

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	SPTE0021
Model	Titan XR1 with MC8765 PCI Express Mini Card
FCC ID	KBCIX270-MC8765
Agent	Spectrum Technology, Inc.
Approval Type	Original
Equipment Class	PCS Licensed Transmitter
Rule Part	22/24

Industry Canada Information	
Model	
Industry Canada ID	
Rule Part	

Overview

On behalf of Itronix Corporation we request a Limited Modular Certification for the Sierra Wireless PCI Express Mini-Card, Model: MC8765 embedded in the IX270 Rugged PC under rule Parts 22H & 24E.

We also request that this Certification include Co-location with the above referenced Limited Modular Certified Intentional radiators. Exhibits supporting this request are submitted with this application. We would like to reference the OEM, Sierra Wireless, Inc. Modular Certification test report prepared by CCS for all of the conducted test data. The radiated spurious and ERP/EIRP measurements made by NW EMC, Inc. would cover the integration of the MC8765 embedded module into the IX270 host with two new antenna combinations.

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 MC8765 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 a 3 dBi gain antenna manufactured by MaxRad Model: BMLPVDB800/1900 along with the Model: LMR195 vehicle antenna $\frac{3}{4}$ " magnetic mount with 17 ft of coax.

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

Opinions	
Specification Requirements	Description
RF Exposure	
Opinion	The output power in the test report does not match the output power used for the RF exposure exhibit.
Discussion	The applicant has provided a revised exhibit to address the deficiency.
Reference	RF Exposure

Opinions	
Specification Requirements	Description
47 Cfr 2.1033(C)(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(C)(8)	DC Voltages and Current
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Tune Up Procedure.pdf

Specification Requirements	Description
47 Cfr 2.1033(c)9)	Tune-up procedure
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Tune Up Procedure.pdf

Specification Requirements	Description
47 Cfr 2.1033(C)(10)	Schematic diagram
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Schematics.pdf

Specification Requirements	Description
47 Cfr 2.1033(c)(11)	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
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-SPTE0021.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-SPTE0021.pdf

Specification Requirements	Description
47 Cfr 2.1046	RF Power Output
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 2.1049	Occupied Bandwidth
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 2.1051	Spurious emissions at antenna terminals
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 2.1053	Field Strength of spurious radiations
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0021.pdf

Specification Requirements	Description
47 Cfr 2.1055	Frequency Stability
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 2.1057	Frequency Spectrum to be investigated
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-SPTE0021.pdf and Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 1.1310	RF Exposure Limits
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	RF Exposure.pdf

Specification Requirements	Description
47 Cfr 22.355	Frequency Tolerance
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 22.913(a)	The ERP of mobile transmitters <= 7 Watts.
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 22.917(e)	Out of Band Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 24.52	RF Exposure Limits
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	RF Exposure.pdf

Specification Requirements	Description
47 Cfr 24.232(b)	Frequency Tolerance
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 24.235	The ERP of mobile transmitters<= 7 Watts.
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675

Specification Requirements	Description
47 Cfr 24.238	Out of Band Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Test Report OEM - MC8675