

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other)		Nr - No.	
OS/SLR/N/ZTB Margareta Persson		52/1521-ROJ 208 423/1Uen	
Dokansv/ Godk - Doc respons/ Approved	Kontr - Checked	Datum - Date	Rev
N/ZTB (Valter Paulsson)		2004-12-21	B
		File	

TEST INSTRUCTIONS FOR SCB-RP

Contents

1	Document History	2
2	Introduction	2
3	Test Objects	2
4	Test Sequence	2
5	Visual check	2
6	ICT and Digital Tests	3
6.1	Required Equipment	3
6.2	Set-up	3
6.2.1	General	3
6.3	Test Execution	3
6.4	Fault Tracing	3
7	Requirements for Acceptance	3
8	Test Flow	3
8.1	Header	3
8.2	Shortingplate	4
8.3	Discharge	4
8.4	APC	4
8.5	CONTINUITIES	4
8.6	LOWR	4
8.7	SHORTS	4
8.8	DELTA SCAN	4
8.9	INDUCTORS	4
8.10	CAPACITORS	4
8.11	RESISTORS	4
8.12	DIODES	4
8.13	POWER ON_B	4
8.14	POWER ON_A	5
8.15	DRIVE LEVEL	5
8.16	ID-Prom	5
8.17	Serial Number Check	5
8.18	FREQUENCIES	5
8.19	MANUALLY FREQUENCY MEASUREMENTS	5
8.20	DIGITAL TESTS	5
8.21	BOUNDARY SCAN	5
8.22	LED TEST	6
8.23	LED V2	6
8.24	TRAILER	6

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other) OS/SLR/N/ZTB Margareta Persson		Nr - No. 52/1521-ROJ 208 423/1Uen	
Dokansv/Godk - Doc respons/Approved N/ZTB (Valter Paulsson)	Kontr - Checked	Datum - Date 2004-12-21	Rev B
		File	

1 DOCUMENT HISTORY

Date	From	To	Changes and reason for changes
2001-08-09	-	A	First released version.
2004-12-21	A	B	Change FXV 109014 to FXV 109 037

2 INTRODUCTION

This document describes the procedures during test of SCB Board.

3 TEST OBJECTS

These instructions are only valid for SCB Board when LPE 207 52/1 or LPE 207 52/2 is used

4 TEST SEQUENCE

The following test sequence is mandatory:

1. Do the visual check, see 5.
2. Execute the test program, see 6.

5 VISUAL CHECK

The following components are not checked at the in-circuit testing and there presence must therefore be secured in another way, e.g. by visual check or other methods in the manufacturing process. Components to be checked according to the manufacturing specification:

Capacitors: All except C13 and C32,

Resistors: R4-R8, R10-R14, R17-R21, R24, R27, R30-R32, R38-R42, R44-R55, R58-R82, R84-R88, R91-R246, R248-R305, R307-R321, R323-R347, R349-R395, R410, RD1-RD15, RD17-RD337, RD339-RD467, RD469-RD568

Diode: V3-V55, VD1-VD4

Mother board IC:s D7, D8, D10, D31, D37, D42-D45, D51

Daughter board IC:s D1, D4, D5, D8, D9, D12, D13, D16, D18, D19, D24-D26, D38

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other)		Nr - No.	
OS/SLR/N/ZTB Margareta Persson		52/1521-ROJ 208 423/1Uen	
Dokansv/Godk - Doc respons/Approved	Kontr - Checked	Datum - Date	Rev
N/ZTB (Valter Paulsson)		2004-12-21	B
		File	

6 ICT AND DIGITAL TESTS

6.1 REQUIRED EQUIPMENT

QTY	CODE	REV	NAME AND DESIGNATION
1	LPE 207 52/1 or LPE 207 52/2	R1A	Teradyne Spectrum 8852
1	FXV 109 037	R1A	Testing Fixture

See 1301-LPE 207 52

6.2 SET-UP

6.2.1 General

Put the Fixture on the Test Head of the Test Equipment and press the INTERFACE VACUUM Button ON and then approve that the Test Equipment and the Testing Fixture are making contact.

6.3 TEST EXECUTION

BOARD VACCUM should be in AUTO

Press the START Button.

No other preparations before and after test are necessary. The requirement for acceptance is that all tests **PASS**.

6.4 FAULT TRACING

Fault Tracing is done with ordinary test instruments such as multimeter and oscilloscope. The Channel Finder could be used to check that component pins are making contact with the fixture and the tester hardware.

7 REQUIREMENTS FOR ACCEPTANCE

All tests in Spectrum 8852 Pass.

8 TEST FLOW

8.1 HEADER

Initiation and declaration of variables

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other)		Nr - No.	
OS/SLR/N/ZTB Margareta Persson		52/1521-ROJ 208 423/1Uen	
Dokansv/ Godk - Doc respons/ Approved	Kontr - Checked	Datum - Date	Rev
N/ZTB (Valter Paulsson)		2004-12-21	B
			File

- 8.2 SHORTINGPLATE
- Disabled, only used for checking interconnects between fixture and tester hardware.
- 8.3 DISCHARGE
- Discharge of capacitors
- 8.4 APC
- The Auto Probe Check
- 8.5 CONTINUITIES
- Verification of the known continuities on the board.
- 8.6 LOWR
- Test of small resistances (less than 5 Ohms).
- 8.7 SHORTS
- Tests for shorts between nails.
- 8.8 DELTA SCAN
- Delta Scan check of D46 and D47.
- 8.9 INDUCTORS
- Analogue test of inductors.
- 8.10 CAPACITORS
- Analogue test of capacitors.
- 8.11 RESISTORS
- Analogue test of resistors.
- 8.12 DIODES
- Analogue test of diodes.
- 8.13 POWER ON_B
- Turns the Power on and measures – 48 V from PS6.
- Turns the power from PS6 off

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other)		Nr - No.	
OS/SLR/N/ZTB Margareta Persson		52/1521-ROJ 208 423/1Uen	
Dokansv/Godk - Doc respons/Approved	Kontr - Checked	Datum - Date	Rev
N/ZTB (Valter Paulsson)		2004-12-21	B
			File

8.14 POWER ON_A

Turns the Power on and measures – 48 V from PS5.

Tests of the two voltage levels 1.8V and 3.3V

8.15 DRIVE LEVEL

Specifies the Drive Levels for the Channels.

8.16 ID-PROM

ICT test of ID-Prom D4.

8.17 SERIAL NUMBER CHECK

Test of ID-Prom data

8.18 FREQUENCIES

Frequency measurement on the mother board of:

- G1
- G2, D27
- D46
- D47

8.19 MANUALLY FREQUENCY MEASUREMENTS

Frequency measurement on the daughter board of:

- G1
- G2
- G5

8.20 DIGITAL TESTS

Test of digital devices.

8.21 BOUNDARY SCAN

Boundary Scan test of the (Boundary Scan (D29, D32, DD17, DD22 and DD23) devices and their surrounding components. The test consists of both Victory generated TAPIT, BICT and VIT test and of manually created cluster tests.

Uppgjord (även faktaansvarig om annan) - <i>Prepared (also subject responsible if other)</i> OS/SLR/N/ZTB Margareta Persson		Nr - No. 52/1521-ROJ 208 423/1Uen	
Dokansv/Godk - <i>Doc respons/Approved</i> N/ZTB (Valter Paulsson)	Kontr - <i>Checked</i>	Datum - <i>Date</i> 2004-12-21	Rev B
		File	

8.22 LED TEST

Visual check that V5, V7-V12 are flashing.

8.23 LED V2

Visual check that MIA led is flashing.

8.24 TRAILER

Ends the test-program, turns off Power, discharge etc.