



VARISCITE LTD.

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DART-MX8M-PLUS

EMC Radiation test

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## Document Revision History

Revision	Date	Notes
1.0	10/02/2022	Initial
1.1	29/06/2022	Added results for SOM revision v1.3 (ADIN1300 Ethernet PHY) - updated sections 2, 3.1; added section,3.2

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# 1 Introduction

This Document presents the DART-MX8M-PLUS 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 included a stock DART-MX8M-PLUS module assembled on a VAR-DT8CustomBoard carrier board powered by 5V linear power supply. All SOM features were enabled, Ethernet ports of the carrier board were connected to Ethernet switch. A script running continuous scan for WLAN access points and eMMC writes was executed.

Notes:

1. R94-R97, R114-R117 were assembled with Ferrite Bead P/N: BLM15BA330SN1D
2. LVDS clock set to 37.125MHz

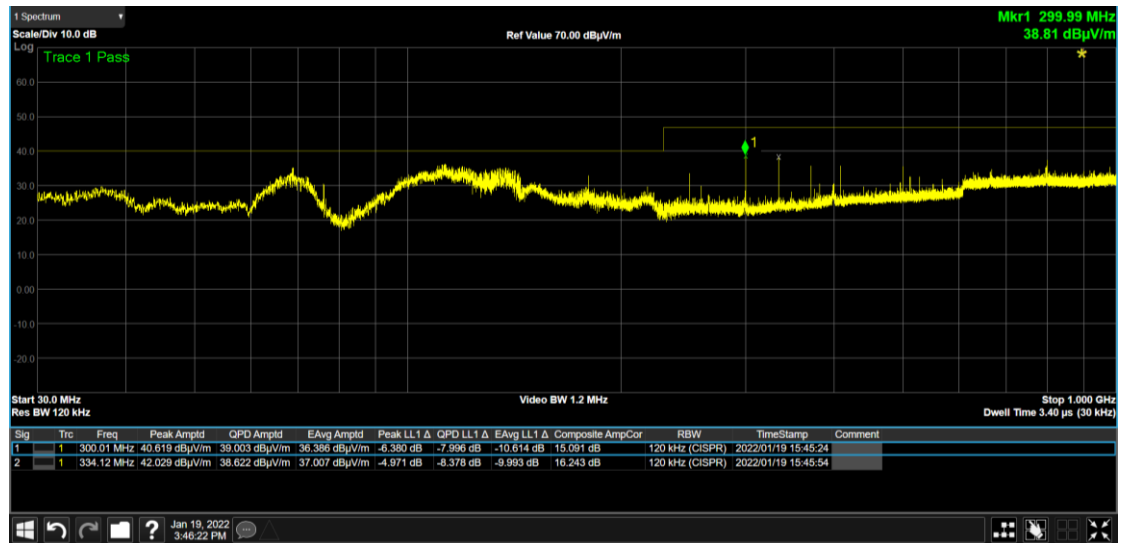
## 3 Results

### 3.1 Radiation Spectrum (SOM Rev 1.2)

SOM: DART-MX8M- PLUS Rev 1.2

Carrier board: VAR-DT8CustomBoard 2.1

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

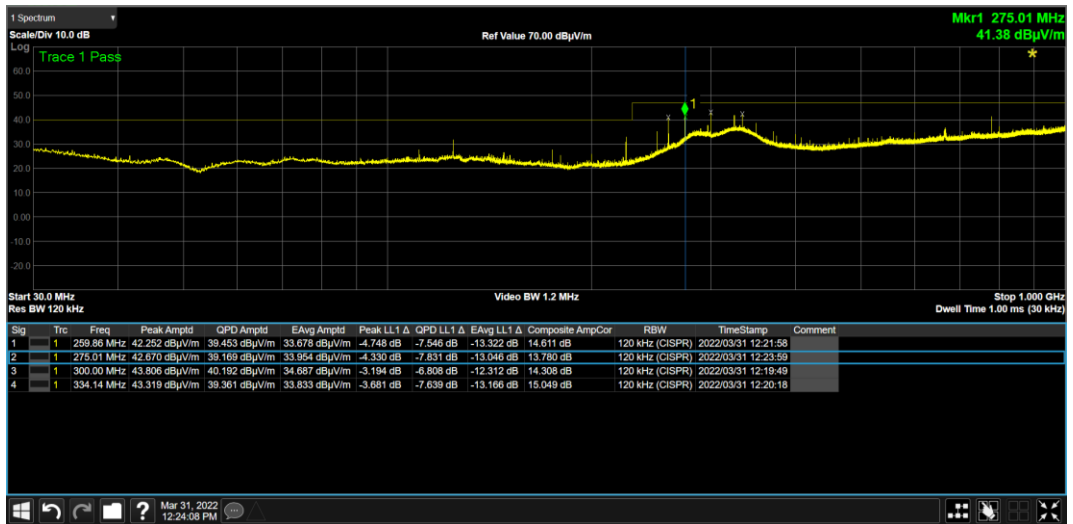


### 3.2 Radiation Spectrum (SOM Rev 1.3)

SOM: DART-MX8M- PLUS Rev 1.3

Carrier board: VAR-DT8CustomBoard 3.0

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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