



VARISCITE LTD.

VAR-SOM-SOLO

EMC Radiation test

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Document Revision History

Revision	Date	Notes
1.0	21/12/2014	Initial
1.1	29/06/2022	Added results for SOM revisions v1.2 (ADIN1300 Ethernet PHY) – updated sections 2, 3.1; added sections 3.2

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-SOLO Rev 1.0).....	5
3.2 Radiation Spectrum (VAR-SOM-SOLO Rev 1.2).....	6
4 Legal Notice	7
5 Warranty Terms	8
6 Contact Information.....	9

1 Introduction

This Document presents the VAR-SOM-SOLO 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 includes VAR-SOM-SOLO module assembled on a VAR-SOLOCustomBoard carrier board, powered by 5V linear power supply. All SOM features were enabled.

3 Results

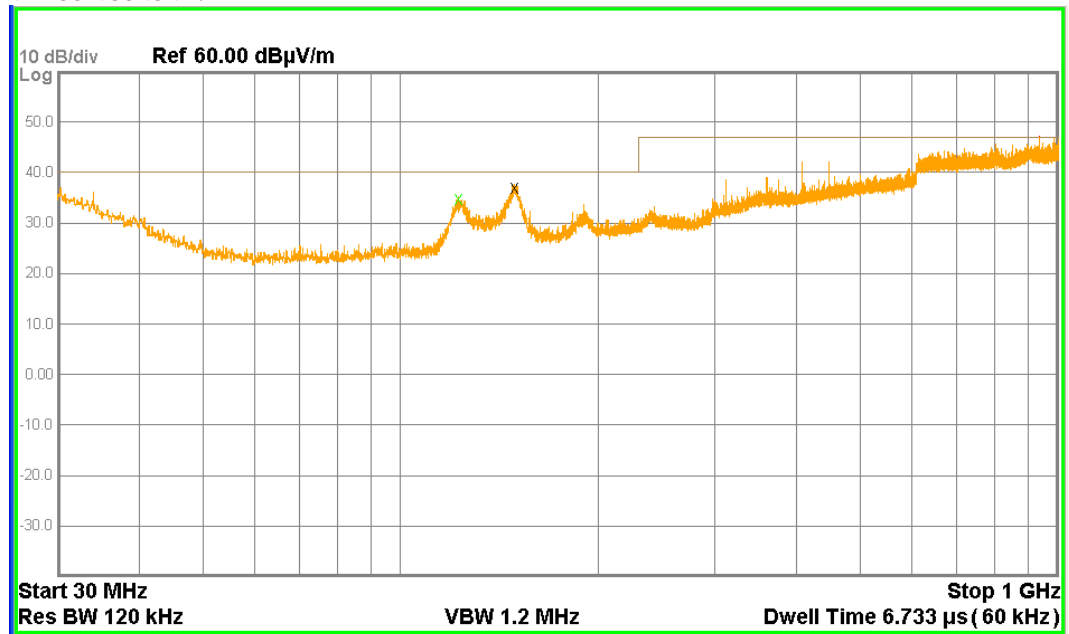
3.1 Radiation Spectrum (VAR-SOM-SOLO Rev 1.0)

SOM: VAR-SOM-SOLO Rev 1.0

Carrier board: VAR-SOLOCustomBoard Rev 1.1

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

VAR-SOM-SOLO v1.0



Peak Frequency Measurement:

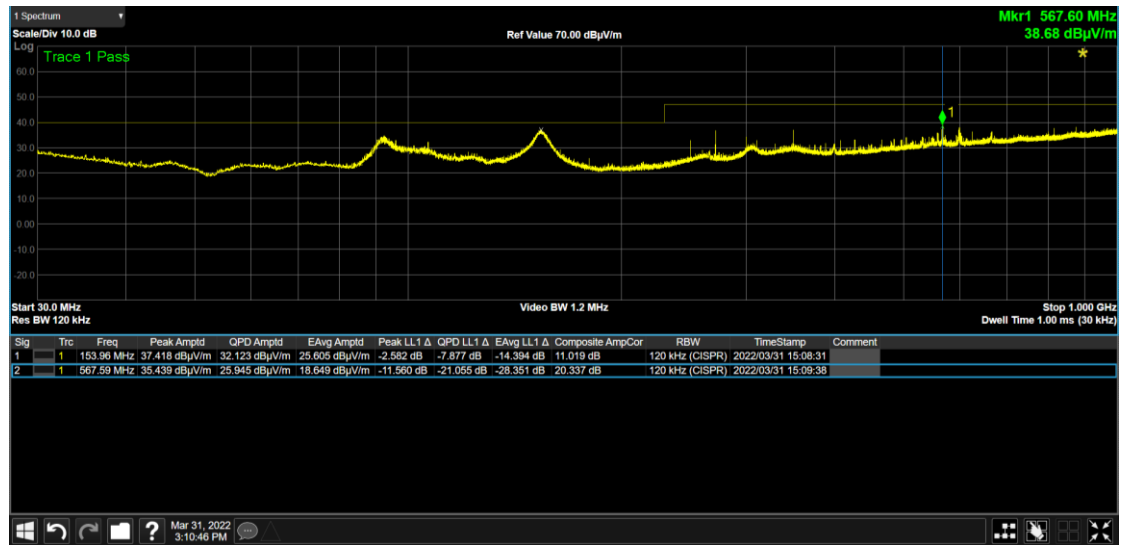
Frequency, Mhz	Peak, dBμV/m	QP, dBμV/m	QP Limit, dBμV/m	Delta QP (dB)
122.340	35.270	31.11	40.00	-8.89
148.500	37.340	33.34	40.00	-6.66

3.2 Radiation Spectrum (VAR-SOM-SOLO Rev 1.2)

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

SOM: VAR-SOM-SOLO Rev 1.2
 Carrier board: VAR-SOLOCustomBoard Rev 1.2

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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