

06/07/2007

Federal Communications Commission
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Request for modular approval

Panasonic Electronic Devices Europe GmbH
FCC ID: T7VEM250B
FCC Part 15 Certification

Gentlemen,

Dear Application Examiner,
the Panasonic Electronic Devices Europe GmbH, module FCC ID: T7VEM250B is seeking FCC authorization as a modular transmitter. The requirement of the FCC Public notice DA00-1407 are met.

The following requirements are fulfilled:

1. The modular transmitter must have its own RF shielding

The radio portion of the module is contained in its own RF shielding. See enclosed 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 and external. It buffers the data inputs from UART and GPIO 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 (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 15.204c

The transmitter shall only be used with the tested integral antenna or with an antenna that has less antenna gain. Requirements for the use of external antennas are specified in Exhibit "Declaration_about_antenna_configurations" FCC ID: T7VEM250B.

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

The EUT was tested in a stand-alone configuration. The module was fixed in the Panasonic Development Kit during the test. See also test setup photos in test report (Exhibit Test Report FCC Part 15.247). For radiated measurements, the required distance of 10 cm was ensured by a special connector.

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

The EUT will be labelled with its own FCC ID number. The label is specified in Exhibit "Label Sample/Loc". 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. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: T7VEM250B" or "Contains FCC ID: T7VEM250B." Any similar wording that expresses the same meaning may be used.

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.

MPE calculation:

- P the maximum measured power output is 75mW (18,75 dBm).
G the maximum antenna gain is 2 dBi = numeric gain 1.58.
Smax the maximum permissible exposure is defined in 47 CFR 1.1310 with 1 mW/cm².
R the distance of 20cm from the EUT's transmitting antenna where the exposure level reaches the maximum permitted level is calculated using the general equation:

$$S = P * G / 4R^2 \quad S = 0.024 \text{mW/cm}^2$$

To comply with FCC RF Exposure requirements, the Original Equipment Manufacturer (OEM) must ensure that the approved antenna in the previous table must be installed and/or configured to operate with a separation distance of 20cm or more from all persons to satisfy RF Exposure compliance.

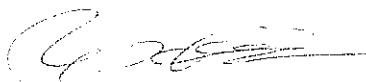
This device is a Modular Approval to be used for fixed and mobile applications in the 2.4 GHz band and contains functions that are not operational in U.S. Territories.

Portable applications or all application in 900 MHz band will be considered unauthorized equipment and will be required a separate FCC equipment authorization.

The EUT meets the requirements of FCC section 15.247. This grant is valid End users may not be provided with the module installation instructions. OEM integrators and end users must be provided with transmitter operating conditions for satisfying RF exposure compliance.

Sincerely,

Signature



Name

Yoshimitsu Hioki

Title

Managing Director

Company

Panasonic Electronic Devices Europe GmbH