



Jan, 29 2020

Dear Application Examiner:

KOYO ELECTRONICS INDUSTRIES CO. LTD., FCC ID: 2AVNJ-0001 is seeking modular approval. The radio meets the requirements for modular approval as detailed in (reference FCC 15.212 and FCC KDB 996369) and (Specification: FCC 15.247:2019). Compliance to each of the requirements is described below:

1. "The modular transmitter must have its own RF shielding." The radio portion of the module is contained in its own RF shielding. The shielding is installed at the factory. Please see the Internal Photos exhibit.
2. "The modular transmitter must have buffered modulation/data inputs." The EUT has buffered data inputs to insure compliance with Part 15 requirements under conditions of excessive data rates or over-modulation. Please see the Schematics exhibit.
3. "The modular transmitter must have its own power supply regulation." The EUT has its own power supply regulation to insure compliance with Part 15 requirements regardless of the quality or level of external DC supplying the module from the host unit. Please see Schematics exhibit. Also, the technical report exhibit contains AC power line conducted emissions data taken with the EUT powered from a linear power supply that contains no EMC suppression components.
4. "The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c)." The EUT meets the FCC antenna requirements. Please see Antenna information exhibit and internal photos exhibit.
5. "The modular transmitter must be tested in a stand-alone configuration." The EUT was tested in a stand-alone configuration. The module was greater than 10 cm from the host device. Please see test setup photos exhibit and technical report exhibit.
6. "The modular transmitter must be labeled with its own FCC ID number." The EUT is labeled with its own FCC ID number. Please see Label and Location (FCC ID) exhibit.
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 for maintaining compliance are given in the User Manual.



8. "The modular transmitter must comply with any applicable RF exposure requirements." The EUT is compliant with all applicable RF exposure requirements. Please see RF Exposure Exhibit.

9. The C2-02CPU and C2-03CPU have two boards.

The C2-CPU RADIO BOARD of C2-02CPU and C2-03CPU uses ESP32-PICO-D4, and Wireless LAN and Bluetooth circuit are exactly the same.

The difference between C2-02CPU and C2-03CPU is

The C2-03CPU has ports of Ethernet Port (RJ45), RS-232, and RS485.

The Ethernet Port (RJ45), RS-232, and RS485 are configured on a board different from the C2-CPU RADIO BOARD.

Please contact me if you have additional questions. Your attention to this matter is greatly appreciated.

Best regards,

KOYO ELECTRONICS INDUSTRIES CO. LTD.

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