



VARISCITE LTD.

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VAR-SOM-MX6

EMC Radiation test

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## Document Revision History

Revision	Date	Notes
1.0	17/Jan/2013	Initial

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# 1 Introduction

This Document presents the VAR-SOM-MX6 EMC radiation test, held at the “THE STANDARDS INSTITUTION OF ISRAEL” EMC test labs ([http://www.sii.org.il/896-en/SII\\_EN.aspx](http://www.sii.org.il/896-en/SII_EN.aspx)).

## 2 Test Set up

Test setup includes VAR-SOM-MX6 Rev 1.0 module assembled on a VAR-MX6CustomBoard Rev 1.1 carrier board, powered by 12V linear power supply.

Dhrystone benchmark was used for 100% CPU utilization.

The following VAR-SOM-MX6 features were enabled:

1. 1.0 GHz dual core @ 100% utilization
2. 24 Bit LCD controller
3. Ethernet controller
4. Audio codec

The following VAR-MX6CustomBoard features were enabled:

1. 3.3V & 5V DC-DC power supply
2. LVDS Display transmitter.
3. USB HUB

## 3 Results

### 3.1 Radiation Spectrum

The blue line represents vertical & horizontal polarity radiation frequency measurements. The red line is the FCC Class B standard limits

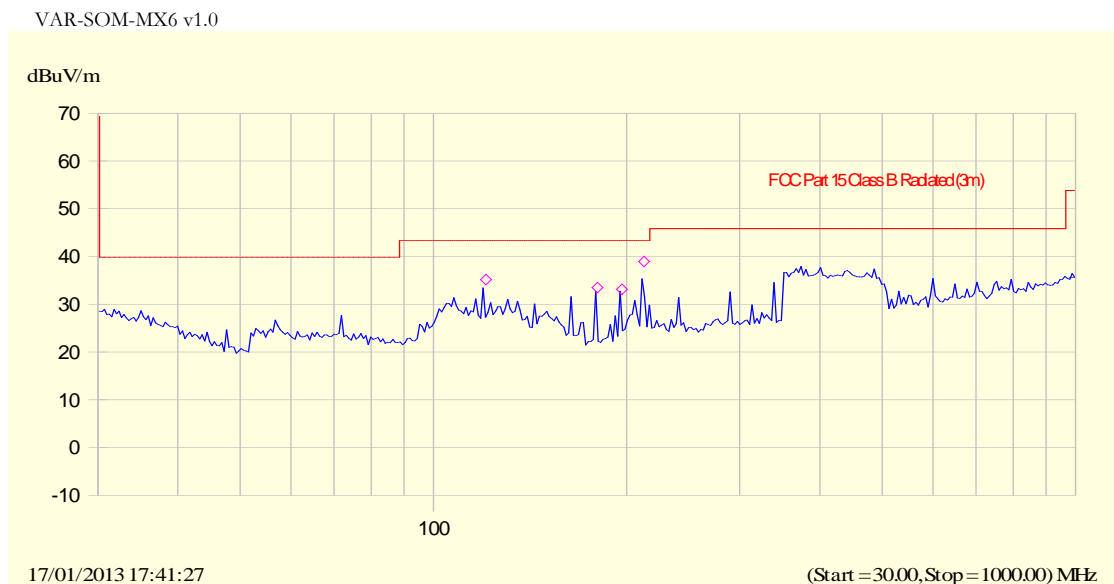


Figure 1 VAR-SOM-MX6 v1.0

## 3.2 Peak Frequencies measurements

Frequency	Peak	QP	QP Limit	QP-QP Limit
MHz	dBuV/m	dBuV/m	dB	dB
119.986	35.3	32.3	43.5	-11.2
178.994	33.7	31.8	43.5	-11.7
195.334	33.3	27.5	43.5	-16.0
211.511	39.1	37.0	43.5	-6.5

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