

Northwest EMC	TCB Compliance Opinion	Rev. 9/15/03
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Information about the Applicant	
Company Name	Spectrum Technology
Grantee	Itronix Corporation
Address	209 Dayton Street Suite #205
City, State, Zip	Edmonds, WA 98020
Job Number	SPTE0018
Model	IX270-WL3945
FCC ID	KBCIX270-WL3945
Agent	Spectrum Technology, Inc.
Approval Type	Class II Permissive Change
Equipment Class	DSS Part 15, Spread Spectrum Transmitter
Rule Part	15.247DSSS

Industry Canada Information	
Model	
Industry Canada ID	
Rule Part	

Overview

On behalf of Itronix Corporation we request a Class II Permissive Change to the Limited Modular Certification of the embedded Intel, Model: PRO/Wireless 3945ABG, Network Connection card installed in the IX270 Rugged PC under rule Parts 15C and 15E. The purpose of the change is to add four new antennas to the current Certification: Two internal, ABG antennas, (one MAIN and one AUX) and two external vehicular magnetic mount, BG only antennas.

We request that this Certification includes Co-location with the three above referenced Limited Modular Certified Intentional Radiators. Exhibits supporting this request are submitted with this application. NW EMC, Inc. measured the radiated spurious and band edges for each antenna combination covering the requirements for integration of this embedded module into the IX270 host. The IX270 Vehicle Mount option extends many of the PC I/O ports and the switches the RF output of the WAN radio to an external antenna. Placing the IX270 in the cradle automatically causes the cradle contact board to switch the output of the WL3945 transmitter from the internal antenna located in the PC display, to and through the IX270 Vehicle Mount to an SMA connector and then to the external antenna. The external vehicular antenna sold by Itronix with this package is either a 3 or 5 dBi gain antenna manufactured by MaxRad Model: MAXC24503 or BMAXC24505 respectively along with the Model: LMR195 vehicle antenna ¾" magnetic mount and 17 ft of coax.

This is a class II permissive change, therefore only those items affected by this change were addressed in this compliance opinion.

Recommendation

All items have been resolved and completed to my satisfaction; therefore I recommend this application for approval.

Signature



8/12/2006

Dean Ghizzone, TCB Committee

Findings	
Specification	Finding
47 Cfr 1.1307(b),2.1091,2.1093	RF Exposure Hazzard
Finding	The applicant has provided a revised exhibit to address the deficiency.
Resolution	Resolved

Opinions	
Specification Requirements	Description
47 Cfr 2.1033(b)(3)	Installation guide, operating instructions,user manual
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	User Manual.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(4)	Operational description
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Operational Description.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(5)	Frequency block diagram and Schematic diagram
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Block Diagram.pdf,Schematics.pdf

Specification Requirements	Description
47 cfr 2.1033(b)(6)	Test Report
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(6)	Conversions showing how the test results were achieved
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(7)	Internal and external photos
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Internal Photos.pdf, External Photos.pdf

Specification Requirements	Description
Required Exhibit	Test Setup Photo Exhibit
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 1.1307(b),2.1091,2.1093	RF Exposure Hazzard
Opinion	The device does not meet the requirements of the rule. The values used in the RF exposure exhibit do not match the original grant.
Discussion	
Reference	RF Exposure.pdf

Specification Requirements	Description
47 Cfr 15.19	Labeling
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	User Manual.pdf, Label.pdf

Specification Requirements	Description
47 Cfr 15.21	Information for user
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	User Manual.pdf

Specification Requirements	Description
47 Cfr 15.27	Special accessories
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 15.33	Frequency range of tests
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 15.35	Measurement detectors
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
ANSI C63.4 EUT Ports	All EUT ports populated,emissions maximized,Antenna height adjusted
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 15.203	Antenna Requirements
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 15.205	Restricted bands
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 15.207	Power line Conducted emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 15.209	Spurious Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf

Specification Requirements	Description
47 Cfr 15.247(d)	Spurious Radiated Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0018.pdf