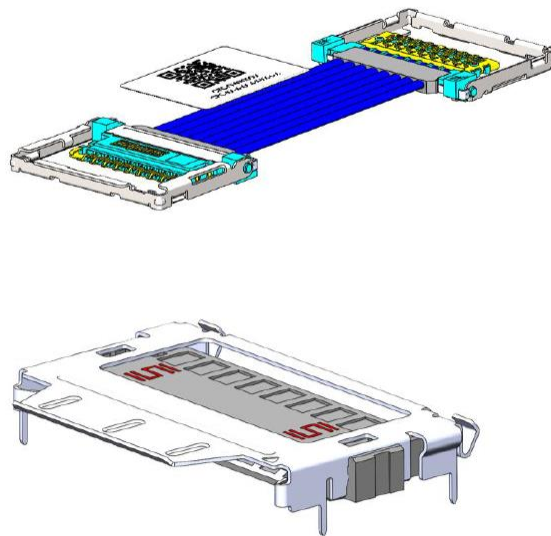




|  |  |
|--|--|
| Project Number: Design Qualification Test Report       | Tracking Code: CR-1191301_Report_Rev_1 |
| Requested by: Zack Weber                               | Date: 1/21/2026                        |
| Part #: CPI-08-01-1-S-RA-0-L-TR/CPC-08-1-XX.X-1-XX-L-2 |  |
| Part description: CPI/CPC                              | Tech: Daniel Haydon, Nicola Ansell     |
| Test Start: 11/27/2024                                 | Test Completed: 12/20/2024             |



**DESIGN QUALIFICATION TEST REPORT**  
**CPI/CPC**  
**CPI-08-01-1-S-RA-0-L-TR/CPC-08-1-XX.X-1-XX-L-2**

|  |  |
|--|--|
| Tracking Code: CR-1191301_Report_Rev_1 | Part #: CPI-08-01-1-S-RA-0-L-TR/CPC-08-1-XX.X-1-XX-L-2 |
| Part description: CPI/CPC              |  |

### REVISION HISTORY

| DATA       | REV.NUM. | DESCRIPTION  | ENG |
|------------|----------|--------------|-----|
| 10/11/2025 | 1        | Initial test | KC  |

## CERTIFICATION

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

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### SCOPE

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

### APPLICABLE DOCUMENTS

Standards: EIA Publication 364

### TEST SAMPLES AND PREPARATION

- 1) All materials were manufactured in accordance with the applicable product specification.
- 2) All test samples were identified and encoded to maintain traceability throughout the test sequences.
- 3) After soldering, the parts to be used for LLCR and DWV/IR testing were cleaned according to CO-SC-WI-3029.
- 4) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
- 5) The automated procedure is used with aqueous compatible soldering materials.
- 6) Parts not intended for testing LLCR and DWV/IR are visually inspected and cleaned if necessary.
- 7) Any additional preparation will be noted in the individual test sequences.
- 8) Solder Information: Lead Free
- 9) Samtec Test PCBs used: PCB-113451-TST-XX

**FLOWCHARTS****Mating/Unmating/Durability**Group 1

CPI-08-01-1-S-RA-0-L-TR

CPC-08-1-XX.X-1-XX-L-2

8 Assemblies

| Step | Description                                |
|------|--|
| 1.   | Contact Gaps                               |
| 2.   | LLCR <sup>(2)</sup>                        |
| 3.   | Mating/Unmating Force <sup>(3)</sup>       |
| 4.   | Cycles<br>Quantity = 25 Cycles             |
| 5.   | Mating/Unmating Force <sup>(3)</sup>       |
| 6.   | Contact Gaps                               |
| 7.   | LLCR <sup>(2)</sup><br>Max Delta = 15 mOhm |
| 8.   | Thermal Shock <sup>(4)</sup>               |
| 9.   | LLCR <sup>(2)</sup><br>Max Delta = 15 mOhm |
| 10.  | Humidity <sup>(1)</sup>                    |
| 11.  | LLCR <sup>(2)</sup><br>Max Delta = 15 mOhm |
| 12.  | Mating/Unmating Force <sup>(3)</sup>       |

(1) Humidity = EIA-364-31

Test Condition = B (240 Hours)

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

Test Exceptions: ambient pre-condition and delete steps 7a and 7b

(2) LLCR = EIA-364-23

Open Circuit Voltage = 20 mV Max

Test Current = 100 mA Max

(3) Mating/Unmating Force = EIA-364-13

(4) Thermal Shock = EIA-364-32

Exposure Time at Temperature Extremes = 1/2 Hour

Method A, Test Condition = I (-55°C to +85°C)

Test Duration = A-3 (100 Cycles)

## FLOWCHARTS Continued

### Cable Pull

| <u>Group 1</u>  | <u>Group 2</u>  | <u>Group 3</u>   |    |                           |   |      |             |    |                           |   |      |             |    |                           |
|---|---|--|----|---------------------------|---|------|-------------|----|---------------------------|---|------|-------------|----|---------------------------|
| CPI-08-01-1-S-RA-0-L-TR<br>CPC-08-1-XX.X-1-XX-L-2<br>5 Assemblies<br>0 Degrees  | CPI-08-01-1-S-RA-0-L-TR<br>CPC-08-1-XX.X-1-XX-L-2<br>5 Assemblies<br>90 Degrees - Lateral | CPI-08-01-1-S-RA-0-L-TR<br>CPC-08-1-XX.X-1-XX-L-2<br>5 Assemblies<br>90 Degrees - Transverse |    |                           |   |      |             |    |                           |   |      |             |    |                           |
| <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Step</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">1.</td> <td>Cable Pull <sup>(1)</sup></td> </tr> </tbody> </table> | Step  | Description  | 1. | Cable Pull <sup>(1)</sup> | <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Step</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">1.</td> <td>Cable Pull <sup>(1)</sup></td> </tr> </tbody> </table> | Step | Description | 1. | Cable Pull <sup>(1)</sup> | <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Step</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">1.</td> <td>Cable Pull <sup>(1)</sup></td> </tr> </tbody> </table> | Step | Description | 1. | Cable Pull <sup>(1)</sup> |
| Step  | Description   |  |    |                           |   |      |             |    |                           |   |      |             |    |                           |
| 1.  | Cable Pull <sup>(1)</sup>   |  |    |                           |   |      |             |    |                           |   |      |             |    |                           |
| Step  | Description   |  |    |                           |   |      |             |    |                           |   |      |             |    |                           |
| 1.  | Cable Pull <sup>(1)</sup>   |  |    |                           |   |      |             |    |                           |   |      |             |    |                           |
| Step  | Description   |  |    |                           |   |      |             |    |                           |   |      |             |    |                           |
| 1.  | Cable Pull <sup>(1)</sup>   |  |    |                           |   |      |             |    |                           |   |      |             |    |                           |

---

(1) Cable Pull = EIA-364-38  
 Measure and Record Force Required to Failure  
 Failure = Discontinuity >1 microsecond at 10 ohms

**FLOWCHARTS Continued****Cable Flex***Note: 1 row/34 awg use 0.500" mandrel***Group 1**

CPI-08-01-1-S-RA-0-L-TR

CPC-08-1-XX.X-1-XX-L-2

8 Assemblies

Circular Cable

| Step | Description                        |
|------|------------------------------------|
| 1.   | IR <sup>(3)</sup>                  |
| 2.   | DWV at Test Voltage <sup>(2)</sup> |
| 3.   | Cable Flex <sup>(1)</sup>          |
| 4.   | Visual Inspection                  |
| 5.   | IR <sup>(3)</sup>                  |
| 6.   | DWV at Test Voltage <sup>(2)</sup> |
| 7.   | Rotate Cable 90°                   |
| 8.   | Cable Flex <sup>(1)</sup>          |
| 9.   | Visual Inspection                  |
| 10.  | IR <sup>(3)</sup>                  |
| 11.  | DWV at Test Voltage <sup>(2)</sup> |

**(1) Cable Flex = EIA-364-41**

Circular Jacket Cable - to be tested 90° each direction (180° total)

Flat Cable - to be tested 70° each direction (140° total)

Monitor continuity during flex testing

Failure = Discontinuity &gt;1 microsecond at 10 ohms

**(2) DWV at Test Voltage = EIA-364-20**

Test Condition = 1 (Sea Level)

DWV test voltage is equal to 75% of the lowest breakdown voltage

Test voltage applied for 60 seconds

**(3) IR = EIA-364-21**

Test Condition = 500 Vdc, 2 Minutes Max

## FLOWCHARTS Continued

### Latch Durability

Group 1

CPI-08-01-1-S-RA-0-L-TR

CPC-08-1-XX.X-1-XX-L-2

5

**Latch Durability**

*Note: Perform visual capture around pivot and the back rib of the cable organizer every 25 cycles.*

---

| <b>Step</b> | <b>Description</b>   |
|-------------|--|
| 1.          | Visual Inspection<br>Pivot durability = No breakdown(Initial)            |
| 2.          | Cycles<br>Quantity = 25 Cycles<br><i>Note: Latch and Unlatch cycling</i> |
| 3.          | Visual Inspection<br>Pivot durability = No breakdown                     |

---

## ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

### THERMAL SHOCK:

- 1) EIA-364-32, *Thermal Shock (Temperature Cycling) Test Procedure for Electrical Connectors*.
- 2) Test Condition I: -55°C to +85°C.
- 3) Test Time: ½ hour dwell at each temperature extreme.
- 4) Number of Cycles: 100
- 5) All test samples are pre-conditioned at ambient.
- 6) All test samples are exposed to environmental stressing in the mated condition.

### HUMIDITY:

- 1) Reference document: EIA-364-31, *Humidity Test Procedure for Electrical Connectors*.
- 2) Test Condition B, 240 Hours.
- 3) Method III, +25° C to + 65° C, 90% to 98% Relative Humidity excluding sub-cycles 7a and 7b.
- 4) All samples are pre-conditioned at ambient.
- 5) All test samples are exposed to environmental stressing in the mated condition.

### MATING/UNMATING:

- 1) Reference document: EIA-364-13, *Mating and Unmating Forces Test Procedure for Electrical Connectors*.
- 2) The full insertion position was to within 0.003” to 0.004” of the plug bottoming out in the receptacle to prevent damage to the system under test.
- 3) One of the mating parts is secured to a floating X-Y table to prevent damage during cycling.

### LLCR:

- 1) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 2) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 3) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
  - a.  $\leq +5.0$  mOhms: -----Stable
  - b. +5.1 to +10.0 mOhms:-----Minor
  - c. +10.1 to +15.0 mOhms: -----Acceptable
  - d. +15.1 to +50.0 mOhms: -----Marginal
  - e. +50.1 to +1000 mOhms: -----Unstable
  - f.  $>+1000$  mOhms:-----Open Failure

**ATTRIBUTE DEFINITIONS Continued**

The following is a brief, simplified description of attributes.

**INSULATION RESISTANCE (IR):**

To determine the resistance of insulation materials to leakage of current through or on the surface of these materials when a DC potential is applied.

- 1) PROCEDURE:
  - a. Reference document: EIA-364-21, *Insulation Resistance Test Procedure for Electrical Connectors*.
  - b. Test Conditions:
    - i. Between Adjacent Contacts or Signal-to-Ground
    - ii. Electrification Time 2.0 minutes
    - iii. Test Voltage (500 VDC) corresponds to calibration settings for measuring resistances.
- 2) MEASUREMENTS:
- 3) When the specified test voltage is applied (VDC), the insulation resistance shall not be less than 1000 megohms.

**DIELECTRIC WITHSTANDING VOLTAGE (DWV):**

To determine if the sockets can operate at its rated voltage and withstand momentary over potentials due to switching, surges, and other similar phenomenon. Separate samples are used to evaluate the effect of environmental stresses so not to influence the readings from arcing that occurs during the measurement process.

- 1) PROCEDURE:
  - a. Reference document: EIA-364-20, *Withstanding Voltage Test Procedure for Electrical Connectors*.
  - b. Test Conditions:
    - i. Between Adjacent Contacts or Signal-to-Ground
    - ii. Barometric Test Condition 1
    - iii. Rate of Application 500 V/Sec
    - iv. Test Voltage (VAC) until breakdown occurs.
- 2) MEASUREMENTS/CALCULATIONS
  - a. The breakdown voltage shall be measured and recorded.
  - b. The dielectric withstanding voltage shall be recorded as 75% of the minimum breakdown voltage.
  - c. The working voltage shall be recorded as one-third (1/3) of the dielectric withstanding voltage (one-fourth of the breakdown voltage).

**ATTRIBUTE DEFINITIONS Continued**

The following is a brief, simplified description of attributes.

**CABLE PULL:**

- 1) Secure cable near center and pull-on connector.
  - a. At 0°, in-line with cable
  - b. At 90°, in-line with cable



Fig. 1  
0° Connector pull.



Fig. 2  
90° Connector pull.

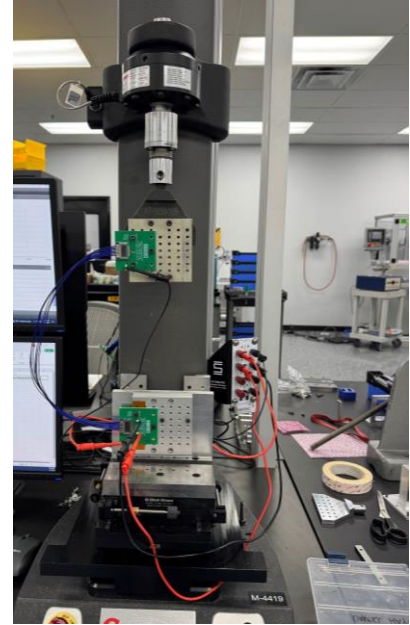


Fig. 3  
90° Transverse Connector pull.

**CABLE Flex:**

- 1) Oscillate and monitor electrical continuity for open circuit indication.
  - a.  $\pm 70^\circ$  Flex Mode, bend up to 100 cycles. load on 16 oz.

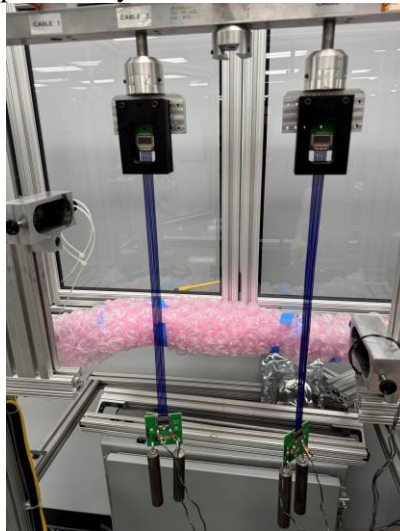


Fig. 4  
(Standard setup)

## RESULTS

### Mating – Unmating Forces

#### Mating/Unmating Durability Group

- **Initial**
  - **Mating**
    - **Min** ----- 0.97 lbs
    - **Max** ----- 1.92 lbs
  - **Unmating**
    - **Min** ----- 0.26 lbs
    - **Max** ----- 0.69 lbs
- **After 25 Cycles**
  - **Mating**
    - **Min** ----- 1.08 lbs
    - **Max** ----- 1.91 lbs
  - **Unmating**
    - **Min** ----- 0.36 lbs
    - **Max** ----- 0.82 lbs
- **After Humidity**
  - **Mating**
    - **Min** ----- 0.58 lbs
    - **Max** ----- 0.72 lbs
  - **Unmating**
    - **Min** ----- 0.52 lbs
    - **Max** ----- 0.64 lbs

#### Cable Pull force:

- **0° Pull**
  - **Min** ----- 13.23 lbs
  - **Max** ----- 14.27 lbs
- **90° Pull-Lateral**
  - **Min** ----- 9.22 lbs
  - **Max** ----- 9.49 lbs
- **90° Pull-Transverse**
  - **Min** ----- 6.37 lbs
  - **Max** ----- 12.60 lbs

**RESULTS Continued**

**Cable Flex:**

**Insulation Resistance minimums, IR**

**Pin to Pin**

- **Initial**
  - Mated-----45000Meg Ω ----- Passed
- **After 100 flex cycles**
  - Mated-----45000Meg Ω ----- Passed
- **After 200 flex cycles**
  - Mated-----45000Meg Ω ----- Passed

**Pin to Ground**

- **Initial**
  - Mated-----45000Meg Ω ----- Passed
- **After 100 flex cycles**
  - Mated-----45000Meg Ω ----- Passed
- **After 200 flex cycles**
  - Mated-----45000Meg Ω ----- Passed

**Ground to Closest Metallic Hardware**

- **Initial**
  - Mated-----45000Meg Ω ----- Passed
- **After 100 flex cycles**
  - Mated-----45000Meg Ω ----- Passed
- **After 200 flex cycles**
  - Mated-----45000Meg Ω ----- Passed

**Dielectric Withstanding Voltage minimums, DWV**

- Test Voltage -----363VAC

**Pin to Pin**

- **Initial DWV** -----Passed
- **After 100 Flex cycles DWV** -----Passed
- **After 200 Flex cycles DWV** -----Passed

**Pin to Ground**

- **Initial DWV** -----Passed
- **After 100 Flex cycles DWV** -----Passed
- **After 200 Flex cycles DWV** -----Passed

**Ground to Closest Metallic Hardware**

- **Initial DWV** -----Passed
- **After 100 Flex cycles DWV** -----Passed
- **After 200 Flex cycles DWV** -----Passed

**RESULTS Continued****LLCR Durability (96 signal and 56 ground LLCR test points)****Signal Pin**

- **Initial** -----174.59 mOhms Max
- **Durability, 25 Cycles**
  - <= +5.0 mOhms -----88 Points ----- Stable
  - +5.1 to +10.0 mOhms -----8 Points ----- Minor
  - +10.1 to +15.0 mOhms -----0 Points ----- Acceptable
  - +15.1 to +50.0 mOhms -----0 Points ----- Marginal
  - +50.1 to +1000 mOhms -----0 Points ----- Unstable
  - >+1000 mOhms -----0 Points ----- Open Failure
- **Thermal Shock**
  - <= +5.0 mOhms -----78 Points ----- Stable
  - +5.1 to +10.0 mOhms -----18 Points ----- Minor
  - +10.1 to +15.0 mOhms -----0 Points ----- Acceptable
  - +15.1 to +50.0 mOhms -----0 Points ----- Marginal
  - +50.1 to +1000 mOhms -----0 Points ----- Unstable
  - >+1000 mOhms -----0 Points ----- Open Failure
- **Humidity**
  - <= +5.0 mOhms -----82 Points ----- Stable
  - +5.1 to +10.0 mOhms -----14 Points ----- Minor
  - +10.1 to +15.0 mOhms -----0 Points ----- Acceptable
  - +15.1 to +50.0 mOhms -----0 Points ----- Marginal
  - +50.1 to +1000 mOhms -----0 Points ----- Unstable
  - >+1000 mOhms -----0 Points ----- Open Failure

**Ground Pin**

- **Initial** -----9.15 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 +1000 mOhms -----0 Points ----- Unstable
  - >+1000 mOhms -----0 Points ----- Open Failure
- **Thermal Shock**
  - <= +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 +1000 mOhms -----0 Points ----- Unstable
  - >+1000 mOhms -----0 Points ----- Open Failure
- **Humidity**
  - <= +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 +1000 mOhms -----0 Points ----- Unstable
  - >+1000 mOhms -----0 Points ----- Open Failure

**DATA SUMMARIES**

**MATING/UNMATING:**

**Mating/Unmating Durability Group**

|                | Initial  |             |          |             | 25 Cycles |             |          |             |
|----------------|----------|-------------|----------|-------------|-----------|-------------|----------|-------------|
|                | Mating   |             | Unmating |             | Mating    |             | Unmating |             |
|                | Newton's | Force (Lbs) | Newton's | Force (Lbs) | Newton's  | Force (Lbs) | Newton's | Force (Lbs) |
| Minimum        | 4.31     | 0.97        | 1.16     | 0.26        | 4.80      | 1.08        | 1.60     | 0.36        |
| Maximum        | 8.54     | 1.92        | 3.07     | 0.69        | 8.50      | 1.91        | 3.65     | 0.82        |
| <b>Average</b> | 5.80     | <b>1.30</b> | 2.53     | <b>0.57</b> | 5.99      | <b>1.35</b> | 3.11     | <b>0.70</b> |
| St Dev         | 1.81     | 0.41        | 0.62     | 0.14        | 1.57      | 0.35        | 0.65     | 0.15        |
| Count          | 8        | 8           | 8        | 8           | 8         | 8           | 8        | 8           |

|                | After Humidity |             |          |             |
|----------------|----------------|-------------|----------|-------------|
|                | Mating         |             | Unmating |             |
|                | Newton's       | Force (Lbs) | Newton's | Force (Lbs) |
| Minimum        | 2.58           | 0.58        | 2.31     | 0.52        |
| Maximum        | 3.20           | 0.72        | 2.85     | 0.64        |
| <b>Average</b> | 3.00           | <b>0.68</b> | 2.60     | <b>0.58</b> |
| St Dev         | 0.21           | 0.05        | 0.20     | 0.05        |
| Count          | 8              | 8           | 8        | 8           |

**DATA SUMMARIES Continued****Cable Pull Force:  
0° Pull**

|         | Force (lbs)  |
|---------|--------------|
| Minimum | <b>13.23</b> |
| Maximum | 14.27        |
| Average | 13.75        |

**90° Pull-Lateral**

|         | Force (lbs) |
|---------|-------------|
| Minimum | <b>9.22</b> |
| Maximum | 9.49        |
| Average | 9.32        |

**90° Pull-Transverse**

|         | Force (lbs) |
|---------|-------------|
| Minimum | <b>6.37</b> |
| Maximum | 12.60       |
| Average | 8.65        |

**Latch Durability**

| Sample# | Initial Visual Inspection | 25 Cycles | Final Visual Inspection |
|---------|---------------------------|-----------|-------------------------|
| 32      | PASS                      | PASS      | PASS                    |
| 33      | PASS                      | PASS      | PASS                    |
| 34      | PASS                      | PASS      | PASS                    |
| 35      | PASS                      | PASS      | PASS                    |
| 36      | PASS                      | PASS      | PASS                    |

**DATA SUMMARIES Continued****Cable Flex:****Insulation Resistance minimums, IR**

| <b>Pin to Pin</b>            |       |
|------------------------------|-------|
| Mated                        |       |
| Minimum                      |       |
| <b>Initial</b>               | 45000 |
| <b>After 100 Flex Cycles</b> | 45000 |
| <b>After 200 Flex Cycles</b> | 45000 |

| <b>Pin to Ground</b>         |       |
|------------------------------|-------|
| Mated                        |       |
| Minimum                      |       |
| <b>Initial</b>               | 45000 |
| <b>After 100 Flex Cycles</b> | 45000 |
| <b>After 200 Flex Cycles</b> | 45000 |

| <b>Ground to Closest Metallic Hardware</b> |       |
|--|-------|
| Mated                                      |       |
| Minimum                                    |       |
| <b>Initial</b>                             | 45000 |
| <b>After 100 Flex Cycles</b>               | 45000 |
| <b>After 200 Flex Cycles</b>               | 45000 |

**Dielectric Withstanding Voltage minimums, DWV**

| <b>Voltage Rating Summary</b> |     |
|-------------------------------|-----|
| <b>Minimum</b>                |     |
| <b>Test Voltage</b>           | 363 |

| <b>Pin to Pin</b>                         |        |
|---|--------|
| <b>Initial Test Voltage</b>               | Passed |
| <b>After 100 Flex Cycles Test Voltage</b> | Passed |
| <b>After 200 Flex Cycles Test Voltage</b> | Passed |

| <b>Pin to Ground</b>                      |        |
|---|--------|
| <b>Initial Test Voltage</b>               | Passed |
| <b>After 100 Flex Cycles Test Voltage</b> | Passed |
| <b>After 200 Flex Cycles Test Voltage</b> | Passed |

| <b>Ground to Closest Metallic Hardware</b> |        |
|--|--------|
| <b>Initial Test Voltage</b>                | Passed |
| <b>After 100 Flex Cycles Test Voltage</b>  | Passed |
| <b>After 200 Flex Cycles Test Voltage</b>  | Passed |

### DATA SUMMARIES Continued

**LLCR Durability:**

- 1) A total of 256 signal and 16 ground points were measured.
- 2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
  - a.  $\leq +5.0$  mOhms: -----Stable
  - b.  $+5.1$  to  $+10.0$  mOhms: -----Minor
  - c.  $+10.1$  to  $+15.0$  mOhms: -----Acceptable
  - d.  $+15.1$  to  $+50.0$  mOhms: -----Marginal
  - e.  $+50.1$  to  $+1000$  mOhms: -----Unstable
  - f.  $>+1000$  mOhms: -----Open Failure

| LLCR Measurement Summaries by Pin Type |                       |                     |                         |                       |
|--|-----------------------|---------------------|-------------------------|-----------------------|
| Date                                   | 11/27/2024            | 11/27/2024          | 12/2/2024               | 12/16/2024            |
| Room Temp (Deg C)                      | 22                    | 22                  | 21                      | 22                    |
| Rel Humidity (%)                       | 37                    | 37                  | 35                      | 48                    |
| Technician                             | Nicola Ansell         | Daniel Haydon       | Daniel Haydon           | Daniel Haydon         |
| <b>mOhm values</b>                     | <b>Actual Initial</b> | <b>Delta Cycles</b> | <b>Delta Therm Shck</b> | <b>Delta Humidity</b> |
| Pin Type: Signal 1                     |                       |                     |                         |                       |
| Average                                | 168.43                | 1.9                 | 3.38                    | 2.99                  |
| St. Dev.                               | 2.37                  | 1.72                | 2                       | 2.03                  |
| Min                                    | 162.74                | 0.01                | 0.19                    | 0.04                  |
| Max                                    | 174.59                | 7.48                | 9.54                    | 8.64                  |
| Summary Count                          | 96                    | 96                  | 96                      | 96                    |
| Total Count                            | 96                    | 96                  | 96                      | 96                    |
| Pin Type: GND 1                        |                       |                     |                         |                       |
| Average                                | 8.81                  | 0.14                | 0.39                    | 0.78                  |
| St. Dev.                               | 0.19                  | 0.11                | 0.21                    | 0.23                  |
| Min                                    | 8.42                  | 0                   | 0.01                    | 0.21                  |
| Max                                    | 9.15                  | 0.54                | 0.78                    | 1.23                  |
| Summary Count                          | 56                    | 56                  | 56                      | 56                    |
| Total Count                            | 56                    | 56                  | 56                      | 56                    |

| LLCR Delta Count by Category |          |                     |                      |                      |                        |         |
|------------------------------|----------|---------------------|----------------------|----------------------|------------------------|---------|
|                              | Stable   | Minor               | Acceptable           | Marginal             | Unstable               | Open    |
| mOhms                        | $\leq 5$ | $>5 \ \& \ \leq 10$ | $>10 \ \& \ \leq 15$ | $>15 \ \& \ \leq 50$ | $>50 \ \& \ \leq 1000$ | $>1000$ |
| Cycles                       | 144      | 8                   | 0                    | 0                    | 0                      | 0       |
| Therm Shck                   | 134      | 18                  | 0                    | 0                    | 0                      | 0       |
| Humidity                     | 138      | 14                  | 0                    | 0                    | 0                      | 0       |

**EQUIPMENT AND CALIBRATION SCHEDULES****Equipment #:** TCT-04**Description:** Dillon Quantrol TC21 25-1000 mm/min series test stand**Manufacturer:** Dillon Quantrol**Model:** TC2 I series test stand**Serial #:** 04-1041-04**Accuracy:** Speed Accuracy: +/- 5% of indicated speed; Speed Accuracy: +/- 5% of indicated speed;  
... Last Cal: 05/29/2025, Next Cal: 05/29/2026**Equipment #:** MO-11**Description:** Switch/Multimeter**Manufacturer:** Keithley**Model:** 3706**Serial #:** 120169**Accuracy:** See Manual

... Last Cal: 09/11/2025, Next Cal: 09/11/2026

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

... Last Cal: 06/30/2025, Next Cal: 06/30/2026

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

... Last Cal: 11/14/2024, Next Cal: 11/14/2025

**Equipment #:** HPT-01**Description:** Hipot Safety Tester**Manufacturer:** Vitrek**Model:** V73**Serial #:** 019808**Accuracy:**

... Last Cal: 05/15/2025, Next Cal: 05/15/2026

**Equipment #:** PS-02**Description:** Power Supply**Manufacturer:** Hewlett-Packard**Model:** 6033A**Serial #:** N/A**Accuracy:** See Manual

... Last Cal: NOT CALIBRATED

**EQUIPMENT AND CALIBRATION SCHEDULES****Equipment #:** MO-04**Description:** Multimeter /Data Acquisition System**Manufacturer:** Keithley**Model:** 2700**Serial #:** 0798688**Accuracy:** See Manual

... Last Cal: 09/11/2025, Next Cal: 09/11/2026

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

... Last Cal: 07/18/2025, Next Cal: 07/18/2026

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

... Last Cal: 10/31/2024, Next Cal: 10/31/2025