P14	24.6	-1.3	1.2	1.2
7	P15	25.8	-1.6	0.2	0.2
7	P16	25.2	-2.2	-0.4	0.9
7	P17	24.5	-1.0	2.4	1.2
7	P18	25.0	-2.5	-1.5	0.2
7	P19	23.4	-1.6	-1.2	0.1
7	P20	22.0	-0.9	0.8	-1.1
7	P21	21.7	1.6	3.7	2.8
7	P22	23.1	0.8	3.2	1.8
7	P23	23.8	-0.1	1.8	0.8
7	P24	21.5	2.0	3.6	2.4
7	P25	21.6	1.9	2.6	1.3
8	P1	22.5	-0.5	1.9	0.8
8	P2	21.5	-0.8	1.8	2.7
8	P3	22.8	-0.9	0.6	1.5
8	P4	25.6	-2.7	-1.9	2.5
8	P5	23.6	-1.8	1.4	1.1
8	P6	21.3	-0.1	2.2	1.6
8	P7	21.4	0.7	0.6	3.2
8	P8	22.6	-1.5	-0.2	1.6
8	P9	23.5	-1.3	0.2	2.9
8	P10	24.2	-2.3	-0.5	0.9
8	P11	24.3	-2.0	-1.5	1.2
8	P12	23.8	-1.5	-0.2	2.0
8	P13	24.1	-2.0	-0.8	2.0

8	P14	23.0	-0.9	0.3	2.0
8	P15	23.5	-1.3	0.2	2.7
8	P16	23.3	-1.4	1.1	1.8
8	P17	22.5	-0.8	0.7	2.6
8	P18	21.8	-1.0	0.6	3.3
8	P19	21.6	-0.6	0.0	2.2
8	P20	20.8	-0.5	1.7	1.2
8	P21	22.4	-0.8	1.6	2.2
8	P22	23.7	0.4	0.9	0.2
8	P23	23.7	-1.2	0.8	0.2
8	P24	21.6	-0.5	2.6	1.6
8	P25	21.7	-0.7	0.4	1.0

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA Continued

LLCR 250 Cycle Power Contact Durability with Environmental Stressing:

		Jun. 29 2004	Jun. 30 2004	Jul. 13 2004	Jul. 30 2004
Date					
Room Temp C		24	24	24	23
RH		39%	30%	39%	52%
Name		Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**250 Cycles**	**Thermal**	**Humidity**
1	P1	4.6	-0.1	0.1	0.1
1	P2	4.6	0.1	0.2	0.1
1	P3	4.5	0.1	0.2	0.0
1	P4	4.6	0.1	0.1	0.1
1	P5	4.6	0.1	0.1	0.1
1	P6	4.6	0.0	0.0	0.0
1	P7	4.6	-0.1	0.0	0.1
1	P8	4.6	0.0	0.0	0.0
2	P1	4.5	0.1	0.4	1.4
2	P2	4.5	0.0	0.3	1.4
2	P3	4.6	0.0	0.1	0.1
2	P4	4.8	-0.4	-0.1	0.6
2	P5	4.7	0.1	0.1	0.3
2	P6	4.6	0.1	0.1	0.2
2	P7	4.6	0.1	0.1	0.3
2	P8	4.7	0.0	0.0	0.1
3	P1	4.5	0.1	0.1	0.2
3	P2	4.6	0.0	0.1	0.1
3	P3	4.5	-0.1	0.0	0.0
3	P4	4.8	0.0	-0.1	-0.1
3	P5	4.6	0.1	0.1	0.2
3	P6	4.7	0.0	0.1	0.0
3	P7	4.6	-0.1	0.0	0.0
3	P8	4.6	0.0	0.1	0.0
4	P1	4.6	0.1	0.1	-0.1
4	P2	4.6	-0.1	0.1	0.1
4	P3	4.6	0.0	0.1	-0.1
4	P4	4.7	-0.1	0.0	-0.1
4	P5	4.6	0.0	0.0	0.1
4	P6	4.6	-0.1	-0.1	0.0
4	P7	4.5	-0.1	0.0	0.0
4	P8	4.5	-0.2	0.0	0.0
5	P1	4.7	-0.3	-0.3	-0.1
5	P2	4.4	0.4	0.6	1.2
5	P3	4.7	-0.1	-0.1	-0.1
5	P4	4.6	-0.3	-0.2	-0.3
5	P5	4.8	-0.2	-0.1	-0.1
5	P6	4.7	-0.1	0.0	0.0

5	P7	5.0	0.0	0.1	0.2
5	P8	4.7	-0.2	-0.2	-0.1
6	P1	4.8	-0.2	-0.1	-0.2
6	P2	4.7	0.1	0.3	0.1
6	P3	4.5	-0.1	-0.1	-0.1
6	P4	4.4	0.1	0.2	0.0
6	P5	4.5	-0.1	0.1	-0.2
6	P6	4.6	-0.1	-0.2	-0.2
6	P7	4.6	-0.3	-0.1	-0.3
6	P8	4.5	0.0	0.1	0.0
7	P1	4.5	0.1	0.2	0.1
7	P2	4.5	0.1	0.1	0.1
7	P3	4.5	-0.2	0.0	-0.1
7	P4	4.4	0.0	0.1	0.0
7	P5	5.0	-0.2	-0.1	0.1
7	P6	4.7	0.2	0.1	0.1
7	P7	4.6	0.2	0.1	0.0
7	P8	4.7	0.1	0.0	0.0
8	P1	4.6	-0.2	-0.2	-0.3
8	P2	5.1	-0.8	-0.7	-0.8
8	P3	4.5	-0.1	0.1	-0.1
8	P4	4.6	-0.1	0.0	-0.1
8	P5	4.7	0.0	0.3	-0.1
8	P6	4.6	-0.1	0.1	-0.2
8	P7	4.7	-0.1	0.0	-0.3
8	P8	4.7	-0.1	0.0	-0.2

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA Continued

LLCR 500 Cycle Signal Contact Durability with Environmental Stressing:

		Jun. 29 2004	Jun. 30 2004	Jul. 13 2004	Aug. 02 2004
Date					
Room Temp C		23	24	24	23
RH		52%	43%	43%	53%
Name		Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**500 Cycles**	**Thermal**	**Humidity**
1	P1	23.4	-0.9	-0.1	-2.1
1	P2	21.7	0.6	1.5	1.6
1	P3	24.0	-0.3	1.5	0.4
1	P4	23.6	-0.7	-0.2	-0.7
1	P5	21.6	1.2	4.9	2.1
1	P6	22.0	0.6	3.3	-0.8
1	P7	21.2	-1.0	1.4	2.6
1	P8	20.5	0.1	2.7	3.4
1	P9	22.8	-1.1	1.3	1.4
1	P10	22.5	-0.7	1.3	2.4
1	P11	23.4	0.1	0.9	2.1
1	P12	24.8	-1.2	-0.9	-0.9
1	P13	24.2	-0.7	0.1	0.6
1	P14	23.5	-0.1	0.7	0.9
1	P15	22.5	-0.1	1.5	2.1
1	P16	23.2	-0.6	1.7	2.3
1	P17	21.7	0.3	3.1	3.2
1	P18	21.6	0.2	2.1	3.0
1	P19	21.8	-1.4	1.1	2.8
1	P20	20.6	0.6	0.9	0.8
1	P21	21.9	1.6	3.2	2.6
1	P22	24.3	0.1	1.8	0.7
1	P23	22.7	0.4	2.3	2.1
1	P24	20.7	1.5	1.7	1.5
1	P25	21.8	0.2	1.0	0.1
2	P1	22.9	0.6	0.2	-0.6
2	P2	22.6	-0.2	0.7	1.4
2	P3	23.6	0.3	2.1	2.1
2	P4	23.9	-0.1	3.2	1.0
2	P5	23.4	0.3	2.6	0.7
2	P6	20.9	0.2	2.3	0.5
2	P7	21.9	1.1	1.9	2.0
2	P8	22.9	0.0	0.9	2.3
2	P9	23.5	-0.2	1.4	2.4
2	P10	24.4	-1.1	0.4	0.7
2	P11	24.5	-0.5	0.7	0.2
2	P12	24.9	-0.5	1.3	0.6
2	P13	24.0	0.1	1.0	1.5

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

2	P14	23.0	0.3	2.5	2.1
2	P15	23.4	0.7	2.4	2.0
2	P16	22.7	1.3	3.5	2.8
2	P17	22.1	1.7	2.9	3.3
2	P18	20.9	0.8	3.1	4.0
2	P19	20.9	0.6	1.7	3.2
2	P20	20.6	1.2	3.0	0.8
2	P21	22.0	0.6	3.8	2.9
2	P22	22.9	0.5	3.2	2.3
2	P23	24.0	0.8	2.0	2.1
2	P24	22.2	-0.1	2.6	0.9
2	P25	21.8	0.0	1.9	-0.1
3	P1	22.2	-0.9	0.1	3.6
3	P2	22.2	-0.4	1.1	2.7
3	P3	22.7	-0.8	0.4	2.3
3	P4	24.6	0.5	0.6	2.0
3	P5	22.5	-0.3	1.7	11.1
3	P6	21.1	0.5	1.6	3.5
3	P7	20.8	2.3	4.8	3.3
3	P8	22.2	2.6	3.9	3.0
3	P9	25.0	-0.7	1.4	3.5
3	P10	24.5	-0.2	1.6	2.3
3	P11	24.1	0.0	2.1	3.4
3	P12	26.1	-1.8	-0.1	0.3
3	P13	24.8	0.1	2.6	1.0
3	P14	23.8	0.7	4.0	3.4
3	P15	22.7	1.8	7.9	5.2
3	P16	24.0	1.2	3.5	4.2
3	P17	23.1	1.4	4.2	4.1
3	P18	23.2	1.3	3.1	2.8
3	P19	22.3	0.7	3.5	3.1
3	P20	21.0	0.9	1.6	2.6
3	P21	23.3	0.4	2.1	2.6
3	P22	24.6	-1.5	1.8	1.0
3	P23	26.6	-2.9	-1.6	-0.4
3	P24	21.3	0.1	2.1	3.6
3	P25	21.2	0.3	1.5	2.8
4	P1	22.9	0.0	1.4	1.5
4	P2	22.7	-1.2	1.8	1.6
4	P3	24.7	0.5	0.9	0.6
4	P4	25.8	-0.1	0.9	0.4
4	P5	24.1	0.7	3.9	2.7
4	P6	23.3	-1.4	1.7	0.9
4	P7	22.8	-0.4	2.6	0.3
4	P8	25.9	-3.2	-1.2	-2.3
4	P9	23.8	0.3	2.8	1.1
4	P10	24.0	0.4	2.4	1.1
4	P11	24.1	0.7	1.6	2.2
4	P12	24.1	-0.2	0.9	0.5
4	P13	23.8	0.5	1.3	0.7

4	P14	24.1	0.0	3.1	1.0
4	P15	23.3	0.5	2.5	1.2
4	P16	23.3	0.3	2.3	1.2
4	P17	22.7	0.6	3.6	1.9
4	P18	22.5	-0.1	1.7	1.0
4	P19	22.3	0.4	2.7	1.2
4	P20	21.2	0.0	1.0	2.0
4	P21	24.1	-0.8	0.1	1.8
4	P22	26.4	-0.6	3.2	2.3
4	P23	24.8	-1.2	1.9	1.0
4	P24	22.0	0.5	2.4	1.8
4	P25	21.2	0.7	1.5	2.1
5	P1	25.2	-2.3	-1.0	-1.4
5	P2	22.4	-0.3	3.7	1.9
5	P3	21.9	0.0	3.3	2.7
5	P4	23.3	-0.4	4.2	1.7
5	P5	21.3	0.1	4.2	2.9
5	P6	21.3	-0.5	3.9	1.1
5	P7	22.3	0.4	1.3	1.0
5	P8	22.2	0.5	3.9	2.4
5	P9	23.7	-0.2	2.4	1.0
5	P10	24.0	-0.3	2.1	0.1
5	P11	24.3	-0.3	2.1	0.2
5	P12	22.9	0.6	2.2	1.3
5	P13	23.0	0.3	2.2	2.2
5	P14	23.2	0.2	1.4	0.5
5	P15	23.1	1.0	1.8	1.9
5	P16	22.6	0.8	2.1	1.6
5	P17	23.0	-0.2	2.4	1.6
5	P18	21.2	0.1	2.6	2.7
5	P19	21.8	-0.4	0.7	1.7
5	P20	21.0	0.2	2.3	1.2
5	P21	22.0	-0.2	3.9	3.7
5	P22	22.7	0.1	2.7	2.8
5	P23	23.1	0.1	3.1	2.4
5	P24	21.4	-0.1	2.9	1.9
5	P25	21.0	0.0	3.3	1.4
6	P1	22.6	-1.0	0.4	0.1
6	P2	22.4	-1.1	1.9	1.1
6	P3	22.8	-0.2	2.8	3.6
6	P4	24.8	-1.1	0.6	-0.1
6	P5	23.9	-1.7	1.9	1.2
6	P6	21.5	-0.3	0.5	2.2
6	P7	23.2	0.5	1.0	-0.1
6	P8	22.4	0.1	1.6	1.0
6	P9	23.4	0.5	1.5	1.2
6	P10	23.4	0.7	2.3	1.5
6	P11	25.1	-0.4	0.1	-0.1
6	P12	24.0	0.7	1.0	0.5
6	P13	23.9	0.1	1.0	0.7

6	P14	23.2	0.4	1.3	0.9
6	P15	22.9	-0.3	1.0	0.8
6	P16	23.8	0.1	1.2	0.6
6	P17	23.0	0.3	1.7	1.7
6	P18	22.3	0.0	2.0	0.9
6	P19	22.0	0.2	2.3	0.9
6	P20	23.1	-1.4	0.1	1.6
6	P21	28.4	-4.5	-1.7	-2.1
6	P22	24.5	-0.7	1.6	1.0
6	P23	23.7	-0.3	2.0	3.5
6	P24	21.5	0.2	1.0	1.8
6	P25	21.2	-0.4	1.6	2.0
7	P1	22.7	-1.1	0.2	1.6
7	P2	23.3	-1.0	0.7	2.0
7	P3	25.0	-2.0	0.2	-0.3
7	P4	24.1	-0.8	1.2	2.2
7	P5	22.1	-0.6	2.9	2.6
7	P6	23.2	-2.0	-1.2	-0.1
7	P7	23.3	0.0	0.7	0.3
7	P8	24.9	-1.8	-0.1	1.0
7	P9	24.9	-0.9	0.2	-0.1
7	P10	24.8	0.2	0.5	0.8
7	P11	26.0	-1.3	-0.9	-0.5
7	P12	26.3	-1.7	-1.7	-1.3
7	P13	25.1	-1.4	-0.2	-0.5
7	P14	23.5	0.2	2.2	1.9
7	P15	23.8	-0.4	1.3	0.6
7	P16	23.9	0.0	1.3	1.2
7	P17	23.5	0.5	1.7	1.8
7	P18	22.9	0.8	2.3	2.0
7	P19	22.7	1.0	1.9	1.7
7	P20	21.7	-0.5	0.9	2.9
7	P21	22.3	0.4	2.5	2.9
7	P22	23.6	-1.5	1.1	0.6
7	P23	24.1	-1.4	1.0	1.7
7	P24	21.3	0.5	2.4	2.8
7	P25	21.1	0.0	0.5	1.2
8	P1	23.4	-0.4	-0.7	-0.2
8	P2	22.4	1.0	0.8	1.0
8	P3	22.9	0.4	2.2	2.5
8	P4	24.4	-0.2	1.1	1.2
8	P5	22.7	-0.5	2.4	2.8
8	P6	20.9	0.1	1.0	0.6
8	P7	22.4	-0.6	2.6	2.7
8	P8	22.7	-0.6	2.5	2.8
8	P9	25.2	-1.3	1.3	1.1
8	P10	24.5	-1.0	0.8	0.7
8	P11	25.1	-1.5	0.4	0.3
8	P12	24.6	-1.2	0.8	0.7
8	P13	24.2	-1.1	0.1	0.2

8	P14	24.8	-1.2	0.0	0.1
8	P15	24.5	-1.3	0.0	0.1
8	P16	24.8	-1.2	0.1	0.5
8	P17	23.9	-1.0	0.6	0.9
8	P18	24.6	-1.9	0.0	1.4
8	P19	22.8	-0.5	0.9	1.0
8	P20	20.8	0.0	0.9	1.2
8	P21	22.5	0.5	2.2	2.7
8	P22	24.8	-0.9	0.8	3.0
8	P23	23.8	0.7	1.7	1.8
8	P24	22.2	0.0	1.5	3.4
8	P25	21.8	0.2	1.1	1.0

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA Continued

LLCR 500 Cycle Power Contact Durability with Environmental Stressing:

		Jun. 29 2004	Jun. 30 2004	Jul. 13 2004	Aug. 02 2004
Date					
Room Temp C		24	24	24	23
RH		41%	45%	43%	52%
Name		Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**500 Cycles**	**Thermal**	**Humidity**
1	P1	4.6	0.2	0.1	0.3
1	P2	4.5	-0.1	0.0	0.2
1	P3	4.6	-0.1	0.7	1.7
1	P4	4.5	0.2	0.1	0.3
1	P5	4.6	0.0	0.1	0.1
1	P6	4.6	0.1	0.1	0.3
1	P7	4.6	0.0	0.2	0.1
1	P8	4.6	-0.2	0.0	-0.1
2	P1	4.8	-0.2	-0.1	0.0
2	P2	4.8	-0.1	-0.2	-0.2
2	P3	4.5	-0.2	-0.2	-0.1
2	P4	4.6	0.0	0.0	0.0
2	P5	4.7	0.1	0.0	0.3
2	P6	4.6	0.1	0.0	0.1
2	P7	4.6	-0.1	-0.1	0.1
2	P8	4.7	0.0	0.0	0.0
3	P1	4.7	0.0	0.9	1.3
3	P2	4.6	0.1	1.4	1.6
3	P3	4.7	0.4	2.3	0.6
3	P4	4.7	0.3	0.7	1.0
3	P5	5.0	-0.2	-0.1	0.2
3	P6	4.8	-0.2	0.0	0.1
3	P7	4.9	0.1	0.3	0.4
3	P8	5.0	-0.1	-0.1	0.0
4	P1	4.7	-0.1	0.0	-0.1
4	P2	4.6	-0.4	0.0	-0.1
4	P3	4.6	0.1	0.0	-0.2
4	P4	4.8	-0.1	0.1	-0.2
4	P5	4.7	-0.2	-0.1	0.0
4	P6	4.4	-0.1	0.0	0.0
4	P7	4.5	-0.1	0.0	0.0
4	P8	4.5	-0.2	-0.1	-0.2
5	P1	4.8	0.1	0.0	0.0
5	P2	4.6	0.1	0.0	0.1
5	P3	4.6	0.0	-0.1	0.0
5	P4	4.7	-0.1	-0.1	0.0
5	P5	4.7	-0.1	-0.1	0.0
5	P6	4.8	-0.1	-0.1	0.1

5	P7	4.6	0.0	0.2	0.1
5	P8	4.6	0.2	0.1	0.3
6	P1	4.5	0.0	0.0	-0.1
6	P2	4.6	0.1	0.0	-0.1
6	P3	4.9	0.0	0.1	0.1
6	P4	4.7	0.0	-0.1	0.0
6	P5	4.6	-0.2	-0.2	-0.1
6	P6	4.7	-0.1	0.0	0.0
6	P7	4.8	0.0	0.1	0.1
6	P8	4.8	0.0	0.1	0.0
7	P1	4.5	-0.1	-0.1	-0.1
7	P2	4.4	0.0	0.1	0.0
7	P3	4.5	-0.1	0.0	0.0
7	P4	4.5	0.0	0.2	0.1
7	P5	4.7	-0.2	0.1	-0.3
7	P6	4.6	0.0	0.2	-0.1
7	P7	4.5	0.0	0.1	-0.2
7	P8	4.7	0.1	0.2	-0.1
8	P1	4.6	0.2	-0.1	0.0
8	P2	4.8	0.1	-0.2	-0.2
8	P3	4.6	0.0	0.0	0.0
8	P4	4.8	0.0	-0.1	0.0
8	P5	4.9	-0.2	-0.1	0.1
8	P6	4.5	0.0	0.0	0.2
8	P7	4.9	0.0	-0.1	-0.1
8	P8	4.6	-0.1	0.0	0.2

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA Continued

LLCR 1000 Cycle Signal Contact Durability with Environmental Stressing:

	Date	Jun. 28 2004	Jun. 30 2004	Jul. 14 2004	Aug. 02 2004
	Room Temp C	23	24	24	23
	RH	42%	39%	53%	53%
	Name	Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**1000 Cycles**	**Thermal**	**Humidity**
1	P1	25.1	-3.9	-3.0	-1.5
1	P2	21.0	0.1	1.7	3.1
1	P3	23.1	-0.8	0.4	1.3
1	P4	23.5	0.0	0.6	1.0
1	P5	22.1	-0.3	0.8	2.1
1	P6	21.2	0.2	1.9	3.6
1	P7	21.9	-0.6	0.1	-0.1
1	P8	22.0	-0.3	1.4	1.2
1	P9	23.7	-1.3	-0.3	-0.1
1	P10	23.1	-0.5	0.8	1.0
1	P11	23.3	-0.9	0.1	0.4
1	P12	22.7	0.2	0.8	0.6
1	P13	22.6	-0.3	0.5	1.4
1	P14	22.4	0.3	0.6	1.7
1	P15	23.0	-0.2	0.1	0.9
1	P16	22.6	-0.4	0.5	1.1
1	P17	21.9	0.3	1.0	1.4
1	P18	21.4	1.5	2.4	3.1
1	P19	21.6	0.1	1.7	1.0
1	P20	20.6	-1.5	2.9	6.2
1	P21	22.4	-0.8	0.5	-0.1
1	P22	23.4	-0.7	0.6	1.1
1	P23	22.7	-0.7	1.2	2.7
1	P24	21.1	-0.1	1.4	2.0
1	P25	21.1	0.2	1.0	2.0
2	P1	23.0	0.0	0.4	0.3
2	P2	21.7	1.0	2.5	2.6
2	P3	22.7	1.3	1.4	2.3
2	P4	23.5	0.5	0.7	5.9
2	P5	22.0	1.5	1.9	2.2
2	P6	21.2	0.1	2.6	2.8
2	P7	21.1	0.6	0.8	3.1
2	P8	21.4	0.0	1.9	2.7
2	P9	22.0	1.9	2.5	3.4
2	P10	23.5	-0.4	0.4	1.0
2	P11	23.7	0.1	0.6	0.9
2	P12	24.0	0.2	0.3	1.3
2	P13	24.0	-0.4	0.2	1.9
2	P14	24.6	-1.0	-1.0	-0.6
2	P15	24.0	-1.2	-0.4	-0.3

2	P16	24.4	-0.8	0.2	-0.5
2	P17	22.6	0.4	1.0	3.0
2	P18	21.8	-0.1	1.2	3.6
2	P19	21.2	0.8	1.4	2.6
2	P20	21.1	0.1	2.4	3.1
2	P21	22.3	1.3	1.5	9.8
2	P22	24.6	-0.8	-0.4	2.3
2	P23	24.1	-0.5	0.3	3.3
2	P24	21.4	2.1	3.9	9.5
2	P25	21.5	0.8	2.4	3.6
3	P1	22.9	-1.1	0.5	0.6
3	P2	21.6	0.2	1.3	2.8
3	P3	23.6	-0.8	0.1	0.5
3	P4	23.7	-0.7	-0.1	0.9
3	P5	21.3	0.2	1.7	6.2
3	P6	20.9	0.0	1.1	2.1
3	P7	21.0	0.9	1.2	1.8
3	P8	20.6	1.4	2.4	2.2
3	P9	23.9	-1.3	-0.6	0.5
3	P10	23.0	-0.2	0.1	0.6
3	P11	22.8	0.1	0.4	2.1
3	P12	22.7	0.2	0.3	1.4
3	P13	22.6	0.4	1.2	3.6
3	P14	22.1	0.1	0.9	1.8
3	P15	22.5	0.4	1.2	1.7
3	P16	21.8	0.3	1.2	3.5
3	P17	22.5	-0.4	1.3	2.0
3	P18	21.1	0.8	1.4	2.1
3	P19	21.2	0.8	1.0	2.2
3	P20	20.4	0.3	1.6	3.8
3	P21	21.2	0.9	2.7	4.8
3	P22	24.0	-1.2	-0.1	9.3
3	P23	22.5	0.7	1.3	2.7
3	P24	21.5	-0.1	1.5	3.1
3	P25	21.5	-0.5	0.6	1.9
4	P1	23.0	-0.9	-0.3	3.1
4	P2	21.7	0.1	1.6	4.3
4	P3	25.9	-3.4	-2.5	-2.2
4	P4	25.2	-1.9	-1.1	0.4
4	P5	22.4	0.2	3.6	7.3
4	P6	20.9	-0.1	1.1	2.7
4	P7	22.1	-0.7	0.6	0.3
4	P8	22.0	-0.9	1.2	1.3
4	P9	23.9	-1.8	0.3	-0.1
4	P10	23.3	-1.2	0.4	0.3
4	P11	24.2	-1.6	-0.9	-0.2
4	P12	23.5	-1.0	-0.2	0.4
4	P13	25.9	-1.9	-2.6	-0.9
4	P14	23.2	-0.8	-0.2	0.2
4	P15	23.3	-0.9	0.3	2.8

4	P16	24.0	-1.4	-0.2	0.6
4	P17	23.8	-1.2	0.1	0.2
4	P18	22.4	-0.3	1.1	3.1
4	P19	22.6	-0.6	0.5	0.8
4	P20	21.2	-0.2	1.4	1.7
4	P21	22.2	0.4	3.4	3.6
4	P22	23.6	-0.4	0.9	1.8
4	P23	24.2	-1.0	0.2	0.5
4	P24	21.2	0.5	3.3	3.5
4	P25	21.2	1.6	5.2	4.6
5	P1	23.6	-1.4	-1.9	0.6
5	P2	22.1	0.3	0.5	2.5
5	P3	23.2	1.1	1.4	1.0
5	P4	23.7	0.7	2.0	1.1
5	P5	23.6	-0.9	0.0	0.0
5	P6	21.5	-0.4	0.6	1.5
5	P7	21.9	0.1	2.7	0.4
5	P8	22.3	-0.9	2.2	1.1
5	P9	22.9	0.5	1.7	0.9
5	P10	22.8	0.4	1.8	1.2
5	P11	24.1	-0.4	1.1	-0.1
5	P12	25.7	-3.3	-1.1	-1.7
5	P13	22.4	-0.1	1.9	1.0
5	P14	23.0	0.7	1.7	0.9
5	P15	23.2	0.8	2.9	1.8
5	P16	23.3	0.4	0.9	0.1
5	P17	24.7	-0.3	1.2	-0.6
5	P18	21.5	2.1	2.8	1.3
5	P19	22.3	1.9	1.2	-0.4
5	P20	20.7	0.4	1.1	2.4
5	P21	21.8	4.4	2.0	1.4
5	P22	23.4	1.0	0.9	1.8
5	P23	23.5	2.0	0.9	1.3
5	P24	21.0	0.4	1.2	3.4
5	P25	20.6	1.2	0.8	2.8
6	P1	22.6	0.8	0.6	-0.4
6	P2	20.9	0.3	1.6	1.5
6	P3	23.0	-0.6	1.4	0.7
6	P4	24.5	-1.8	1.0	0.9
6	P5	22.0	-0.8	3.0	1.2
6	P6	21.1	0.0	1.5	0.5
6	P7	21.2	2.6	1.9	2.5
6	P8	20.5	3.1	3.0	3.1
6	P9	22.5	1.6	2.4	3.3
6	P10	23.0	1.3	2.3	1.4
6	P11	23.4	0.4	2.0	1.6
6	P12	23.9	0.0	1.0	2.6
6	P13	23.3	0.3	1.9	9.8
6	P14	23.1	-0.3	0.7	0.9
6	P15	23.4	-0.7	1.0	0.1

6	P16	22.7	0.5	1.5	0.9
6	P17	22.6	0.5	1.4	0.9
6	P18	20.7	1.7	2.4	2.6
6	P19	20.4	1.8	2.3	2.6
6	P20	20.7	0.6	1.8	1.0
6	P21	22.1	-1.1	1.4	1.3
6	P22	24.3	-0.7	0.5	0.0
6	P23	22.3	-0.3	1.6	0.6
6	P24	21.3	-0.3	3.9	2.5
6	P25	21.0	0.4	2.9	2.1
7	P1	23.1	-0.2	0.6	1.9
7	P2	21.3	2.2	3.3	4.4
7	P3	23.0	0.9	1.8	2.4
7	P4	23.3	0.0	1.6	1.9
7	P5	23.1	0.8	2.0	2.2
7	P6	21.2	1.5	2.3	2.4
7	P7	23.0	-1.4	0.1	1.2
7	P8	23.6	-1.9	-1.0	2.0
7	P9	24.2	-1.6	1.2	0.7
7	P10	23.5	-1.6	0.1	2.4
7	P11	24.4	-2.0	0.9	0.8
7	P12	24.4	-1.2	0.7	1.2
7	P13	24.3	-1.9	2.7	1.4
7	P14	24.3	-1.8	3.0	4.0
7	P15	24.8	-0.9	0.5	3.0
7	P16	24.3	-1.7	2.5	2.8
7	P17	22.5	-0.1	2.2	1.3
7	P18	22.4	-0.6	0.6	2.8
7	P19	23.3	-1.7	0.2	6.5
7	P20	20.8	2.1	3.3	2.8
7	P21	22.2	1.9	5.1	2.7
7	P22	23.1	1.7	5.2	2.8
7	P23	23.9	1.7	2.5	1.8
7	P24	21.5	3.0	3.6	2.4
7	P25	21.6	2.9	3.1	2.0
8	P1	23.5	-1.6	-0.5	-0.2
8	P2	22.2	-0.3	1.4	2.4
8	P3	24.3	-0.8	0.7	0.5
8	P4	24.6	-0.6	1.4	0.3
8	P5	22.4	-0.9	3.6	2.4
8	P6	20.8	-0.2	1.0	1.4
8	P7	22.4	0.1	1.6	1.5
8	P8	21.5	-0.6	2.7	2.5
8	P9	24.6	-1.7	0.5	-0.3
8	P10	25.7	-3.1	-0.4	-0.8
8	P11	25.1	-1.5	-0.1	-0.3
8	P12	24.4	-1.0	0.6	-0.5
8	P13	24.1	-0.6	0.2	1.1
8	P14	23.9	-0.8	1.3	1.9
8	P15	23.9	-1.2	1.1	0.8

8	P16	22.2	0.3	1.9	2.0
8	P17	22.7	0.0	1.4	1.5
8	P18	21.6	-0.2	2.0	3.0
8	P19	21.2	0.1	2.2	1.8
8	P20	21.1	-0.6	0.1	2.2
8	P21	21.3	0.5	2.3	2.0
8	P22	23.5	-0.1	1.2	1.4
8	P23	23.6	0.0	2.7	2.3
8	P24	21.3	0.1	3.2	2.7
8	P25	21.6	-0.4	0.1	1.1

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

DATA Continued

LLCR 1000 Cycle Power Contact Durability with Environmental Stressing:

Date		Jun. 28 2004	Jun. 30 2004	Jul. 14 2004	Aug. 02 2004
Room Temp C		23	24	24	24
RH		39%	32%	56%	50%
Name		Troy Cook	Troy Cook	Troy Cook	Troy Cook
mOhm values		**Actual**	**Delta**	**Delta**	**Delta**
Board	**Position**	**Initial**	**1000 Cycles**	**Thermal**	**Humidity**
1	P1	4.7	-0.3	-0.2	-0.1
1	P2	4.3	0.0	0.0	0.0
1	P3	4.8	0.4	1.1	0.5
1	P4	4.7	0.0	0.4	0.3
1	P5	4.7	-0.5	-0.4	-0.3
1	P6	4.7	-0.2	-0.1	0.0
1	P7	4.7	-0.1	0.0	0.1
1	P8	4.7	-0.3	-0.2	-0.1
2	P1	4.5	0.0	0.3	0.4
2	P2	4.5	0.1	0.5	1.0
2	P3	4.5	0.0	0.4	0.8
2	P4	4.6	0.0	0.3	2.2
2	P5	4.6	-0.3	-0.2	1.3
2	P6	4.6	0.0	0.2	1.7
2	P7	4.4	0.2	0.5	2.0
2	P8	4.5	-0.3	-0.1	1.6
3	P1	4.5	0.1	0.2	1.1
3	P2	4.6	-0.1	0.1	0.1
3	P3	4.6	0.2	0.2	0.1
3	P4	4.6	-0.1	0.1	0.3
3	P5	4.6	0.0	-0.1	0.3
3	P6	4.5	0.3	0.3	0.5
3	P7	4.4	0.1	0.3	0.4
3	P8	4.5	0.1	0.1	0.5
4	P1	4.6	0.2	0.1	0.6
4	P2	4.5	0.0	0.1	0.6
4	P3	4.6	-0.1	0.0	0.0
4	P4	4.5	-0.1	-0.1	-0.1
4	P5	4.7	-0.1	0.1	0.2
4	P6	4.7	-0.2	-0.2	-0.1
4	P7	4.6	-0.2	-0.1	-0.1
4	P8	4.5	-0.1	0.0	-0.1
5	P1	4.7	-0.4	0.1	0.1
5	P2	4.7	-0.3	0.9	1.0
5	P3	4.6	-0.2	0.0	0.0
5	P4	4.9	-0.1	0.0	0.0
5	P5	4.7	0.2	-0.3	-0.2
5	P6	4.5	0.6	0.9	0.7
5	P7	4.8	0.6	0.7	0.5
5	P8	4.7	0.4	0.0	-0.1

6	P1	4.9	-0.2	-0.1	-0.4
6	P2	4.7	-0.2	0.1	-0.1
6	P3	4.6	-0.1	0.6	0.6
6	P4	4.8	-0.3	0.4	0.8
6	P5	4.5	0.2	0.6	0.4
6	P6	4.5	0.0	0.5	0.6
6	P7	4.4	0.2	0.5	0.5
6	P8	4.3	0.1	0.4	0.3
7	P1	4.8	-0.1	0.0	0.0
7	P2	4.8	-0.2	-0.1	-0.2
7	P3	4.8	-0.2	1.1	0.0
7	P4	4.5	-0.1	0.0	0.1
7	P5	4.7	-0.2	0.1	0.2
7	P6	4.7	0.0	0.4	0.2
7	P7	4.9	0.0	0.3	0.2
7	P8	4.7	-0.1	0.0	0.2
8	P1	4.4	0.0	0.0	0.3
8	P2	4.5	-0.1	0.0	0.2
8	P3	4.4	-0.1	0.0	0.4
8	P4	4.6	-0.1	-0.1	0.3
8	P5	4.5	0.2	0.4	0.6
8	P6	4.6	0.0	0.0	0.5
8	P7	4.6	-0.1	0.1	0.9
8	P8	4.7	-0.2	0.1	0.3

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: THL-02
Description: Temperature/Humidity Chart Recorder
Manufacturer: Dickson
Model: THDX
Serial #: 00120351
Accuracy: Temp: +/- 1C; Humidity: +/-2% RH (0 - 60%) +/- 3% RH (61 - 95%).
… Last Cal: 6/02/04, Next Cal: 6/02/05

Equipment #: MO-01
Description: Micro-Ohmeter
Manufacturer: Keithley
Model: 580
Serial #: 0772740
Accuracy: See Manual
… Last Cal6/12/03, Next Cal: 6/12/04

Equipment #: MO-03
Description: Multimeter /Data Acquisition System
Manufacturer: Keithley
Model: 2700
Serial #: 0791975
Accuracy: See Manual
… Last Cal: 6/12/03, Next Cal: 6/12/04

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: 6/12/03, Next Cal: 6/12/04

Equipment #: LC-2500N(icell)
Description: 2500 N Load Cell for Dillon Quantrol
Manufacturer: Dillon Quantrol
Model: icell
Serial #: 01-0132-01
Accuracy: .10% of capacity
… Last Cal: 4/27/04, Next Cal: 4/27/05

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
… Last Cal: 6/20/03, Next Cal: 6/30/04

Tracking Code: TC0426--0462	Part #: QFSS-052-01-H-D-PC4
Part description: High Speed Shielded Socket	

Equipment #: THC-01
Description: Temperature/Humidity Chamber
Manufacturer: Thermotron
Model: SM-8-7800
Serial #: 30676
Accuracy: See Manual See Manual
… Last Cal: 4/22/2004, Next Cal: 5/22/2005

Equipment #: TCT-01
Description: Test Stand
Manufacturer: Chatillon
Model: TCD-1000
Serial #: 05 23 00 02
Accuracy: Speed Accuracy: +/-5% of max speed; Displacement: +/-.5% or +/-.005, whichever is greater.
… Last Cal: 6/04/04, Next Cal: 6/04/05

Equipment #: LC-1000
Description: Chatillon 1000 Lb Load Cell
Manufacturer: Chatillon
Model: Remote-1000
Serial #: F32799
Accuracy: +/- 0.3% of Full Scale +/- 1 LSC
… Last Cal: 6/17/04, Next Cal: 6/17/05