

December 15, 2016

Federal Communications Commission
Washington, DC 20554.

Industry Canada
Certification and Engineering Bureau
3701 Carling Avenue Bldg. 94,
P.O. Box 11490, Station "H",
Ottawa, Ontario, K2H 8S2

Dear Sir or Madam:

Nordic ID hereby request modular approval for Nordic ID SDC-SSD40NBT WLAN/Bluetooth module.

The following paragraphs detail the eight requirements for modules and explain how the module meets those requirements. (FCC Part 15.212 Requirements for Single Modular Transmitters; includes RSS GEN Section 3.2.2)

The module meets all of the technical specifications applicable to the frequency band of operation.

1. The radio elements of the modular transmitter must have their own RF shielding.

- The module contains a metallic shield on the top part of the radio.

2. The modular transmitter must have buffered modulation/data inputs

- Data to the modulation circuit is buffered by the Broadcom chip.

3. The modular transmitter must have its own power supply regulation.

- The module contains its own power supply regulation and the RF reference oscillator is contained within the module. Power supply regulation is provided via component U1.

4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c) and RSS-GEN, 3.2.2.

- The certification submission contains a detailed description of the configuration of any antenna that will be used with the module. The SDC-SSD40NBT User's Guide contains this information.

- Installation instructions for the module explain that only these antennas may be used with the device and that the end user shall not be able to access the antenna port or change antennas.

- The module connects to its antennas via Hirose U.FL connectors. These connectors are nonstandard (unique) connectors.

5. For the FCC (and IC), the modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in Section 15.207.

- Test data contained in this application is for the device tested as a stand-alone device. Radiated spurious emissions data and AC conducted emissions data demonstrating compliance with the requirements of Part 15 of the FCC rules for intentional radiators has been provided.

6. The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC/IC identification number(s).

- The module is appropriately labeled (refer to the label and label location drawings contained within this application). Instructions to the end user regarding the labeling requirements for host devices are included in this application.

7. 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.

- The module complies with the specific rules and operating requirements for which certification is sought. Instructions to the OEM installer or end user regarding such requirements for use in host devices are included in this application.

8. The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.

- The module meets the requirements for a portable device that may be used at separation distances of less than 20cm from the human body.

Refer to the documents: "FCC Statement of Human Exposure to Radiofrequency Electromagnetic Field SDCSSD40NBT" and

"IC Statement of Human Exposure to Radiofrequency Electromagnetic Field SDCSSD40NBT"

9. Is the modular device for an IC licensed exempt service?

- Yes.

Modular Approval Letter	Yes	No
(a) The radio elements must have the radio frequency circuitry must be shielded. Physical/discrete and tuning capacitors may be located external to the shield, but must be on the module assembly.	X	
(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.	X	
(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 supply circuitry in the host device which houses the module.	X	
(d) The module shall comply with the provisions for external power amplifiers and antennas detailed in this standard. The equipment certification submission shall contain a detailed description of the configuration of all antennas that will be used with the module.	X	
(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.	X	
(f) The module shall comply with the Category I equipment labeling requirements	X	
(g) The module shall comply with the applicable RSS-102 exposure requirements, which are based on the intended use/configurations.	X	
(h) Is the modular device for an Industry Canada licensed exempt service?	X	

Sincerely,



Rauno Nikkilä
Certification Specialist
Nordic ID Oy