



PXA270-11 Card Engine

Radiated Emissions Scan: 30 MHz – 1 GHz

White Paper 480

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Revision History

REV	EDITOR	DESCRIPTION	APPROVAL	DATE
A	NJK	-Initial Release	SO	02/01/13

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1 PXA270-11 Card Engine Radiated Emissions Scan

The PXA270-11 Card Engine passes the United States of America Federal Communications Commission (FCC) Class B digital device threshold levels. This testing was completed to provide a baseline scan of the PXA270-11 Card Engine for customers and does not guarantee FCC validation for end-product designs; final testing and passage is the responsibility of the customer.

2 Test Setup

The CENGPXA270-520-11-504HCR configuration of the PXA270-11 Card Engine was scanned for unintentional radiated emissions.

The test results were obtained by running the PXA270-11 Card Engine on a standard SDK baseboard. The only connection to the baseboard was the power supply. The unit under test used software that looped through the Ethernet, RAM, and audio interfaces.

The tests were conducted at [Northwest EMC](http://www.nwemc.com/)¹ in Brooklyn Park, MN.

3 Test Results

Table 3.1 lists the known frequencies generated on the PXA270-11 Card Engine with the functional test code running.

Table 3.1: Frequencies Generated while Running Functional Test Code

Source	Frequency
CORE_CLOCK	520 MHz
Internal bus	208 MHz
SDCLK1	104 MHz
SDCLK0	52 MHz
Peripheral PLL	312 MHz
System oscillator	13 MHz

¹ <http://www.nwemc.com/>

3.1 30 MHz to 1 GHz Scan

Figure 3.1 shows a baseline scan of a fully configured PXA270-11 Card Engine (CENGPXA270-520-11-504HCR). During the scan, the software looped through the peripherals as indicated in Section 2.

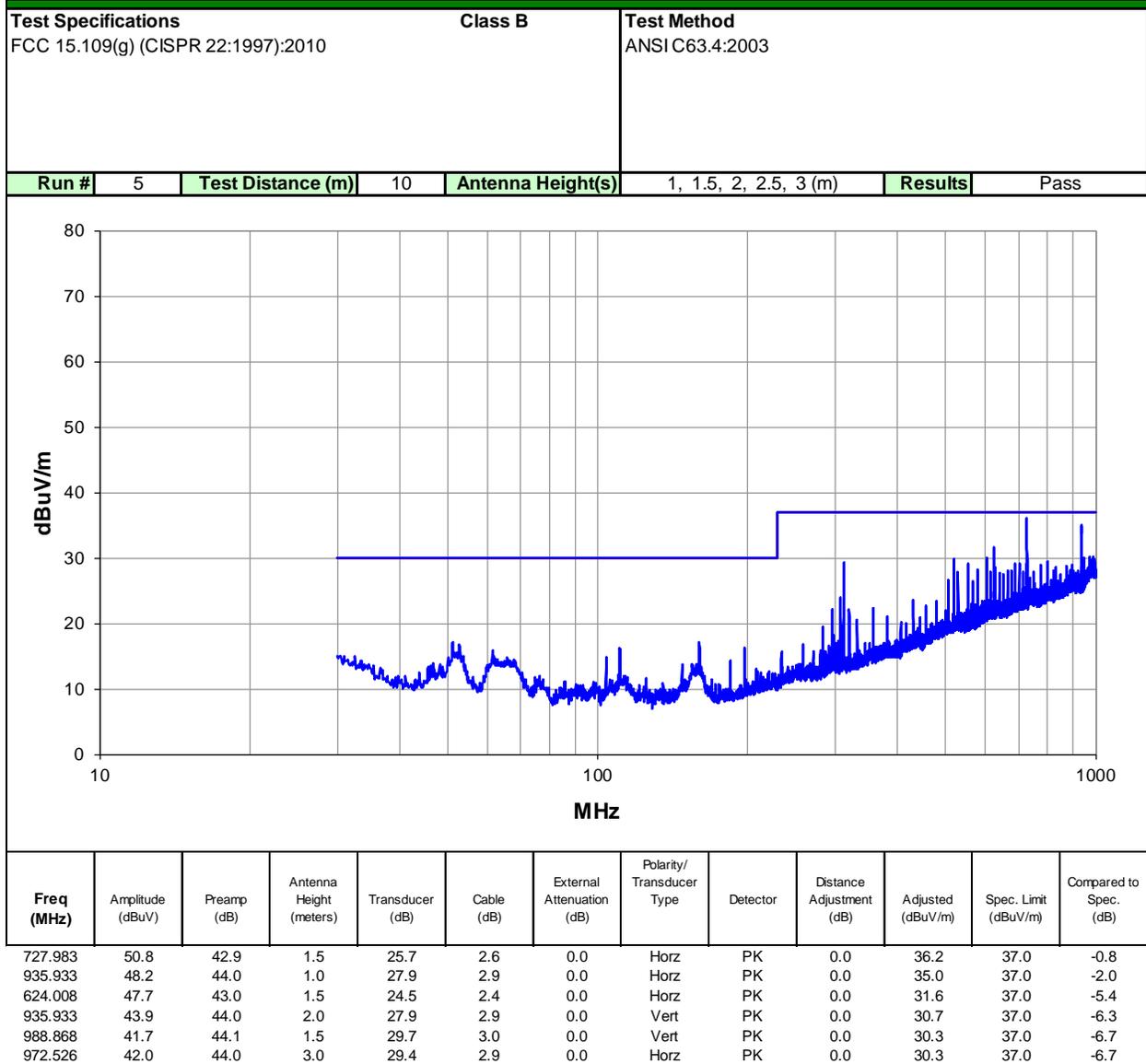


Figure 3.1: PXA270-11 Card Engine Scan (CENGPXA270-520-11-504HCR)

4 Summary

This radiated emissions scan provides a baseline for the performance of the PXA270-11 Card Engine alone. Radiated emissions testing of a final product designed around the PXA270-11 Card Engine is the responsibility of the developer.