

## **Modular Approval Letter**

09-24-15

FEDERAL COMMUNICATIONS COMMISSIONS

Authorization and Evaluation Division 7435 Oakland Mills Road

Columbia. MD 21046

Subject: Modular Approval Letter

The Device, FCC ID: <u>2AFST-G1D</u>, is seeking FCC authorization as a modular transmitter. The EUT meets the requirement for modular approval as detailed in FCC Public Notice DA 00-1407. Compliance to each of the requirements is described below:

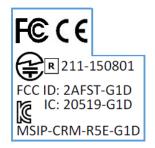
- 1. The modular transmitter must have its own RF shielding.
  - RL78/G1D-SK has a metal shield on it.



- 2. The modular transmitter must have buffered modulation/data inputs
  - The module only has digital data interface input/output with each pin being buffered.
- 3. The modular transmitter must have its own power supply regulator
  - RL78/G1D-SK uses RL78/G1D IC and this device has an onboard DC-DC regulator
  - Datasheet http://am.renesas.com/products/mpumcu/rl78/rl78g1x/rl78g1d/Documentation.jsp
- 4. The modular transmitter must comply with the antenna requirement of section 15.203 and 15.204(c)
  - RL78/G1D-SK uses Pulse W3008 chip antenna
  - Datasheet -

 $http://www.pulseelectronics.com/products/old_antennas/products\_solutions/antennas_for_wireless\_devices/wd_antennas/w3008c_ceramic_24_ghz_bluetooth_wlan_wifi$ 

- 5. The modular transmitter must be tested in a stand-alone configuration
  - RL78/G1D-SK can be put in test mode by using a PMOD to E1 debugger connector. E1 Debugger connects to a PC. FCC lab. test report shows stand-alone testing method.
- 6. The modular transmitter must be labeled with its own FCC ID number
  - Each module will have its own label with FCC ID



7. The modular transmitter must comply with any specific rule or operating requirements and the manufacturer must provide adequate instruction along with the module to explain any such requirements

- The User's Manual provides the appropriate information regarding operating requirements as follows:

## "FCC CAUTION:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20cm or more away from person's body."

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- 8. The modular transmitter must comply with any applicable RF exposure requirements
  - The module is limited to 1.7dBm peak EIRP, which is well under the FCC requirement.

Sincerely Yours,

Client's signature

Client's name – Ash Patel Client's title – Sr Staff Segment Marketing Manager Company name & address – Renesas Electronics America, Inc 2801, Scott Blvd, Santa Clara, CA – 95050.