



Integration Test Report

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Document Approval

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Publish in eB and Distribute to all signatories on the document and the relevant line managers.

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Glossary

B-Engine	The DSP software or bitstream responsible for beamforming.
F-Engine	The DSP software or bitstream responsible for channelisation.
F-X Correlator	A correlator architecture where digitiser data is first channelised (F) per-receptor, and then cross-correlation (X) is calculated per-frequency-channel.
X-Engine	The DSP software or bitstream responsible for correlation.

1 Test Configuration

Configuration Parameter	Value
Test Suite Git Info	0.2-279-g3628032-dirty
Some other software version	x.y.ZZ

2 Result Summary

Test	Result	Duration
Channelisation	passed	4.010 s
Delay Tracking	failed	5.011 s
Baselines	failed	2.006 s

3 tests run, with 1 passing and 2 failing.

Total test duration: 11.027 s

3 Detailed Test Results

3.1 Channelisation

Channelisation Test.

Fulfil requirement ABC.

Outcome: **PASSED** Test start time: 09:39:13 Duration: 4.010 s seconds

Test Configuration	
Channels	4096
Antennas	13
Bandwidth	1712000000.0

3.1.1 Procedure

Setting up SKARAB Dsim	
0.701 s	skarab020406, firmware 0.1
Select a random channel.	
0.705 s	Random channel selected: 42
Sweep frequencies across that channel and capture heaps.	
0.705 s	Setting Dsim frequency to 1
1.706 s	Heap captured.
1.706 s	Setting Dsim frequency to 2
2.707 s	Heap captured.
2.707 s	Setting Dsim frequency to 3

3.709 s	Heap captured.
Draw a plot to illustrate some of the data.	
3.709 s	Making up some numners.
<p>A plot to show you what we mean.</p>	
3.710 s	Plot shown.
Tearing down SKARAB dsim.	
4.012 s	DSim teardown finished.

3.2 Delay Tracking

Delay tracking test.

Fulfilis requirement FGD.

Outcome: **FAILED** Test start time: 09:39:17 Duration: 5.011 s seconds

Test Configuration	
Channels	4096
Antennas	13
Bandwidth	1712000000.0
Enthusiasm	Low

3.2.1 Procedure

Setting up SKARAB Dsim	
0.701 s	skarab020406, firmware 0.1
Set delay model on Antenna 1	
0.702 s	Setting delay model on antenna 1
1.703 s	Antenna 1 delay model confirmed as 345.
Capture 3 heaps, compare the phase, check for within spec.	
2.704 s	Captured heap 1

3.706 s	Captured heap 2
4.707 s	Captured heap 3
Tearing down SKARAB dsim.	
5.032 s	DSim teardown finished.

AssertionError: Phase not within spec!

assert 2 < 1

3.3 Baselines

Baseline test.

Blurb.

Fulfils another requirement.

Outcome: **FAILED**

Test start time: 09:39:22

Duration: 2.006 s seconds

Test Configuration	
Setup	Arbitrary

3.3.1 Procedure

Setting up SKARAB Dsim	
0.701 s	skarab020406, firmware 0.1
Set something.	
1.704 s	Checking that something is set.
1.704 s	Confirmed, something is set properly.
Tearing down SKARAB dsim.	
2.007 s	DSim teardown finished.

assert 9 < 8