Vibration Test Report per MIL-STD 801F, Method 514.5 Proc. 1

On model

FlexMux

report no.

20040114-02-MS

Provided for evaluation by

ELMA Electronics Inc.

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CA 95438
United States

report generated by

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Registration number: TTI-P-G 159/98-00 (RES-GmbH)

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Part 1 General Information

Product Name: **Description:**	FlexMux 39C, 2U, 4-Slot Rack-mountable Chassis	
Applicant's Name: **Applicant's Address:** **Contact:**	ELMA Electronics Inc. 44350 S. Grimmer Blvd Fremont, CA 95438 Tel: (510) 656 -3400 Mr. Ram Rajan	 Fax: (510) 656-3783 RamR@Elma.com
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Test & Report Numbers: **Test & Issue Date:** **Technical Author:** **Principal Engineer:**	20030916-05 February 19th, 2004 Gurjit Khosa Michael Gbadebo	20030916-05-EMS April 17th, 2004
Total Number of Pages:	12	

The results and conclusions of this report apply to the specified samples tested under stated test setup and conditions. However, there is no warranty expressed or implied with this report and ITC is in no way responsible for the client's use of the data contained herein.

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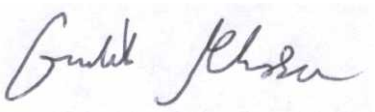

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Chief Engineer

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Part 2 Vibration Test

A. Purpose of Test and Product Specification

To verify functionality and structural integrity of EUT during and after vibration test events per MIL-STD 801F, Method 514.5 Proc. 1.

B. Test Setup

The equipment under test was secured to a table by means of its normal attachment points via suitable test fixture. All vibration tests were conducted with the equipment powered off.

C. Test Procedures

Step 1: Performed a visual inspection of the test item.

Step 2: Mounted the test item to the test fixture in a manner dynamically representative of the life cycle event simulated.

Step 3: Installed sufficient transducers on or near the test item/fixture/vibration exciter combination to measure vibration at the test item/fixture interface, to control the vibration exciter as required by the control strategy.

Step 4: Performed a visual inspection of the test item.

Step 5: Applied low level vibration to the test item/fixture interface.

Step 6: Verified that the vibration exciter, fixture, and instrumentation system functions as required.

Step 7: Applied the required vibration levels to the test item/fixture interface.

Step 8: Verified that vibration levels at test item/fixture interface are as specified immediately after full levels are first applied, and immediately before scheduled shut down.

Step 9: Monitored vibration levels continuously through the exposure.

Step 10: When the required duration had been achieved, stopped the vibration.

Step 11: Inspected the test item, fixture, vibration exciter, and instrumentation.

Step 12: Repeated steps 1 through 11 for each excitation axis.

Step 13: Removed the test item from the fixture and inspected the test item and mounting hardware..

D. Equipment Used for Testing

Test Name: Vibration					Test Date(s): to
MET ID #	EQUIPMENT	MANUFACTURER	MODEL #	LAST CAL	CAL DUE
2U500	VIBRATION CONTROL SYSTEM	M&P INTERNATIONAL	VCX9000	19-NOV-03	19-NOV-04
2U546	ACCELEROMETER	DYTRAN	3100B	15-OCT-03	15-OCT-04
2U653	ACCELEROMETER	DYTRAN INSTRUMENTS, INC.	3157A	07-MAY-03	07-MAY-04
2U554	VIBRATION SYSTEM	LING DYNAMIC SYSTEMS	PIC2	SEE NOTE	SEE NOTE
2U570	SHAKER	LING DYNAMIC SYSTEMS INC	V984LS	SEE NOTE	SEE NOTE

Note: Functionally tested equipment is verified using calibrated instrumentation at the time of testing.

E. Test Data

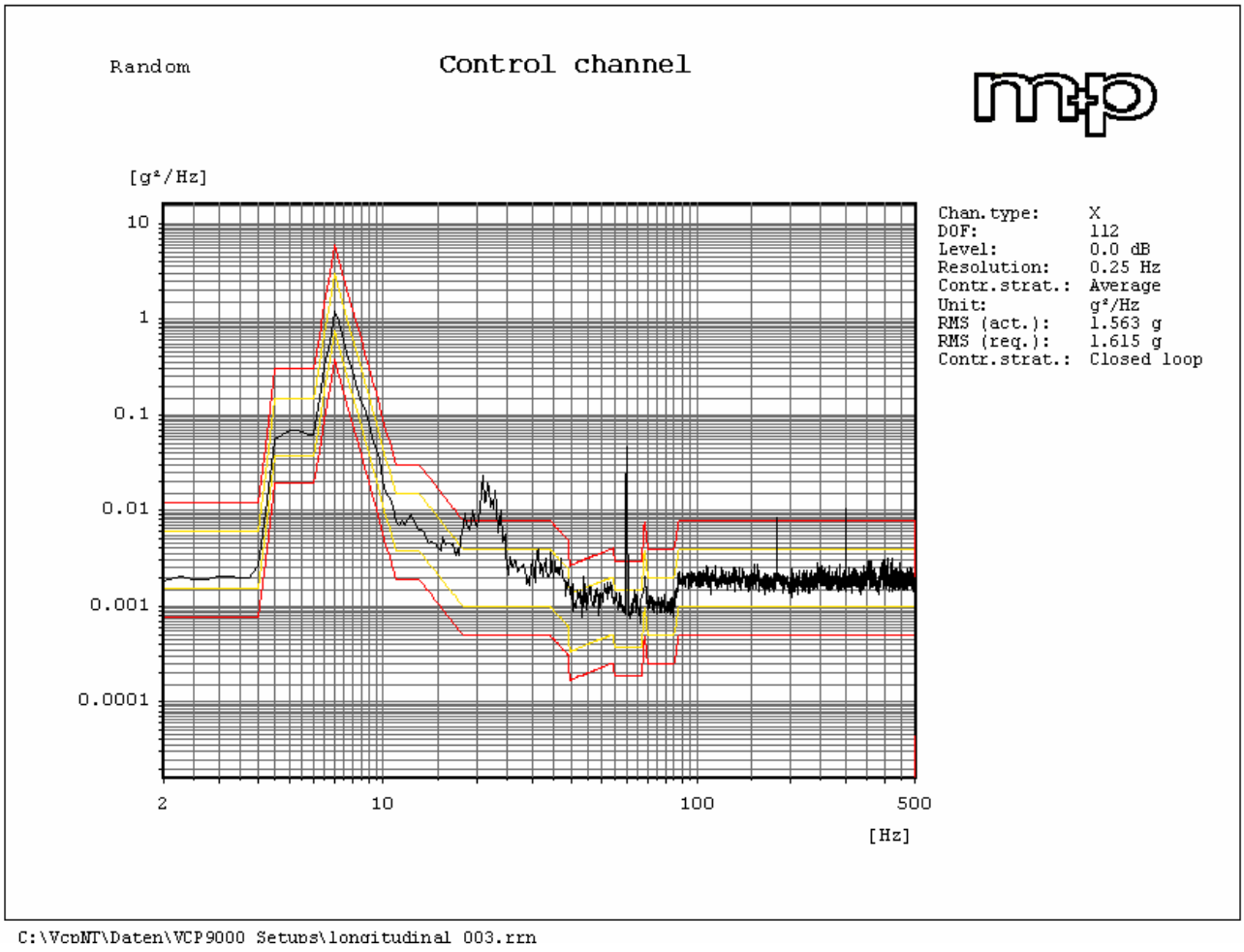

Figure 1: Vibration Test (Long)

Test Data (cont.)

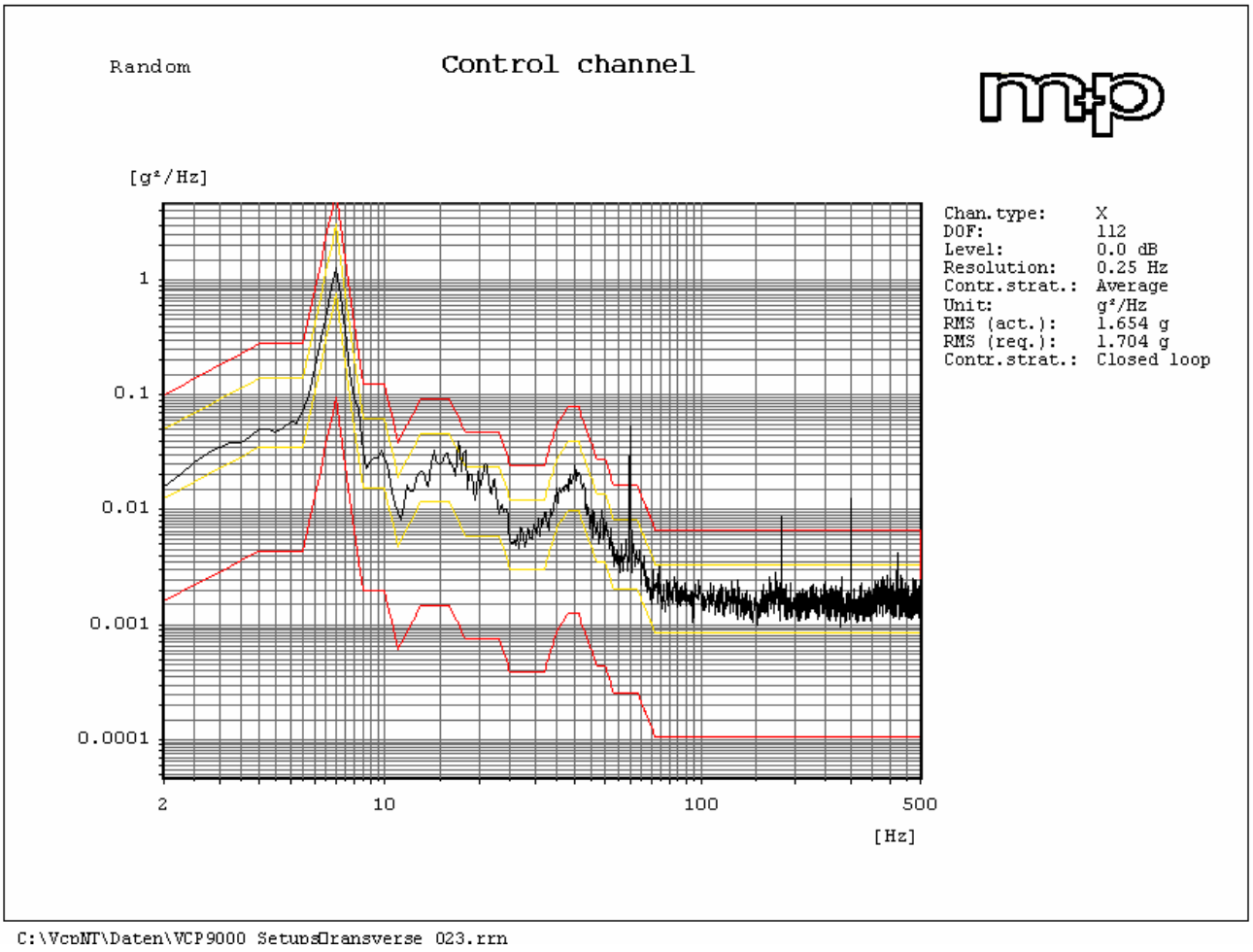

Figure 2: Vibration Test (Transverse)

Test Data (cont.)

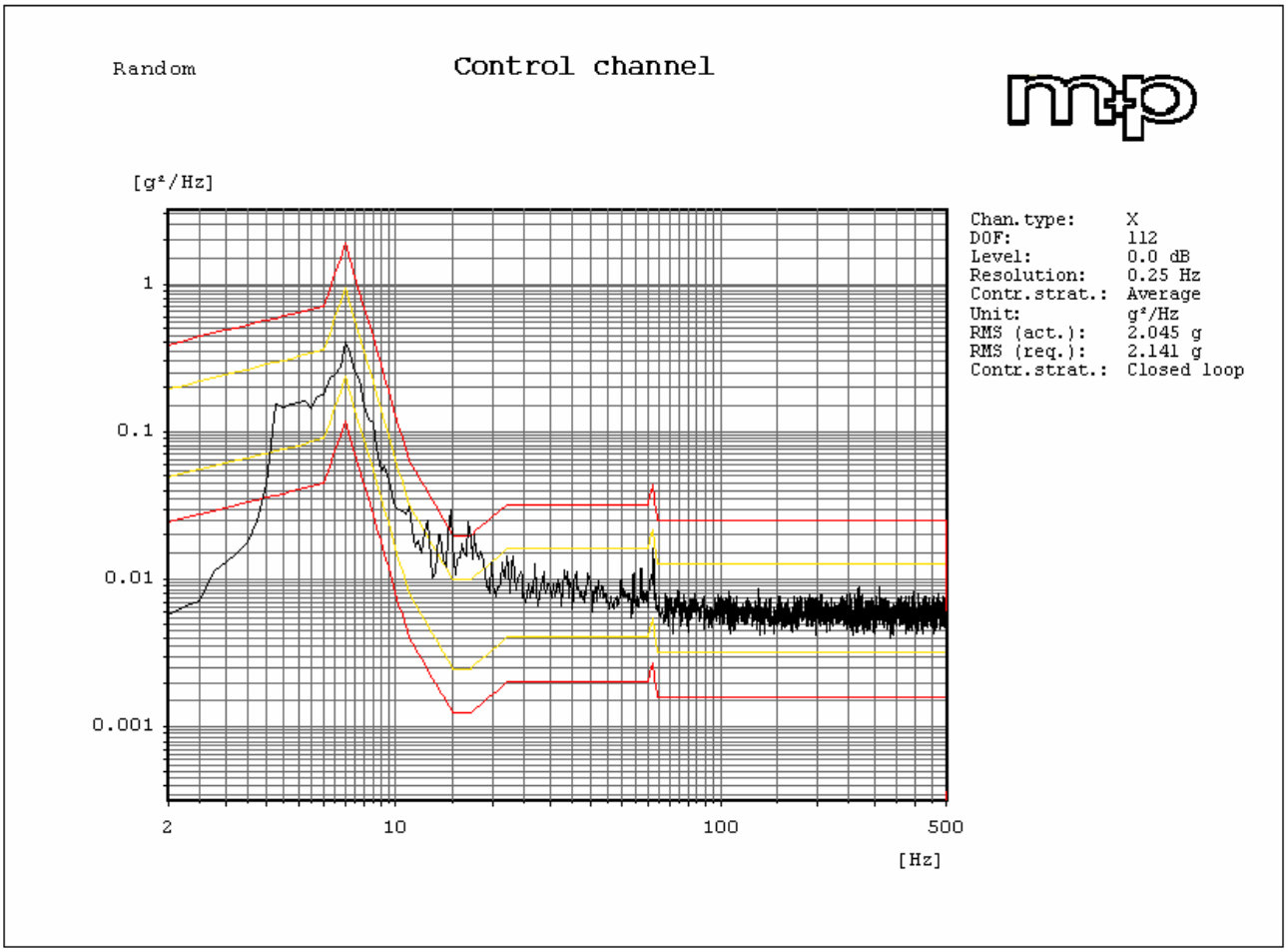

Figure 3: Vibration Test (Vertical)

F. Test Photos

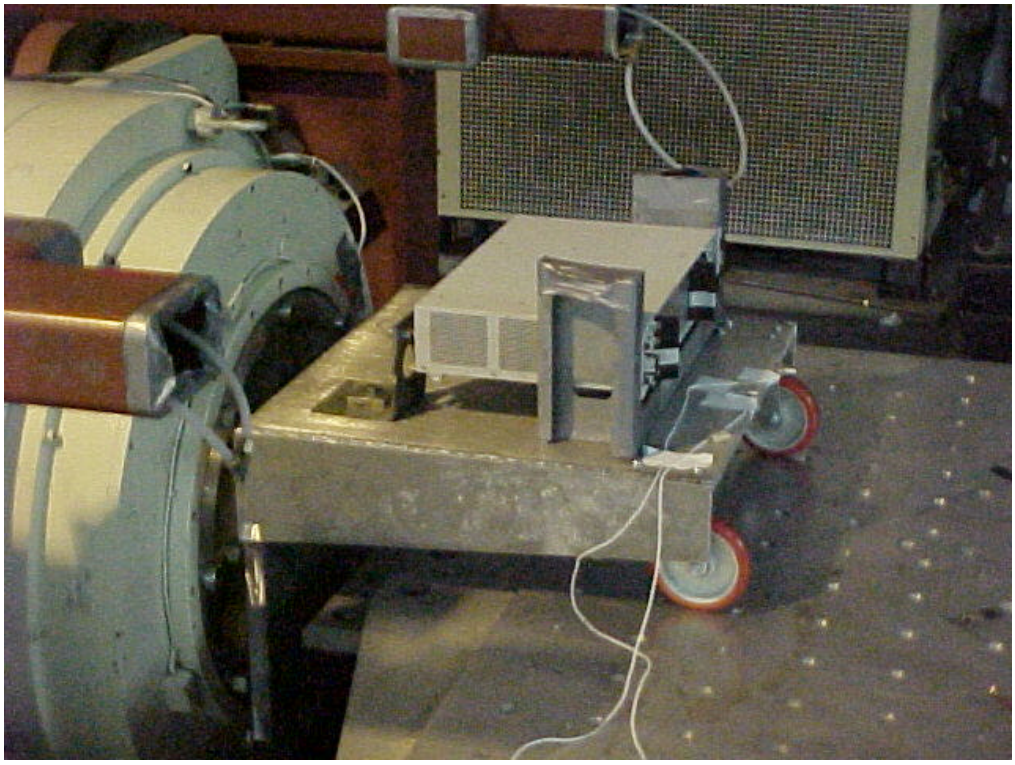

Figure 4: Vibration Test Set-up Side View

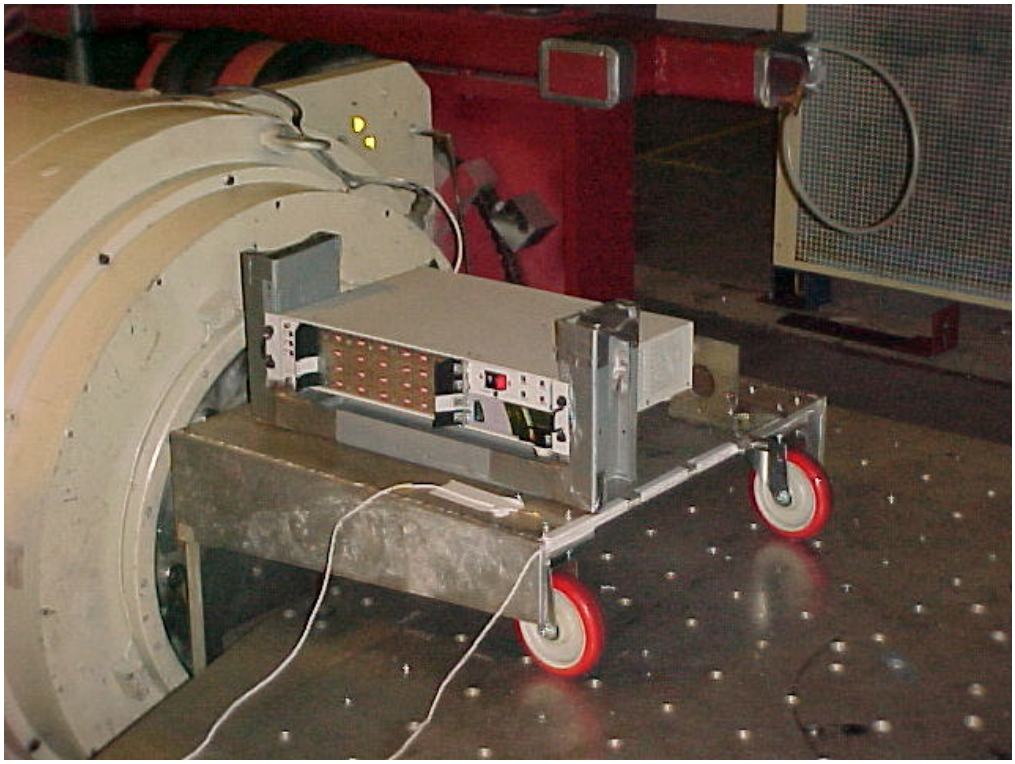

Figure 5: Vibration Test Set-up Front View

Part 3 EUT Technical Specification

EUT Specifications

Applicant	Elma Electronics Inc.	
General Description	2U, 4-Slot Rack-mountable CPCI chassis	
Model	FlexMux Type39C	
Serial #	N/A	
Power Input	28VDC	
Approx. EUT Dimension	17.25" x 11.75" x 3.5"	
	PCB Description	Model/Part Number N/A / Rev A
	One (1) Bustronic Power Interface Board	Dimensions 5.25" x 1.5"
	PCB Description	Model/Part Number N/A
	4 Slot Compact PCI PCB	Dimensions 3.25" x 10.25"
Power Supply	Model Telkoor CPCIDC-3U-200/24	
	Rating 18-36V, 15A Max	

EUT Photos

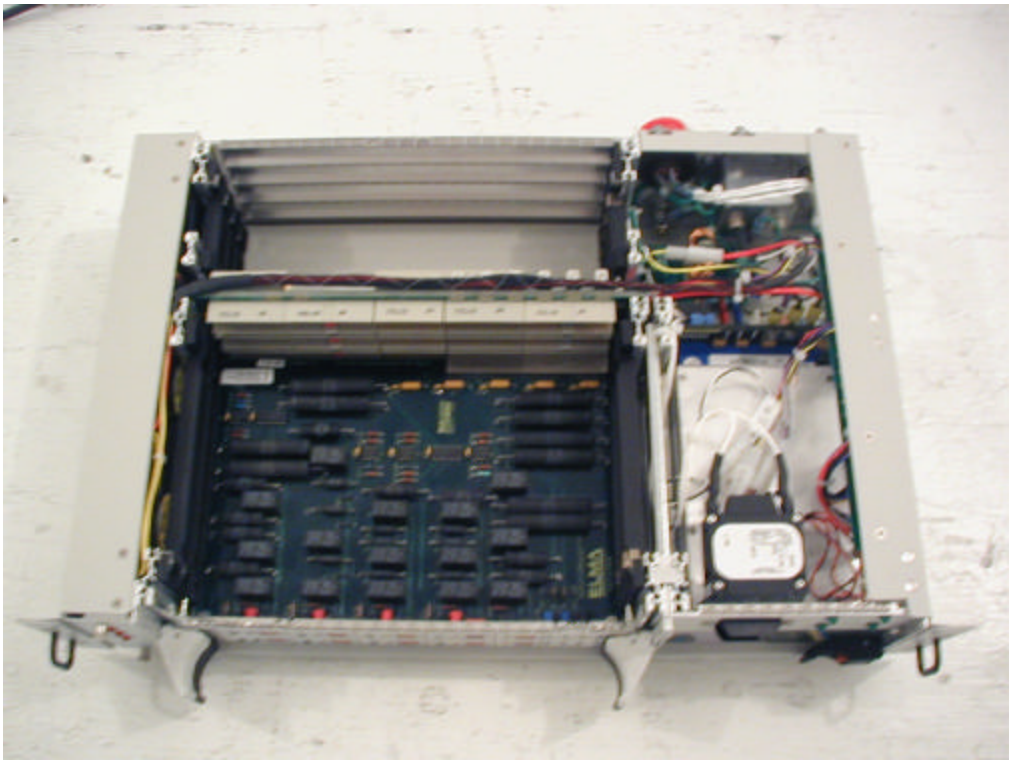

Figure 6: EUT Top View (Internal)

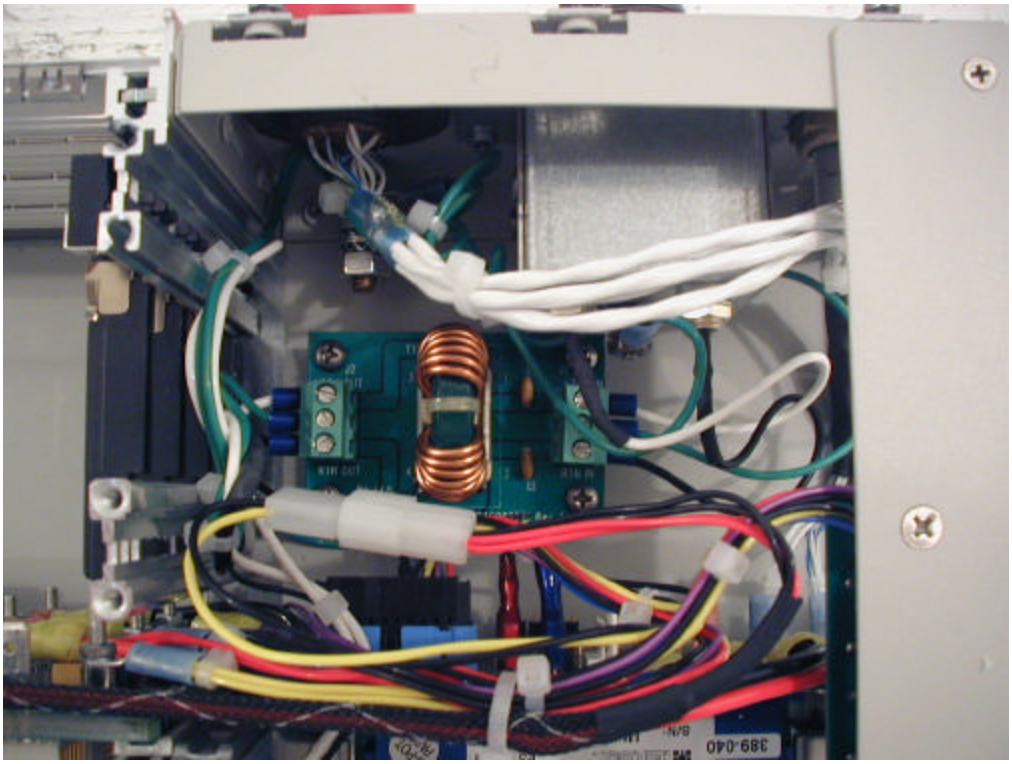

Figure 7: EUT P/S Filter View

EUT Photographs (cont.)

Figure 8: EUT P/S Filter Side View

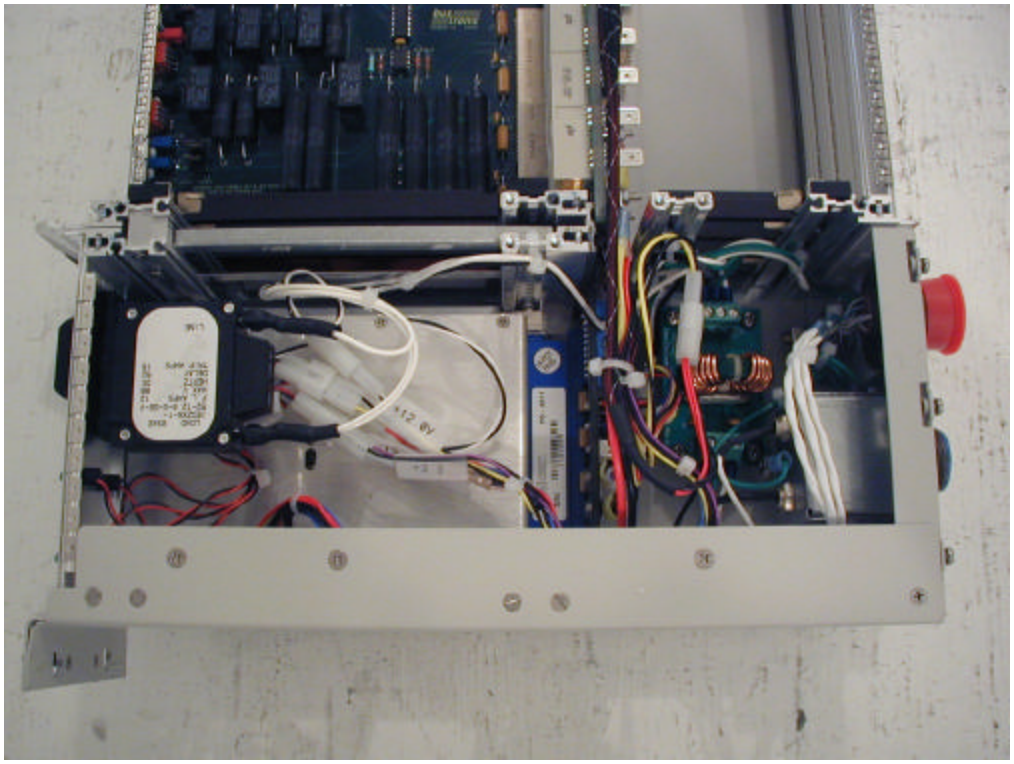

Figure 9: EUT P/S Filter Top View