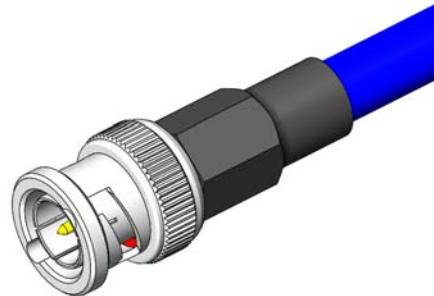
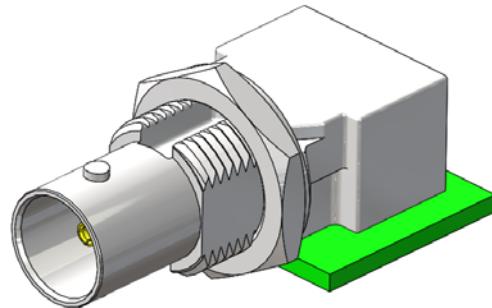




Project Number: Design Qualification Test Report	Tracking Code: 1539907_Report_Rev_1
Requested by: Alvin Wang	Date: 7/27/2018
Part #: BNC7T-J-P-GN-RA-BM1D/RFB6T-D4SP3-505050-0153	
Part description: BNC7T/RFB6T	Tech: Kason He
Test Start: 5/22/2018	Test Completed: 6/27/2018



## DESIGN QUALIFICATION TEST REPORT

**BNC7T/RFB6T**  
**BNC7T-J-P-GN-RA-BM1D/RFB6T-D4SP3-505050-0153**

Tracking Code:1539907_Report_Rev_1	Part #: BNC7T-J-P-GN-RA-BM1D/RFB6T-D4SP3-505050-0153
Part description: BNC7T/RFB6T	

## REVISION HISTORY

DATA	REV.NUM.	DESCRIPTION	ENG
7/27/2018	1	Initial Issue	KH

## 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 TLWI-0001.
- 4) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
- 5) The automated procedure is used with aqueous compatible soldering materials.
- 6) Parts not intended for testing LLCR and DWV/IR are visually inspected and cleaned if necessary.
- 7) Any additional preparation will be noted in the individual test sequences.
- 8) Solder Information: Lead free
- 9) Samtec Test PCBs used: PCB-109089-TST/PCB-109090-TST

## FLOWCHARTS

### Thermal Aging

#### Group 1

BNC7T-J-P-GN-RA-BM1D

RFB6T-D4SP3-505050-0153

8 Assemblies

---

#### Step    Description

1.    Contact Gaps

*Note: Signal and ground.*

2.    LLCR <sup>(1)</sup>

*Note: Signal and ground.*

3.    Thermal Age <sup>(2)</sup>

4.    LLCR <sup>(1)</sup>

Max Delta = 15 mOhm

*Note: Signal and ground.*

5.    Contact Gaps

*Note: Signal and ground.*

---

(1) LLCR = EIA-364-23

Open Circuit Voltage = 20 mV Max

Test Current = 100 mA Max

(2) Thermal Age = EIA-364-17

Test Condition = 4 (105°C)

Time Condition = B (250 Hours)

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

BNC7T-J-P-GN-RA-BM1D

RFB6T-D4SP3-505050-0153

8 Assemblies

**Step Description**

1. Contact Gaps  
*Note: Signal and ground.*
2. LLCR (2)  
*Note: Signal and ground.*
3. Cycles  
Quantity = 500 Cycles  
*Note: By hand*
4. Contact Gaps  
*Note: Signal and ground.*
5. LLCR (2)  
Max Delta = 15 mOhm  
*Note: Signal and ground.*
6. Thermal Shock (3)
7. LLCR (2)  
Max Delta = 15 mOhm  
*Note: Signal and ground.*
8. Humidity (1)
9. LLCR (2)  
Max Delta = 15 mOhm  
*Note: Signal and ground.*

(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) 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

### IR/DWV

#### Pin-to-Ground

Group 1		Group 2		Group 3		Group 4	
BNC7T-J-P-GN-RA-BM1D RFB6T-D4SP3-505050-0153 2 Assemblies		BNC7T-J-P-GN-RA-BM1D 2 Assemblies		RFB6T-D4SP3-505050-0153 2 Assemblies		BNC7T-J-P-GN-RA-BM1D RFB6T-D4SP3-505050-0153 2 Assemblies	
Step	Description	Step	Description	Step	Description	Step	Description
1.	DWV Breakdown (2)	1.	DWV Breakdown (2)	1.	DWV Breakdown (2)	1.	IR (4)
						2.	DWV at Test Voltage (1)
						3.	Thermal Shock (5)
						4.	IR (4)
						5.	DWV at Test Voltage (1)
						6.	Humidity (3)
						7.	IR (4)
						8.	DWV at Test Voltage (1)

(1) 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

(2) DWV Breakdown = 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) 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

(4) IR = EIA-364-21

Test Condition = 500 Vdc, 2 Minutes Max

(5) 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

#### Group 1

BNC7T-J-P-GN-RA-BM1D

RFB6T-D4SP3-505050-0410

8 Assemblies

---

#### Step Description

1. LLCR <sup>(1)</sup>  
*Note: Signal and ground.*
2. Mechanical Shock <sup>(2)</sup>
3. Random Vibration <sup>(3)</sup>
4. LLCR <sup>(1)</sup>  
Max Delta = 15 mOhm  
*Note: Signal and ground.*

---

(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

#### Group 1

BNC7T-J-P-GN-RA-BM1D

RFB6T-D4SP3-505050-0410

8 Assemblies

---

#### Step Description

1. Nanosecond Event Detection  
(Mechanical Shock) <sup>(1)</sup>
2. Nanosecond Event Detection  
(Random Vibration) <sup>(2)</sup>

---

(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)

## FLOWCHARTS Continued

### Pull/Shear

#### Group 1

BNC7T-J-P-GN-RA-BM1D

RFB6T-D4SP3-505050-0153

5 Assemblies

*Note: Push up on front connector shell  
perpendicular to shell axis.*

---

#### **Step    Description**

1.    Connector Pull

---

## 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 1: -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.

### **THERMAL:**

- 1) EIA-364-17, *Temperature Life with or without Electrical Load Test Procedure for Electrical Connectors.*
- 2) Test Condition 4 at 105°C
- 3) Test Time Condition B for 250 hours.
- 4) All test samples are pre-conditioned at ambient.
- 5) All test samples are exposed to environmental stressing in the mated condition.

### **HUMIDITY:**

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

### **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 G<sup>2</sup> / 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

### **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.

**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  $+2000$  mOhms: ----- Unstable
  - f.  $>+2000$  mOhms: ----- Open Failure

**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 withstand 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 withstand voltage (one-fourth of the breakdown voltage).

**ATTRIBUTE DEFINITIONS Continued**

The following is a brief, simplified description of attributes.

**PULL SHEAR:**

push perpendicular on the center contact. Record that data when the center contact was abscission.



90° push



0° push

## RESULTS

### PULL SHEAR:

- 90° push
  - Min ----- 1.84 kg
  - Max ----- 2.31 kg
- 0° push
  - Min ----- 5.74 kg
  - Max ----- 7.25 kg

### Insulation Resistance minimums, IR

- Initial
  - Mated ----- 45000 Meg Ω ----- Passed
  - Unmated ----- 45000 Meg Ω ----- Passed
- Thermal Shock
  - Mated ----- 45000 Meg Ω ----- Passed
  - Unmated ----- 45000 Meg Ω ----- Passed
- Humidity
  - Mated ----- 45000 Meg Ω ----- Passed
  - Unmated ----- 45000 Meg Ω ----- Passed

### Dielectric Withstanding Voltage minimums, DWV

- Minimums
  - Breakdown Voltage ----- 2883 VAC
  - Test Voltage ----- 2165 VAC
  - Working Voltage ----- 720 VAC

### Pin to Closest Metallic Hardware

- Initial DWV ----- Passed
- Thermal DWV ----- Passed
- Humidity DWV ----- Passed

## RESULTS Continued

### LLCR Thermal Aging Group (16 LLCR test points)

#### Signal

- Initial ----- **7.01 mOhms Max**

#### Ground Pin:

- Initial ----- **1.77 mOhms Max**
- Thermal

○ <= +5.0 mOhms -----	<b>16 Points -----</b>	Stable
○ +5.1 to +10.0 mOhms -----	<b>0 Points -----</b>	Minor
○ +10.1 to +15.0 mOhms -----	<b>0 Points -----</b>	Acceptable
○ +15.1 to +50.0 mOhms -----	<b>0 Points -----</b>	Marginal
○ +50.1 to +2000 mOhms-----	<b>0 Points -----</b>	Unstable
○ >+2000 mOhms-----	<b>0 Points -----</b>	Open Failure

### LLCR Mating/Unmating Durability Group (16 LLCR test points)

#### Signal

- Initial ----- **7.00 mOhms Max**

#### Ground

- Initial ----- **1.85 mOhms Max**

- Durability, 500 Cycles

○ <= +5.0 mOhms -----	<b>16 Points -----</b>	Stable
○ +5.1 to +10.0 mOhms -----	<b>0 Points -----</b>	Minor
○ +10.1 to +15.0 mOhms -----	<b>0 Points -----</b>	Acceptable
○ +15.1 to +50.0 mOhms -----	<b>0 Points -----</b>	Marginal
○ +50.1 to +2000 mOhms-----	<b>0 Points -----</b>	Unstable
○ >+2000 mOhms-----	<b>0 Points -----</b>	Open Failure

- Thermal Shock

○ <= +5.0 mOhms -----	<b>16 Points -----</b>	Stable
○ +5.1 to +10.0 mOhms -----	<b>0 Points -----</b>	Minor
○ +10.1 to +15.0 mOhms -----	<b>0 Points -----</b>	Acceptable
○ +15.1 to +50.0 mOhms -----	<b>0 Points -----</b>	Marginal
○ +50.1 to +2000 mOhms-----	<b>0 Points -----</b>	Unstable
○ >+2000 mOhms-----	<b>0 Points -----</b>	Open Failure

- Humidity

○ <= +5.0 mOhms -----	<b>16 Points -----</b>	Stable
○ +5.1 to +10.0 mOhms -----	<b>0 Points -----</b>	Minor
○ +10.1 to +15.0 mOhms -----	<b>0 Points -----</b>	Acceptable
○ +15.1 to +50.0 mOhms -----	<b>0 Points -----</b>	Marginal
○ +50.1 to +2000 mOhms-----	<b>0 Points -----</b>	Unstable
○ >+2000 mOhms-----	<b>0 Points -----</b>	Open Failure

## RESULTS Continued

### LLCR Shock & Vibration (16 LLCR test points)

#### Signal Pin

- Initial ----- 13.04 mOhms Max

#### Ground Pin

- Initial ----- 4.83 mOhms Max
- Shock & Vibration

- <= +5.0 mOhms ----- 16 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

### Mechanical Shock & Random Vibration:

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

## DATA SUMMARIES

**Pull Shear:**
**90° push**

	Force (Kg)
Minimum	<b>1.84</b>
Maximum	2.31
Average	2.08

**0° push**

	Force (Kg)
Minimum	<b>5.74</b>
Maximum	7.25
Average	6.69

**INSULATION RESISTANCE (IR):**

	Pin to Closest Metallic Hardware		
	Mated	Unmated	Unmated
	BNC7T/RFB6T	BNC7T	RFB6T
<b>Initial</b>	45000	45000	45000
<b>Thermal</b>	45000	45000	45000
<b>Humidity</b>	45000	45000	45000

**DIELECTRIC WITHSTANDING VOLTAGE (DWV):**

Voltage Rating Summary	
Minimum	<b>BNC7T/RFB6T</b>
<b>Break Down Voltage</b>	2883
<b>Test Voltage</b>	2165
<b>Working Voltage</b>	720

Pin to Closest Metallic Hardware	
<b>Initial Test Voltage</b>	Passed
<b>After Thermal Test Voltage</b>	Passed
<b>After Humidity Test Voltage</b>	Passed

## DATA SUMMARIES Continued

### LLCR Thermal Aging Group

- 1) A total of 16 points were measured.
- 2) EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3) A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4) The following guidelines are used to categorize the changes in LLCR as a result from stressing.
  - a.  $\leq +5.0$  mOhms: -----Stable
  - b.  $+5.1$  to  $+10.0$  mOhms: -----Minor
  - c.  $+10.1$  to  $+15.0$  mOhms: -----Acceptable
  - d.  $+15.1$  to  $+50.0$  mOhms: -----Marginal
  - e.  $+50.1$  to  $+2000$  mOhms: -----Unstable
  - f.  $>+2000$  mOhms: -----Open Failure

LLCR Measurement Summaries by Pin Type						
mOhm values	Date	5/22/2018	6/5/2018			
	Room Temp (Deg C)	24	23			
	Rel Humidity (%)	58	54			
	Technician	Kason He	Kason He			
	Actual		Delta	Delta	Delta	
	Initial		Thermal			
	Pin Type 1: Signal					
	Average	6.91	0.04			
	St. Dev.	0.05	0.02			
	Min	6.81	0.01			
	Max	7.01	0.09			
	Summary Count	8	8			
	Total Count	8	8			
Pin Type 2: Ground						
Average	1.66	0.26				
St. Dev.	0.06	0.25				
Min	1.56	0.05				
Max	1.77	0.86				
Summary Count	8	8				
Total Count	8	8				

LLCR Delta Count by Category						
mOhms	Stable	Minor	Acceptable	Marginal	Unstable	Open
	$\leq 5$	$>5 \text{ & } \leq 10$	$>10 \text{ & } \leq 15$	$>15 \text{ & } \leq 50$	$>50 \text{ & } \leq 1000$	$>1000$
Thermal	16	0	0	0	0	0

Tracking Code:1539907\_Report\_Rev\_1 Part #: BNC7T-J-P-GN-RA-BM1D/RFB6T-D4SP3-505050-0153  
Part description: BNC7T/RFB6T

## DATA SUMMARIES Continued

## LLCR Mating/Unmating Durability Group

- 1). A total of 16 points were measured.
- 2). EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3). A computer program, *LLCR 221.exe*, ensures repeatability for data acquisition.
- 4). The following guidelines are used to categorize the changes in LLCR as a result from stressing.
  - a.  $\leq +5.0$  mOhms: -----Stable
  - b.  $+5.1$  to  $+10.0$  mOhms: -----Minor
  - c.  $+10.1$  to  $+15.0$  mOhms: -----Acceptable
  - d.  $+15.1$  to  $+50.0$  mOhms: -----Marginal
  - e.  $+50.1$  to  $+2000$  mOhms -----Unstable
  - f.  $> +2000$  mOhms: -----Open Failure

LLCR Measurement Summaries by Pin Type				
Date	5/22/2018	6/5/2018	6/15/2018	6/27/2018
Room Temp (Deg C)	24	24	24	24
Rel Humidity (%)	54	54	53	54
Technician	Kason He	Kason He	Kason He	Kason He
mOhm values	Actual	Delta	Delta	Delta
	Initial	500 Cycles	Therm Shck	Humidity
Pin Type 1: Signal				
Average	6.93	0.12	0.04	0.08
St. Dev.	0.04	0.10	0.03	0.10
Min	6.88	0.00	0.01	0.01
Max	7.00	0.29	0.08	0.34
Summary Count	8	8	8	8
Total Count	8	8	8	8
Pin Type 2: Ground				
Average	1.70	0.22	1.60	1.41
St. Dev.	0.08	0.36	0.83	0.85
Min	1.59	0.01	0.46	0.39
Max	1.85	1.17	3.21	2.83
Summary Count	8	8	8	8
Total Count	8	8	8	8

LLCR Delta Count by Category						
mOhms	Stable	Minor	Acceptable	Marginal	Unstable	Open
	<=5	>5 & <=10	>10 & <=15	>15 & <=50	>50 & <=1000	>1000
500 Cycles	16	0	0	0	0	0
Therm Shck	16	0	0	0	0	0
Humidity	16	0	0	0	0	0

## DATA SUMMARIES Continued

### LLCR Shock & Vibration:

- 1). A total of 16 points were measured.
- 2). EIA-364-23, *Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets*.
- 3). The following guidelines are used to categorize the changes in LLCR as a result from stressing.
  - a.  $\leq +5.0$  mOhms: ----- Stable
  - b.  $+5.1$  to  $+10.0$  mOhms: ----- Minor
  - c.  $+10.1$  to  $+15.0$  mOhms: ----- Acceptable
  - d.  $+15.1$  to  $+50.0$  mOhms: ----- Marginal
  - e.  $+50.1$  to  $+2000$  mOhms ----- Unstable
  - f.  $>+2000$  mOhms: ----- Open Failure

		LLCR Measurement Summaries by Pin Type				
Date	7/11/2018	7/13/2018				
	23	23				
Room Temp (Deg C)	46	41				
	Aaron Mckim	Aaron Mckim				
Rel Humidity (%)	Actual	Delta	Delta	Delta		
	Initial	Shock-Vib				
Pin Type 1: Ground						
mOhm values	Average	0.28				
	St. Dev.	0.17				
Technician	Min	0.04				
	Max	0.68				
Summary Count	8	8				
	Total Count	8				
Pin Type 2: Signal						
Summary Count	Average	0.05				
	St. Dev.	0.04				
Total Count	Min	0.00				
	Max	0.12				
Technician	8	8				
	Total Count	8				

LLCR Delta Count by Category						
mOhms	Stable	Minor	Acceptable	Marginal	Unstable	Open
	$\leq 5$	$>5 \text{ & } \leq 10$	$>10 \text{ & } \leq 15$	$>15 \text{ & } \leq 50$	$>50 \text{ & } \leq 1000$	$>1000$
Shock-Vib	16	0	0	0	0	0

### Nanosecond Event Detection:

Shock and Vibration Event Detection Summary	
Contacts tested	16
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

Tracking Code:1539907_Report_Rev_1	Part #: BNC7T-J-P-GN-RA-BM1D/RFB6T-D4SP3-505050-0153
Part description: BNC7T/RFB6T	

## EQUIPMENT AND CALIBRATION SCHEDULES

**Equipment #:** HZ-TCT-01

**Description:** Normal force analyzer

**Manufacturer:** Mecmesin Multitester

**Model:** Mecmesin Multitester 2.5-i

**Serial #:** 08-1049-04

**Accuracy:** Last Cal: 4/25/2018, Next Cal: 4/24/2019

**Equipment #:** HZ-OV-01

**Description:** Oven

**Manufacturer:** Huida

**Model:** CS101-1E

**Serial #:** CS101-1E-B

**Accuracy:** Last Cal: 12/12/2017, Next Cal: 12/11/2018

**Equipment #:** HZ-THC-01

**Description:** Humidity transmitter

**Manufacturer:** Thermtron

**Model:** SM-8-8200

**Serial #:** 38846

**Accuracy:** Last Cal: 2/27/2018, Next Cal: 2/26/2019

**Equipment #:** HZ-TSC-01

**Description:** Vertical Thermal Shock Chamber

**Manufacturer:** Cincinnati Sub Zero

**Model:** VTS-3-6-6-SC/AC

**Serial #:** 10-VT14994

**Accuracy:** See Manual

... Last Cal: 06/27/2018, Next Cal: 06/26/2019

**Equipment #:** DG-HPM-02

**Description:** Hipot Safety Tester

**Manufacturer:** Vitrek

**Model:** V73

**Serial #:** 025866

**Accuracy:**

... Last Cal: 10/20/2017, Next Cal: 10/19/2018

**Equipment #:** HZ-MO-05

**Description:** Micro-ohmmeter

**Manufacturer:** Keithley

**Model:** 3706

**Serial #:** 1285188

**Accuracy:** Last Cal: 11/14/2017, Next Cal: 11/13/2018

## 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: 04/22/2016, Next Cal: 04/22/2019

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

... Last Cal: 07/18/2017, Next Cal: 07/18/2018

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

... Last Cal: 10/31/2017, Next Cal: 10/31/2018

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

... Last Cal: 09/11/2017, Next Cal: 09/11/2018