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## A.2 - Special requirement for Modular application

The following requirements are fulfilled:

- 1) The modular transmitter must have its own RF shielding:

The RF module used on the board fulfils the emission requirements of the FCC rules without additional shielding.

- 2) The modular transmitter must have buffered modulation/data inputs:

The module has a memory management unit inside of the IC. The processor interfacing with the external application by means general purpose I/O ( GPIO) , Uart, SPI. The processor interfaces also the RF part of the module exchanging data and command with it. Inside the processor a flash memory is available to download the customer application and the ZigBee profiles.

- 3) The modular transmitter must have its own power supply regulation:

The IC contains an own voltage regulation. In case of changes in the supply voltage VCC (for example caused by temperature changes or other effects), the internal voltage will be stabilized.

- 4) The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204:

The RF module is for OEM (Original Equipment Manufacturer) integration only. The end-user product will be professionally installed in such a manner that only the authorized antenna is used.

- 5) The modular transmitter must be tested in a stand-alone configuration:

The RF module was tested in a stand-alone configuration.

- 6) The modular transmitter must be labelled with its own FCC ID number:

The RF module will be labelled with its own FCC ID number. When the module is installed inside the end-product, the label is not visible. The OEM manufacturer is instructed how to apply the exterior label.

- 7) The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements:

The EUT is compliant with all applicable FCC rules. Detail instructions are given in the product Users Guide.

- 8) The modular transmitter must comply with any applicable RF exposure requirements.

- Maximum measured power output: 1.90 mW (2.77 dBm )
- Maximum antenna gain: 2.2 dBi (see also FCC test report)

Maximum permissible exposure defined in 47 CFR 1.1310: 1 mW/cm<sup>2</sup>.

The RF module operates at low power level so it does not exceed the Commission's RF exposure guidelines limits; furthermore, Spread spectrum transmitters operate according to the Section 15.247 are categorically excluded from routine environmental evaluation.