



VARISCITE LTD.

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VAR-SOM-MX7

EMC Radiation test

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## Document Revision History

Revision	Date	Notes
1.0	27/11/2017	Initial
1.1	03/03/2022	Added results for SOM revisions v1.2, v2.1(ADIN1300 Ethernet PHY) – updated sections 2, 3.1; added sections 3.2,3.3

## Table of Contents

Document Revision History .....	2
Table of Contents .....	3
1 Introduction .....	4
2 Test Set up.....	5
3 Results .....	5
3.1 Radiation Spectrum (VAR-SOM-MX7 Rev 1.12) .....	5
3.2 Radiation Spectrum (VAR-SOM-MX7 Rev 1.2) .....	6
3.3 Radiation Spectrum (VAR-SOM-MX7-5G Rev 2.1) .....	6
4 Legal Notice .....	7
5 Warranty Terms .....	8
6 Contact Information.....	9

# 1 Introduction

This Document presents the VAR-SOM-MX7 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-MX7 module assembled on a VAR-MX7CustomBoard carrier board powered by 5V linear power supply.

All SOM features were enabled, Ethernet ports of the carrier board were connected to an Ethernet switch. A script running continuous scan for WLAN access points and eMMC writes was executed.

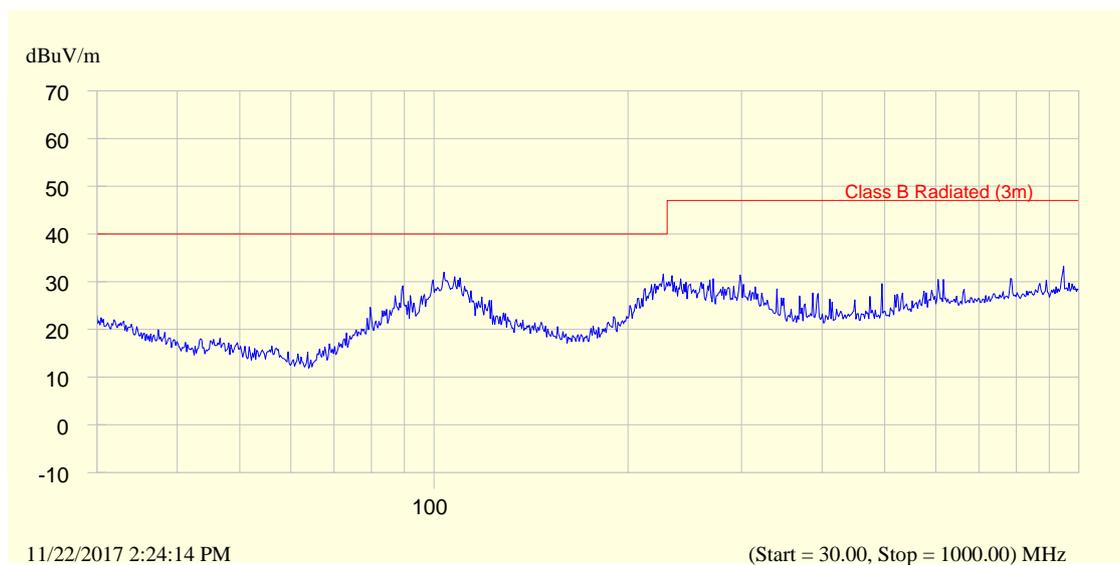
## 3 Results

### 3.1 Radiation Spectrum (VAR-SOM-MX7 Rev 1.12)

SOM: VAR-SOM-MX7 Rev 1.12

Carrier board: VAR-MX7CustomBoard Rev 1.1

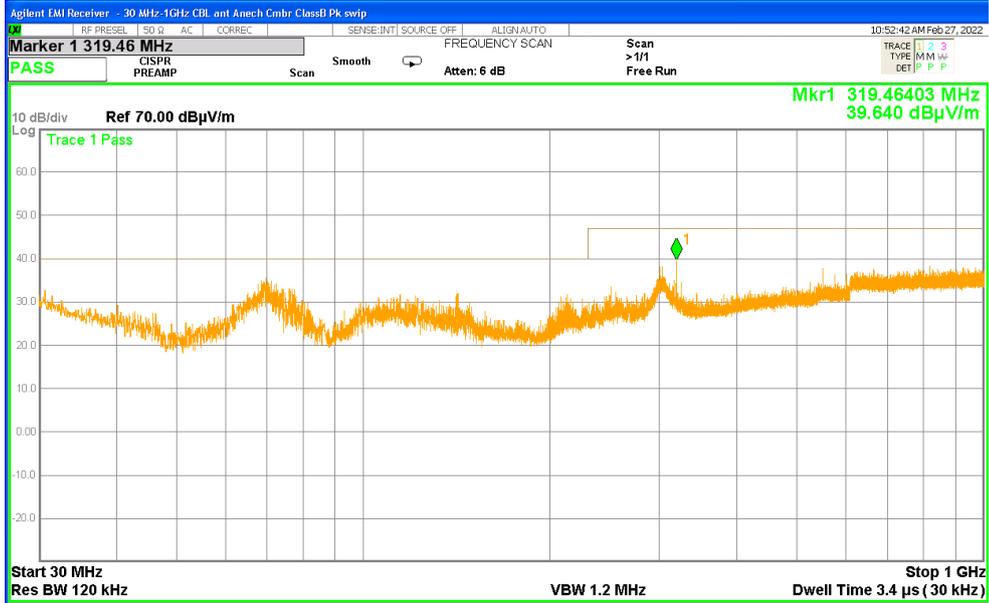
The blue graph represents Vertical & Horizontal polarity radiation frequency measurements. The dotted purple line is the EN55022 Class B standard limits



### 3.2 Radiation Spectrum (VAR-SOM-MX7 Rev 1.2)

SOM: VAR-SOM-MX7 Rev 1.2  
 Carrier board: VAR-MX7CustomBoard Rev 1.1

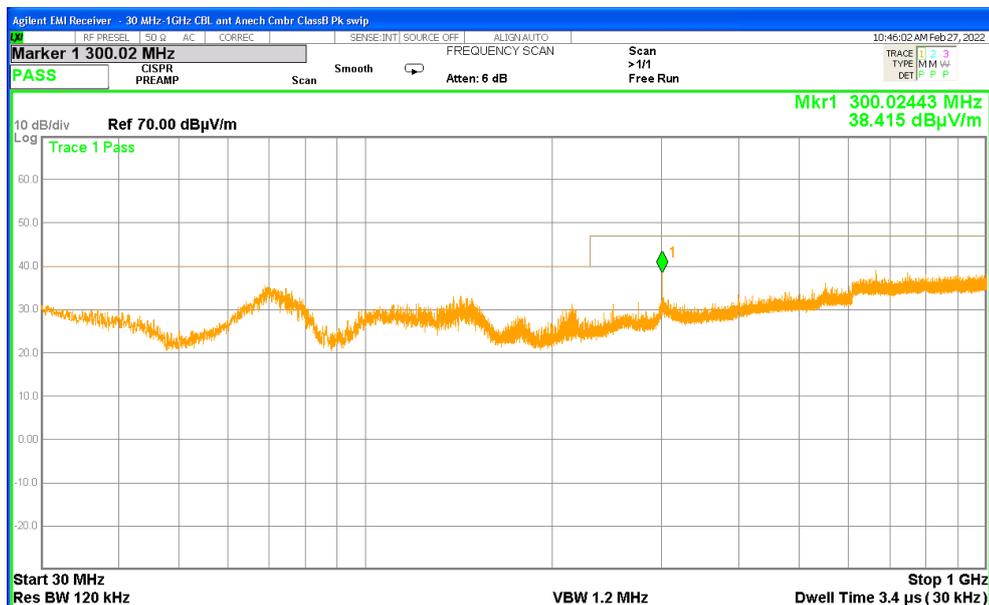
The yellow graph represents Vertical & Horizontal polarity radiation frequency measurements. The yellow horizontal line is the EN5022 Class B standard limits



### 3.3 Radiation Spectrum (VAR-SOM-MX7-5G Rev 2.1)

SOM: VAR-SOM-MX7 Rev 2.1  
 Carrier board: VAR-MX7CustomBoard Rev 1.1

The yellow graph represents Vertical & Horizontal polarity radiation frequency measurements. The yellow horizontal line is the EN5022 Class B standard limits



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