



dresden elektronik ingenieurtechnik gmbh • Enno-Heidebroek-Str. 12 • D-01237 Dresden

Federal Communications Commission
Equipment Authorization Branch
7435 Oakland Mills Rd
Columbia MD 21046-1609

Dresden, 26th Juli 2012

Request for limited split modular approval

agent: dresden elektronik ingenieurtechnik gmbh
client: Atmel Automotive GmbH
FCC ID: VNR-E33SD-X5B-00
FCC Part 15 Certification

Dear Sir or Madam,

the Atmel Automotive GmbH, module FCC ID: VNR-E33SD-X5B-00 is seeking FCC authorization as a Limited Split Modular Device.

The wireless radio node consists of:

1. Radio Extender Board REB233SMAD(AVR2162), assembled with
2. Two 2.4GHz Omni Rubber Antennas M35-S, mounted on
3. REB Controller Base Board REB-CBB, which hosts an application firmware available with
4. Atmel AVR2025: IEEE 802.15.4 MAC Software Package

Part 1. and 4. are being certified and explain the Atmel series of controller boards.

The following requirements of the FCC Public notice DA00-1407 are fulfilled:

1. The modular transmitter must have its own RF shielding

The radio part of the module is covered with its own RF shielding. See enclosure product photos in exhibit "external photos".

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

The module has a memory management unit inside of the IC. It buffers the data inputs from UART and USB terminal.

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, the internal voltage will be stabilized.



4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204c

The transmitter shall only be used with the tested approved antenna. This component is provided together with the transmitter and attached to the transmitter. In accordance with FCC public requirements DA00-1087 it is allowed to use a standard antenna connector when professional installation is required for the transmitter.

The transmitter is intended for use for further engineering, development, demonstration, or evaluation purposes only, accordant with the user manual important notice. The EUT is designed to provide a reference design for the implemented single chip microcontroller to the customer.

If the customer decides to use the single chip microcontroller for an end user application, he have to engineer and certify the end user application with the help of this limited approved module reference design and compliant to FCC part 15 regulations including a new FCC ID.

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

The EUT was tested in a battery powered stand-alone configuration. See also test setup photos in Exhibit "Test report".

6. The modular transmitter must be labeled with its own FCC ID number

The EUT will be labelled with ist own FCC ID number. The label is specified in Exhibit "Label Sample". If the module is installed inside of an end-product, the label will not be visible. In this case the OEM customer will be instructed to 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 User Manual.

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

This OEM module is approved for use in products operating as mobile transmitting device with respect to 2.1091 and 2.1093. This grant is only valid when the device is sold to OEM integrators. OEM manufacturers and OEM integrators are instructed to ensure that the end may not be provided with the module installation instructions. OEM integrators and end-users must be provided with transmitter operation conditions for satisfying RF exposure compliance.

Sincerely,

Signature

Name

Michael Fleischmann

Title

Test Engineer

Company

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