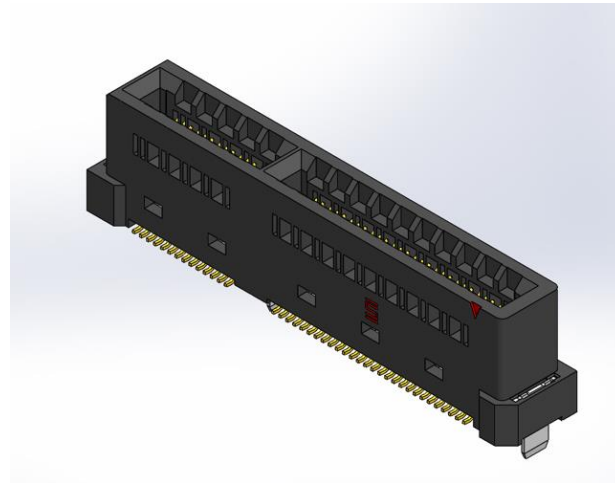
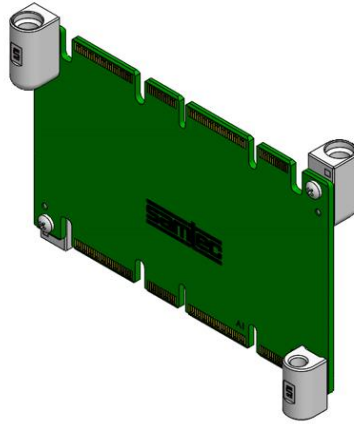




Project Number: Design Qualification Test Report	Tracking Code: CR-1209302_Report_Rev_1
Requested by: Cesar Wang	Date: 12/2/2025
Part #: H6RU-084-DV-060-DP-085/HSEC6-084-01-S-DV-WT-TR	
Part description: H6RU/HSEC6	Tech: John Crawford
Test Start: 2/21/2025	Test Completed: 10/3/2025



SUPPLEMENTAL TESTING

H6RU/HSEC6

H6RU-084-DV-060-DP-085/HSEC6-084-01-S-DV-WT-TR

Tracking Code: CR-1209302_Report_Rev_1	Part #: H6RU-084-DV-060-DP-085/HSEC6-084-01-S-DV-WT-TR
Part description: H6RU/HSEC6	

REVISION HISTORY

DATA	REV.NUM.	DESCRIPTION	ENG
12/2/2025	1	Initial Issue	KC

Tracking Code: CR-1209302_Report_Rev_1	Part #: H6RU-084-DV-060-DP-085/HSEC6-084-01-S-DV-WT-TR
Part description: H6RU/HSEC6	

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: Supplemental testing. 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 testing were cleaned according to TLWI-0001.
- 4) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
- 5) The automated procedure is used with aqueous compatible soldering materials.
- 6) Parts not intended for testing LLCR 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-113899-TST、PCB-113898-TST、PCB-113924-TST、PCB-113925-TST、PCB-113923-TST、PCB-113922-TST

FLOWCHARTS

Mating/Unmating/Durability

<u>Group 1</u>		<u>Group 2</u>		<u>Group 3</u>		<u>Group 4</u>	
H6RU-028-DV-025-DP-085		H6RU-028-DV-025-DP-085		H6RU-084-DV-060-DP-085		H6RU-084-DV-060-DP-085	
HSEC6-028-01-S-DV-WT-TR		HSEC6-028-01-S-DV-WT-TR		HSEC6-084-01-S-DV-WT-TR		HSEC6-084-01-S-DV-WT-TR	
8 Assemblies		8 Assemblies		8 Assemblies		8 Assemblies	
1-up Mezzanine Layout, 28pos		4-up Mezzanine Layout, 28pos		1-up Mezzanine Layout, 84pos		4-up Mezzanine Layout, 84pos	
Note: Please verify edge card thickness before starting test.		Note: Please verify edge card thickness before starting test.		Note: Please verify edge card thickness before starting test.		Note: Please verify edge card thickness before starting test.	
Step	Description	Step	Description	Step	Description	Step	Description
1.	Contact Gaps	1.	Contact Gaps	1.	Contact Gaps	1.	Contact Gaps
2.	LLCR ⁽²⁾	2.	LLCR ⁽²⁾	2.	LLCR ⁽²⁾	2.	LLCR ⁽²⁾
3.	Mating/Unmating Force ⁽³⁾	3.	Mating/Unmating Force ⁽³⁾	3.	Mating/Unmating Force ⁽³⁾	3.	Mating/Unmating Force ⁽³⁾
4.	Cycles Quantity = 25 Cycles	4.	Cycles Quantity = 25 Cycles	4.	Cycles Quantity = 25 Cycles	4.	Cycles Quantity = 25 Cycles
5.	Mating/Unmating Force ⁽³⁾	5.	Mating/Unmating Force ⁽³⁾	5.	Mating/Unmating Force ⁽³⁾	5.	Mating/Unmating Force ⁽³⁾
6.	Contact Gaps	6.	Contact Gaps	6.	Contact Gaps	6.	Contact Gaps
7.	LLCR ⁽²⁾ Max Delta = 15 mOhm	7.	LLCR ⁽²⁾ Max Delta = 15 mOhm	7.	LLCR ⁽²⁾ Max Delta = 15 mOhm	7.	LLCR ⁽²⁾ Max Delta = 15 mOhm
8.	Thermal Shock ⁽⁴⁾	8.	Thermal Shock ⁽⁴⁾	8.	Thermal Shock ⁽⁴⁾	8.	Thermal Shock ⁽⁴⁾
9.	LLCR ⁽²⁾ Max Delta = 15 mOhm	9.	LLCR ⁽²⁾ Max Delta = 15 mOhm	9.	LLCR ⁽²⁾ Max Delta = 15 mOhm	9.	LLCR ⁽²⁾ Max Delta = 15 mOhm
10.	Humidity ⁽¹⁾	10.	Humidity ⁽¹⁾	10.	Humidity ⁽¹⁾	10.	Humidity ⁽¹⁾
11.	LLCR ⁽²⁾ Max Delta = 15 mOhm	11.	LLCR ⁽²⁾ Max Delta = 15 mOhm	11.	LLCR ⁽²⁾ Max Delta = 15 mOhm	11.	LLCR ⁽²⁾ Max Delta = 15 mOhm
12.	Mating/Unmating Force ⁽³⁾	12.	Mating/Unmating Force ⁽³⁾	12.	Mating/Unmating Force ⁽³⁾	12.	Mating/Unmating Force ⁽³⁾

(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

Mechanical Shock/Random Vibration/LLCR

<u>Group 1</u>		<u>Group 2</u>		<u>Group 3</u>		<u>Group 4</u>	
H6RU-028-DV-025-DP-085		H6RU-028-DV-025-DP-085		H6RU-084-DV-060-DP-085		H6RU-084-DV-060-DP-085	
HSEC6-028-01-S-DV-WT-TR		HSEC6-028-01-S-DV-WT-TR		HSEC6-084-01-S-DV-WT-TR		HSEC6-084-01-S-DV-WT-TR	
8 Assemblies		8 Assemblies		8 Assemblies		8 Assemblies	
1-up Mezzanine Layout, 28pos		4-up Mezzanine Layout, 28pos		1-up Mezzanine Layout, 84pos		4-up Mezzanine Layout, 84pos	
Step	Description	Step	Description	Step	Description	Step	Description
1.	LLCR ⁽¹⁾	1.	LLCR ⁽¹⁾	1.	LLCR ⁽¹⁾	1.	LLCR ⁽¹⁾
2.	Mechanical Shock ⁽²⁾	2.	Mechanical Shock ⁽²⁾	2.	Mechanical Shock ⁽²⁾	2.	Mechanical Shock ⁽²⁾
3.	Random Vibration ⁽³⁾	3.	Random Vibration ⁽³⁾	3.	Random Vibration ⁽³⁾	3.	Random Vibration ⁽³⁾
4.	LLCR ⁽¹⁾ Max Delta = 15 mOhm	4.	LLCR ⁽¹⁾ Max Delta = 15 mOhm	4.	LLCR ⁽¹⁾ Max Delta = 15 mOhm	4.	LLCR ⁽¹⁾ Max Delta = 15 mOhm

(1) LLCR = EIA-364-23

Open Circuit Voltage = 20 mV Max

Test Current = 100 mA Max

(2) Mechanical Shock = EIA-364-27

Test Condition = C (100 G Peak, 6 milliseconds, Half Sine)

Number of Shocks = 3 Per Direction, Per Axis, 18 Total

(3) Random Vibration = EIA-364-28

Condition = VB (7.56 gRMS Average, 2 Hours/Axis)

Mechanical Shock/Random Vibration/Event Detection

<u>Group 1</u>		<u>Group 2</u>		<u>Group 3</u>		<u>Group 4</u>	
H6RU-028-DV-025-DP-085		H6RU-028-DV-025-DP-085		H6RU-084-DV-060-DP-085		H6RU-084-DV-060-DP-085	
HSEC6-028-01-S-DV-WT-TR		HSEC6-028-01-S-DV-WT-TR		HSEC6-084-01-S-DV-WT-TR		HSEC6-084-01-S-DV-WT-TR	
60 Points		60 Points		60 Points		60 Points	
1-up Mezzanine Layout, 28pos		4-up Mezzanine Layout, 28pos		1-up Mezzanine Layout, 84pos		4-up Mezzanine Layout, 84pos	
Step	Description	Step	Description	Step	Description	Step	Description
1.	Nanosecond Event Detection (Mechanical Shock) ⁽¹⁾	1.	Nanosecond Event Detection (Mechanical Shock) ⁽¹⁾	1.	Nanosecond Event Detection (Mechanical Shock) ⁽¹⁾	1.	Nanosecond Event Detection (Mechanical Shock) ⁽¹⁾
2.	Nanosecond Event Detection (Random Vibration) ⁽²⁾	2.	Nanosecond Event Detection (Random Vibration) ⁽²⁾	2.	Nanosecond Event Detection (Random Vibration) ⁽²⁾	2.	Nanosecond Event Detection (Random Vibration) ⁽²⁾

(1) Nanosecond Event Detection (Mechanical Shock)

Use EIA-364-87 for Nanosecond Event Detection:

Test Condition = F (50 nanoseconds at 10 ohms)

Use EIA-364-27 for Mechanical Shock:

Test Condition = C (100 G Peak, 6 milliseconds, Half Sine)

Number of Shocks = 3 Per Direction, Per Axis, 18 Total

(2) Nanosecond Event Detection (Random Vibration)

Use EIA-364-87 for Nanosecond Event Detection:

Test Condition = F (50 nanoseconds at 10 ohms)

Use EIA-364-28 for Random Vibration:

Condition = VB (7.56 gRMS Average, 2 Hours/Axis)

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) Test Duration: A-3 100 Cycles
- 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: Other, *Humidity Test Procedure for Electrical Connectors*.
- 2) Test Condition, 240 Hours.
- 3) Method, +25° C to + 65° C, 95% to 100% Relative Humidity excluding sub-cycles 7a.
- 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.

MECHANICAL SHOCK (Specified Pulse):

- 1) Reference document: EIA-364-27, *Mechanical Shock Test Procedure for Electrical Connectors*
- 2) Test Condition C
- 3) Peak Value: 100 G
- 4) Duration: 6 Milliseconds
- 5) Wave Form: Half Sine
- 6) Velocity: 12.3 ft/s
- 7) Number of Shocks: 3 Shocks / Direction, 3 Axis (18 Total)

VIBRATION:

- 1) Reference document: EIA-364-28, *Vibration Test Procedure for Electrical Connectors*
- 2) Test Condition V, Letter B
- 3) Power Spectral Density: 0.04 G² / Hz
- 4) G ‘RMS’: 7.56
- 5) Frequency: 50 to 2000 Hz
- 6) Duration: 2.0 Hours per axis (3 axis total)

NANOSECOND-EVENT DETECTION:

- 1) Reference document: EIA-364-87, *Nanosecond-Event Detection for Electrical Connectors*
- 2) Prior to test, the samples were characterized to assure the low nanosecond event being monitored will trigger the detector.
- 3) After characterization it was determined the test samples could be monitored for 50 nanosecond events

ATTRIBUTE DEFINITIONS Continued

The following is a brief, simplified description of attributes.

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

RESULTS

Mating – Unmating Forces

Mating Unmating Durability Group 1(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR)

1-up Mezzanine Layout, 28pos

- Initial
 - Mating
 - Min ----- 5.79 lbs
 - Max ----- 8.31 lbs
 - Unmating
 - Min ----- 1.62 lbs
 - Max ----- 2.07 lbs
- After 25 Cycles
 - Mating
 - Min ----- 5.98 lbs
 - Max ----- 8.30 lbs
 - Unmating
 - Min ----- 2.08 lbs
 - Max ----- 2.51 lbs
- After Humidity
 - Mating
 - Min ----- 3.34 lbs
 - Max ----- 4.06 lbs
 - Unmating
 - Min ----- 1.22 lbs
 - Max ----- 1.43 lbs

Mating Unmating Durability Group 2(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR)

4-up Mezzanine Layout, 28pos

- Initial
 - Mating
 - Min ----- 24.55 lbs
 - Max ----- 29.63 lbs
 - Unmating
 - Min ----- 6.72 lbs
 - Max ----- 8.08 lbs
- After 25 Cycles
 - Mating
 - Min ----- 27.45 lbs
 - Max ----- 30.86 lbs
 - Unmating
 - Min ----- 8.01 lbs
 - Max ----- 9.66 lbs
- After Humidity
 - Mating
 - Min ----- 13.88 lbs
 - Max ----- 16.05 lbs
 - Unmating
 - Min ----- 5.78 lbs
 - Max ----- 6.47 lbs

RESULTS Continued**Mating – Unmating Forces****Mating Unmating Durability Group 3(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR)****1-up Mezzanine Layout, 84pos**

- **Initial**
 - **Mating**
 - **Min** -----13.64 lbs
 - **Max** -----17.07 lbs
 - **Unmating**
 - **Min** -----4.92 lbs
 - **Max** -----5.95 lbs
- **After 25 Cycles**
 - **Mating**
 - **Min** -----16.54 lbs
 - **Max** -----19.26 lbs
 - **Unmating**
 - **Min** -----5.88 lbs
 - **Max** -----6.88 lbs
- **After Humidity**
 - **Mating**
 - **Min** -----9.27 lbs
 - **Max** -----10.58 lbs
 - **Unmating**
 - **Min** -----4.07 lbs
 - **Max** -----4.88 lbs

Mating Unmating Durability Group 4(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR)**4-up Mezzanine Layout, 84pos**

- **Initial**
 - **Mating**
 - **Min** -----48.32 lbs
 - **Max** -----69.29 lbs
 - **Unmating**
 - **Min** -----18.49 lbs
 - **Max** -----21.53 lbs
- **After 25 Cycles**
 - **Mating**
 - **Min** -----61.83 lbs
 - **Max** -----84.69 lbs
 - **Unmating**
 - **Min** -----22.49 lbs
 - **Max** -----28.10 lbs
- **After Humidity**
 - **Mating**
 - **Min** -----48.27 lbs
 - **Max** -----55.20 lbs
 - **Unmating**
 - **Min** -----17.63 lbs
 - **Max** -----21.38 lbs

RESULTS Continued**LLCR Mating Unmating Durability Group****Group 1(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR)****1-up Mezzanine Layout, 28pos (160 signal and 32 ground LLCR test points)****Signal**

- Initial ----- 22.93 mOhms Max

Ground

- Initial ----- 18.93 mOhms Max
- Durability, 25 Cycles
 - <= +5.0 mOhms ----- 192 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 ----- 192 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 ----- 176 Points ----- Stable
 - +5.1 to +10.0 mOhms ----- 14 Points ----- Minor
 - +10.1 to +15.0 mOhms ----- 2 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

Group 2(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR)**4-up Mezzanine Layout, 28pos (192 LLCR test points)****Signal**

- Initial ----- 22.66 mOhms Max
- Durability, 25 Cycles
 - <= +5.0 mOhms ----- 188 Points ----- Stable
 - +5.1 to +10.0 mOhms ----- 2 Points ----- Minor
 - +10.1 to +15.0 mOhms ----- 2 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 ----- 187 Points ----- Stable
 - +5.1 to +10.0 mOhms ----- 5 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 ----- 191 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 +1000 mOhms ----- 0 Points ----- Unstable
 - >+1000 mOhms ----- 0 Points ----- Open Failure

RESULTS Continued**LLCR Mating Unmating Durability Group**

Group 3(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR)

1-up Mezzanine Layout, 84pos (160 signal and 32 ground LLCR test points)

Signal

- Initial ----- 22.93 mOhms Max

Ground

- Initial ----- 18.93 mOhms Max
- Durability, 25 Cycles
 - <= +5.0 mOhms ----- 192 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 ----- 192 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 ----- 179 Points ----- Stable
 - +5.1 to +10.0 mOhms ----- 13 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

Group 4(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR)

4-up Mezzanine Layout, 84pos (192 LLCR test points)

Signal

- Initial ----- 20.76 mOhms Max
- Durability, 25 Cycles
 - <= +5.0 mOhms ----- 191 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 +1000 mOhms ----- 0 Points ----- Unstable
 - >+1000 mOhms ----- 0 Points ----- Open Failure
- Thermal Shock
 - <= +5.0 mOhms ----- 192 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 ----- 191 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 +1000 mOhms ----- 0 Points ----- Unstable
 - >+1000 mOhms ----- 0 Points ----- Open Failure

RESULTS Continued**LLCR Vibration and Mechanical Shock Group****Group 1(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR)****1-up Mezzanine Layout, 28pos (160 signal and 32 ground LLCR test points)****Signal**

- Initial ----- 21.55 mOhms Max

Ground

- Initial ----- 18.96 mOhms Max
- Shock and Vibe
 - <= +5.0 mOhms ----- 192 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

Mechanical Shock & Random Vibration:

- Shock
 - No Damage----- Pass
 - 50 Nanoseconds----- Pass
- Vibration
 - No Damage----- Pass
 - 50 Nanoseconds----- Pass

Group 2(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR)**4-up Mezzanine Layout, 28pos (160 signal and 32 ground LLCR test points)****Signal**

- Initial ----- 21.44 mOhms Max

Ground

- Initial ----- 21.10 mOhms Max
- Shock and Vibe
 - <= +5.0 mOhms ----- 192 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

Mechanical Shock & Random Vibration:

- Shock
 - No Damage----- Pass
 - 50 Nanoseconds----- Pass
- Vibration
 - No Damage----- Pass
 - 50 Nanoseconds----- Pass

RESULTS Continued**LLCR Vibration and Mechanical Shock Group****Group 3(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR)****1-up Mezzanine Layout, 84pos (160 signal and 32 ground LLCR test points)****Signal**

- Initial ----- 21.96 mOhms Max

Ground

- Initial ----- 18.17 mOhms Max
- Shock and Vibe
 - <= +5.0 mOhms ----- 185 Points ----- Stable
 - +5.1 to +10.0 mOhms ----- 7 Points ----- Minor
 - +10.1 to +15.0 mOhms ----- 0 Points ----- Acceptable
 - +15.1 to +50.0 mOhms ----- 0 Points ----- Marginal
 - +50.1 to +1000 mOhms ----- 0 Points ----- Unstable
 - >+1000 mOhms ----- 0 Points ----- Open Failure

Mechanical Shock & Random Vibration:

- Shock
 - No Damage----- Pass
 - 50 Nanoseconds----- Pass
- Vibration
 - No Damage----- Pass
 - 50 Nanoseconds----- Pass

Group 4(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR)**4-up Mezzanine Layout, 84pos (160 signal and 32 ground LLCR test points)****Signal**

- Initial ----- 20.05 mOhms Max

Ground

- Initial ----- 18.08 mOhms Max
- Shock and Vibe
 - <= +5.0 mOhms ----- 192 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

Mechanical Shock & Random Vibration:

- Shock
 - No Damage----- Pass
 - 50 Nanoseconds----- Pass
- Vibration
 - No Damage----- Pass
 - 50 Nanoseconds----- Pass

DATA SUMMARIES

MATING/UNMATING:

Mating Unmating Durability Group

Group 1(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR) 1-up Mezzanine Layout, 28pos

	Initial				25 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	25.75	5.79	7.21	1.62	26.60	5.98	9.25	2.08
Maximum	36.96	8.31	9.21	2.07	36.92	8.30	11.16	2.51
Average	31.67	7.12	8.26	1.86	30.98	6.97	10.28	2.31
St Dev	4.43	1.00	0.87	0.20	3.51	0.79	0.70	0.16
Count	8	8	8	8	8	8	8	8
	After Humidity							
	Mating		Unmating					
	Newtons	Force (Lbs)	Newtons	Force (Lbs)				
Minimum	14.86	3.34	5.43	1.22				
Maximum	18.06	4.06	6.36	1.43				
Average	16.42	3.69	5.81	1.31				
St Dev	1.02	0.23	0.29	0.06				
Count	8	8	8	8				

Group 2(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR) 4-up Mezzanine Layout, 28pos

	Initial				25 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	109.20	24.55	29.89	6.72	122.10	27.45	35.63	8.01
Maximum	131.79	29.63	35.94	8.08	137.27	30.86	42.97	9.66
Average	119.75	26.92	33.03	7.43	129.35	29.08	39.94	8.98
St Dev	8.59	1.93	2.13	0.48	4.78	1.07	2.98	0.67
Count	8	8	8	8	8	8	8	8
	After Humidity							
	Mating		Unmating					
	Newtons	Force (Lbs)	Newtons	Force (Lbs)				
Minimum	61.74	13.88	25.71	5.78				
Maximum	71.39	16.05	28.78	6.47				
Average	65.42	14.71	27.28	6.13				
St Dev	3.40	0.76	1.05	0.24				
Count	8	8	8	8				

DATA SUMMARIES Continued**Mating Unmating Durability Group****Group 3(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR) 1-up Mezzanine Layout, 84pos**

	Initial				25 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	60.67	13.64	21.88	4.92	73.57	16.54	26.15	5.88
Maximum	75.93	17.07	26.47	5.95	85.67	19.26	30.60	6.88
Average	68.44	15.39	23.98	5.39	81.01	18.21	28.14	6.33
St Dev	6.65	1.50	1.49	0.33	3.73	0.84	1.54	0.35
Count	8	8	8	8	8	8	8	8
	After Humidity							
	Mating		Unmating					
	Newtons	Force (Lbs)	Newtons	Force (Lbs)				
Minimum	41.23	9.27	18.10	4.07				
Maximum	47.06	10.58	21.71	4.88				
Average	43.61	9.81	19.73	4.44				
St Dev	1.98	0.45	1.04	0.23				
Count	8	8	8	8				

Group 4(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR) 4-up Mezzanine Layout, 84pos

	Initial				25 Cycles			
	Mating		Unmating		Mating		Unmating	
	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)	Newtons	Force (Lbs)
Minimum	214.93	48.32	82.24	18.49	275.02	61.83	100.04	22.49
Maximum	308.20	69.29	95.77	21.53	376.70	84.69	124.99	28.10
Average	259.66	58.38	88.39	19.87	317.36	71.35	111.07	24.97
St Dev	32.86	7.39	4.91	1.10	39.75	8.94	8.79	1.98
Count	8	8	8	8	8	8	8	8
	After Humidity							
	Mating		Unmating					
	Newtons	Force (Lbs)	Newtons	Force (Lbs)				
Minimum	201.36	45.27	78.42	17.63				
Maximum	245.53	55.20	95.10	21.38				
Average	226.06	50.82	87.92	19.77				
St Dev	15.75	3.54	6.62	1.49				
Count	8	8	8	8				

DATA SUMMARIES Continued**LLCR Mating Unmating Durability Group:**

- 1) A total of 160 signal and 32 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

Group 1(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR) 1-up Mezzanine Layout

LLCR Measurement Summaries by Pin Type				
Date	2/27/2025	5/2/2025	5/7/2025	5/27/2025
Room Temp (Deg C)	22	22	22	22
Rel Humidity (%)	36	54	46	42
Technician	Tony Wagoner	Tony Wagoner	Samuel Cecil	Tony Wagoner
mOhm values	Actual Initial	Delta 25 Cycles	Delta Therm Shck	Delta Humidity
Pin Type: Signal 1				
Average	19.9	0.52	0.73	1.65
St. Dev.	1.03	0.45	0.51	2.13
Min	18.05	0.01	0	0
Max	22.93	2.4	2.44	13.76
Summary Count	160	160	160	160
Total Count	160	160	160	160
Pin Type: GND 1				
Average	17.79	0.48	0.64	2.07
St. Dev.	0.58	0.33	0.26	2.69
Min	16.69	0.01	0.04	0.01
Max	18.93	1.18	1.14	11.78
Summary Count	32	32	32	32
Total Count	32	32	32	32

LLCR Delta Count by Category						
mOhms	Stable ≤ 5	Minor $>5.1 \text{ \& } \leq 10$	Acceptable $>10.1 \text{ \& } \leq 15$	Marginal $>15.1 \text{ \& } \leq 50$	Unstable $>50.1 \text{ \& } \leq 1000$	Open >1000
25 Cycles	192	0	0	0	0	0
Therm Shck	192	0	0	0	0	0
Humidity	176	14	2	0	0	0

DATA SUMMARIES Continued**LLCR Mating Unmating Durability Group:**

- 1) A total of 192 signal 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

Group 2(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR) 4-up Mezzanine Layout

LLCR Measurement Summaries by Pin Type				
Date	7/29/2025	9/16/2025	9/22/2025	10/2/2025
Room Temp (Deg C)	22	22	22	23
Rel Humidity (%)	55	49	56	47
Technician	Daniel Haydon	Aaron McKim	Daniel Haydon	Richard Ison
mOhm values	Actual	Delta	Delta	Delta
	Initial	25 Cycles	Therm Shck	Humidity
Pin Type: Signal 1				
Average	18.58	1.15	0.89	0.88
St. Dev.	1.06	1.71	1.26	1.08
Min	16.28	0	0	0
Max	22.66	13.99	7.84	6.7
Summary Count	192	192	192	192
Total Count	192	192	192	192

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	$>5.1 \text{ \& } \leq 10$	$>10.1 \text{ \& } \leq 15$	$>15.1 \text{ \& } \leq 50$	$>50.1 \text{ \& } \leq 1000$	>1000
25 Cycles	188	2	2	0	0	0
Therm Shck	187	5	0	0	0	0
Humidity	191	1	0	0	0	0

DATA SUMMARIES Continued**LLCR Mating Unmating Durability Group:**

- 1) A total of 160 signal and 32 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

Group 3(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR) 1-up Mezzanine Layout

LLCR Measurement Summaries by Pin Type				
Date	4/29/2025	5/12/2025	5/22/2025	6/2/2025
Room Temp (Deg C)	22	22	22	22
Rel Humidity (%)	54	42	46	43
Technician	Samuel Cecil	Tony Wagoner	Tony Wagoner	Tony Wagoner
mOhm values	Actual Initial	Delta 25 Cycles	Delta Therm Shck	Delta Humidity
Pin Type: Signal 1				
Average	18.67	0.3	0.6	1.57
St. Dev.	0.91	0.27	0.59	1.91
Min	17.41	0	0	0
Max	21.08	1.25	3.31	9.97
Summary Count	160	160	160	160
Total Count	160	160	160	160
Pin Type: GND 1				
Average	16.94	0.23	0.37	0.91
St. Dev.	0.54	0.2	0.27	1.34
Min	16.27	0.01	0.01	0.02
Max	17.99	0.9	1	6.38
Summary Count	32	32	32	32
Total Count	32	32	32	32

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	$>5.1 \text{ \& } \leq 10$	$>10.1 \text{ \& } \leq 15$	$>15.1 \text{ \& } \leq 50$	$>50.1 \text{ \& } \leq 1000$	>1000
25 Cycles	192	0	0	0	0	0
Therm Shck	192	0	0	0	0	0
Humidity	179	13	0	0	0	0

DATA SUMMARIES Continued

LLCR Mating Unmating Durability Group:

- 1) A total of 192 signal 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

Group 4(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR) 4-up Mezzanine Layout

LLCR Measurement Summaries by Pin Type				
Date	7/29/2025	9/16/2025	9/22/2025	10/2/2025
Room Temp (Deg C)	22	22	22	22
Rel Humidity (%)	56	51	56	44
Technician	Daniel Haydon	Aaron McKim	Daniel Haydon	Richard Richard Ison
mOhm values	Actual	Delta	Delta	Delta
	Initial	25 Cycles	Therm Shck	Humidity
Pin Type: Signal 1				
Average	18.03	0.84	0.35	0.52
St. Dev.	0.98	0.92	0.41	0.8
Min	15.81	0	0	0.01
Max	20.76	8.5	2.63	8.01
Summary Count	192	192	192	192
Total Count	192	192	192	192

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	$>5.1 \text{ \& } \leq 10$	$>10.1 \text{ \& } \leq 15$	$>15.1 \text{ \& } \leq 50$	$>50.1 \text{ \& } \leq 1000$	>1000
25 Cycles	191	1	0	0	0	0
Therm Shck	192	0	0	0	0	0
Humidity	191	1	0	0	0	0

DATA SUMMARIES Continued**LLCR Vibration and Mechanical Shock Group:**

- 1) A total of 160 signal and 32 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

Group 1(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR) 1-up Mezzanine Layout

LLCR Measurement Summaries by Pin Type		
Date	7/23/2025	7/31/2025
Room Temp (Deg C)	22	22
Rel Humidity (%)	58	55
Technician	Daniel Haydon	Daniel Haydon
mOhm values	Actual Initial	Delta Shock-Vib
Pin Type: Signal 1		
Average	19.21	0.58
St. Dev.	0.85	0.62
Min	17.51	0.01
Max	21.55	4.2
Summary Count	160	160
Total Count	160	160
Pin Type: GND 1		
Average	17.25	0.38
St. Dev.	0.75	0.36
Min	16.23	0
Max	18.96	1.16
Summary Count	32	32
Total Count	32	32

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	>5.1 & ≤ 10	>10.1 & ≤ 15	>15.1 & ≤ 50	>50.1 & ≤ 1000	>1000
Shock-Vib	192	0	0	0	0	0

Nanosecond Event Detection:

Shock and Vibration Event Detection Summary	
Contacts tested	60
Test Condition	C, 100g's, 6ms, Half-Sine
Shock Events	0
Test Condition	V-B, 7.56 rms g
Vibration Events	0
Total Events	0

DATA SUMMARIES Continued**LLCR Vibration and Mechanical Shock Group:**

- 1) A total of 160 signal and 32 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

Group 2(H6RU-028-DV-025-DP-085/ HSEC6-028-01-S-DV-WT-TR) 4-up Mezzanine Layout

LLCR Measurement Summaries by Pin Type		
Date	7/31/2025	8/6/2025
Room Temp (Deg C)	22	22
Rel Humidity (%)	58	57
Technician	Daniel Haydon	Daniel Haydon
mOhm values	Actual Initial	Delta Shock-Vib
Pin Type: Signal 1		
Average	18.79	1.38
St. Dev.	1.13	1.09
Min	16.12	0
Max	21.44	4.58
Summary Count	160	160
Total Count	160	160
Pin Type: GND 1		
Average	18.71	1.3
St. Dev.	1.05	0.97
Min	17.01	0.03
Max	21.10	3.52
Summary Count	32	32
Total Count	32	32

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	>5.1 & ≤ 10	>10.1 & ≤ 15	>15.1 & ≤ 50	>50.1 & ≤ 1000	>1000
Shock-Vib	192	0	0	0	0	0

Nanosecond Event Detection:

Shock and Vibration Event Detection Summary	
Contacts tested	60
Test Condition	C, 100g's, 6ms, Half-Sine
Shock Events	0
Test Condition	V-B, 7.56 rms g
Vibration Events	0
Total Events	0

DATA SUMMARIES Continued**LLCR Vibration and Mechanical Shock Group:**

- 1) A total of 160 signal and 32 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

Group 3(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR) 1-up Mezzanine Layout

LLCR Measurement Summaries by Pin Type		
Date	7/23/2025	8/7/2025
Room Temp (Deg C)	22	22
Rel Humidity (%)	57	56
Technician	Daniel Haydon	Daniel Haydon
mOhm values	Actual Initial	Delta Shock-Vib
Pin Type: Signal 1		
Average	18.87	0.77
St. Dev.	1	1.35
Min	17.52	0
Max	21.96	7.96
Summary Count	160	160
Total Count	160	160
Pin Type: GND 1		
Average	17.09	0.57
St. Dev.	0.56	1.27
Min	16.28	0
Max	18.17	5.41
Summary Count	32	32
Total Count	32	32

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	$>5.1 \text{ \& } \leq 10$	$>10.1 \text{ \& } \leq 15$	$>15.1 \text{ \& } \leq 50$	$>50.1 \text{ \& } \leq 1000$	>1000
Shock-Vib	185	7	0	0	0	0

Nanosecond Event Detection:

Shock and Vibration Event Detection Summary	
Contacts tested	60
Test Condition	C, 100g's, 6ms, Half-Sine
Shock Events	0
Test Condition	V-B, 7.56 rms g
Vibration Events	0
Total Events	0

DATA SUMMARIES Continued**LLCR Vibration and Mechanical Shock Group:**

- 1) A total of 160 signal and 32 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

Group 4(H6RU-084-DV-060-DP-085/ HSEC6-084-01-S-DV-WT-TR) 4-up Mezzanine Layout

LLCR Measurement Summaries by Pin Type		
Date	7/31/2025	8/12/2025
Room Temp (Deg C)	22	22
Rel Humidity (%)	58	55
Technician	Daniel Haydon	Daniel Haydon
mOhm values	Actual Initial	Delta Shock-Vib
Pin Type: Signal 1		
Average	18.22	0.39
St. Dev.	0.71	0.27
Min	16.09	0
Max	20.05	1.46
Summary Count	160	160
Total Count	160	160
Pin Type: GND 1		
Average	16.71	0.24
St. Dev.	0.6	0.19
Min	16.1	0
Max	18.08	0.74
Summary Count	32	32
Total Count	32	32

LLCR Delta Count by Category						
	Stable	Minor	Acceptable	Marginal	Unstable	Open
mOhms	≤ 5	>5.1 & ≤ 10	>10.1 & ≤ 15	>15.1 & ≤ 50	>50.1 & ≤ 1000	>1000
Shock-Vib	192	0	0	0	0	0

Nanosecond Event Detection:

Shock and Vibration Event Detection Summary	
Contacts tested	60
Test Condition	C, 100g's, 6ms, Half-Sine
Shock Events	0
Test Condition	V-B, 7.56 rms g
Vibration Events	0
Total Events	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 #: THC-05**Description:** Temperature/Humidity Chamber (Chamber Room)**Manufacturer:** Thermotron**Model:** SM-8-3800**Serial #:** 05 23 00 02**Accuracy:** See Manual

... Last Cal: 11/14/2025, Next Cal: 05/31/2026

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

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

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: SVC-01
Description: Shock & Vibration Table
Manufacturer: Data Physics
Model: LE-DSA-10-20K
Serial #: 10037
Accuracy: See Manual
... Last Cal: 04/22/2025, Next Cal: 04/22/2026

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: 10/31/2025, Next Cal: 10/31/2026