

Modular / Limited Modular Approval Request

Date: 1/11/2012

Company: BTR Controls, INC

Request for: Modular Approval Limited Modular Approval

Mobile Device Portable Device

Product Name: SeyWave RF Module

Model Number (s): 11-115-0000, 11-115-0001

FCC ID: RDF-SEYWAVE

IC ID: 10823A-SEYWAVE

Device Description: Low power RF module for low to mid data rate applications.

The requirements of FCC Code of Federal Regulations Title 47 Part 15.212 and Industry Canada's RSS-Gen Issue 3 (12-2010) Section 3.2 have been met as shown below:

FCC & IC Modular Approval Checklist:

Modular approval requirement	Yes	No
(a) The radio elements must have the radio frequency circuitry shielded. Physical/discrete and tuning capacitors may be located external to the shield, but must be on the module assembly.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explanation: The module contains a metallic shield which covers all of the components except for the antenna.		
(b) The module shall have buffered modulation/data input(s) (if such inputs are provided) to ensure that the module will comply with the requirements set out in the applicable RSS standard under conditions of excessive data rates or over-modulation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explanation: The module includes 3 separate 32 byte TX and RX FIFO buffers.		
(c) The module shall have its own power supply regulation on the module. This is to ensure that the module will comply with the requirements set out in the applicable standard regardless of the design of the power supplying circuitry in the host device which houses the module.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explanation: The module includes two voltage regulators with one being fed from the other. One is specifically powering the RF circuitry.		

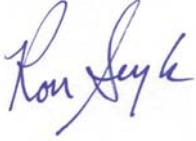
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Modular approval requirement	Yes	No
(d) The module shall comply with the provisions for external power amplifiers and antennas detailed in FCC Part 15.203, 15.204(b) & 15.204(c) and RSS-Gen Issue 3. The equipment certification submission shall contain a detailed description of the configuration of all antennas that will be used with the module.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explanation: The module was tested with two different antennas. The part numbers for each are listed in the user manual for the module.		
(e) The module shall be tested for compliance with the applicable standard in a stand-alone configuration, i.e. the module must not be inside another device during testing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explanation: The module was tested in a standalone state. Communication to set testing modes and power were supplied to the module without affecting the module under test.		
(f) The module must be labeled with its own FCC ID number and shall comply with Industry Canada's Category I equipment labeling requirements.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explanation: The module includes a label located on the shield which complies to the FCC and IC labeling requirements. Included in the user manual is a note to end users to properly label the final product.		
(g) The module shall comply with applicable FCC & Industry Canada RSS-102 exposure requirements, which are based on the intended use/configurations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explanation: The module is compliant with applicable RF exposure requirements.		
(h) Is the modular device for an Industry Canada licensed exempt service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explanation: The module does not require licensing for use.		
(FCC - additional) The modular transmitter must comply with any specific rules or operating requirements that ordinarily apply to a complete transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements. A copy of these instructions must be included in the application for equipment authorization.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Explanation: The user manual for the module states the allowed usage.		

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Please contact me if you have any further questions. Thank you for your attention to this matter.

Regards,

A handwritten signature in blue ink that reads "Ron Seyk". The signature is written in a cursive style with a large initial "R" and a long, sweeping underline.

Name of responsible person: Ron Seyk

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