

VARISCITE LTD. VAR-SOM-MX8M-NANO EMC Radiation test

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Document Revision History

Revision	Date	Notes
1.0	17/12/2020	Initial
1.1	03/03/2022	Added results for SOM revision v1.5 (ADIN1300 Ethernet PHY) – updated sections 2, 3.1; added section 3.2

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1 Introduction

This Document presents the VAR-SOM-MX8M-NANO EMC radiation test, held at the "THE STANDARDS INSTITUTION OF ISRAEL" EMC test labs (http://www.sii.org.il/896-en/SII_EN.aspx).

2 Test Set up

Test setup included a VAR-SOM-MX8M-NANO module assembled on a Symphony-Board carrier board, powered by 12V linear power supply. All SOM features were enabled, Ethernet port of the carrier board was connected to Ethernet switch. A script running continuous scan for WLAN access points and eMMC writes was executed.

3 Results

3.1 Radiation Spectrum (SOM revision 1.2A)

SOM: VAR-SOM-MX8M-NANO Rev 1.2A Carrier board: Symphony-Board Rev 1.4A

Note: Isolation resistors RN1,RN2,RN3,R151,R136 were not assembled on the Symphony-Board.

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



3.2 Radiation Spectrum (SOM revision 1.5)

SOM: VAR-SOM-MX8M-NANO Rev 1.5 Carrier board: Symphony-Board Rev 1.6

The yellow graph represents Vertical & Horizontal polarity radiation frequency measurements. The yellow horizontal line is the EN55022 Class B standard limits



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VAR-SOM-MX8M-NANO EMC RADIATION TEST

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