



Regulatory Engineering

Federal Communications Commission Office of Engineering and Technology Equipment Authorization Division 7345 Oakland Mills Road Columbia MD 21046

September 10, 2014

SUBJECT: FCC Application for FCC ID: H9PRA1202

To Whom It May Concern:

I hereby appoint UltraTech Engineering Labs Inc. (UltraTech) to act as my agent in preparation of this application for authorization of above equipment under F.C.C. Rules.

The applicant hereby certify that neither the applicant nor any party to the application is subject to a denial of Federal benefits, that include FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. §862 because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the definition of a "party" for these purposes.

I also certify that the information provided, properly describe the device or system for which authorization is required.

I, hereby attest to the fact that we will apply the Verification Authorization procedure to the Part 15B - Unintentional Radiator portion of this composite filing.

I, hereby request the following documents submitted with this application for certification be withheld from public disclosure as per Section 0.457 & 0.459 of FCC Rules.

Operational Description Block Diagram Schematics Parts List

The above materials contain trade secrets and proprietary information not customarily released to the public. The public disclosure of these materials may be harmful to the applicant and provide unjustified benefits to its competitors.

I, hereby confirm that the following requirements per FCC PART 15 Unlicensed Modular Transmitter Approval of Sec 15.212 & Pubic Notice # DA 00-1407 are met for Modular Approval certification:





Modular Approval Checklist:

| Modular approval requirement | Yes | No |
|---|-----|----------------------|
| The modular transmitter must have its own RF shielding. This is intended to ensure that the module does not have | Yes | |
| to rely upon the shielding provided by the device into which it is installed in order for all modular transmitter | | |
| emissions to comply with Part 15 limits. It is also intended to prevent coupling between the RF circuitry of the | | |
| module and any wires or circuits in the device into which the module is installed. Such coupling may result in | | |
| non-compliant operation. | | |
| The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the | Yes | |
| module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation. | | |
| The modular transmitter must have its own power supply regulation. This is intended to ensure that the module | Yes | |
| will comply with Part 15 requirements regardless of the design of the power supplying circuitry in the device into | | |
| which the module is installed. | | |
| The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c). The | | NO – all the devices |
| antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the | | using RA1202 are |
| module and the antenna, including the cable). Any antenna used with the module must be approved with the | | professionally |
| module, either at the time of initial authorization or through a Class II permissive change. The "professional | | installed |
| installation" provision of Section 15.203 may not be applied to modules. | | |
| The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another | Yes | |
| device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 | | |
| emission limits regardless of the device into which it is eventually installed. Unless the transmitter module will be | | |
| battery powered, it must comply with the AC line conducted requirements found in Section 15.207. AC or DC | | |
| power lines and data input/output lines connected to the module must not contain ferrites, unless they will be | | |
| marketed with the module (see Section 15.27(a)). The length of these lines shall be length typical of actual use or, | | |
| if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module | | |
| and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during | | |
| testing shall be unmodified or commercially available (see Section 15.31(i)). | | |
| The modular transmitter must be labeled with its own FCC ID number, and, if the FCC ID is not visible when the | Yes | |
| module is installed inside another device, then the outside of the device into which the module is installed must | | |
| also display a label referring to the enclosed module. This exterior label can use wording such as the following: | | |
| "Contains Transmitter Module FCC ID: XYZMODEL1" or "Contains FCC ID: XYZMODEL1." Any similar | | |
| wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example | | |
| of which must be included in the application for equipment authorization, or, must provide adequate instructions | | |
| along with the module which explain this requirement. In the latter case, a copy of these instructions must be | | |
| included in the application for equipment authorization. | | |
| The modular transmitter must comply with any specific rule or operating requirements applicable to the | Yes | |
| transmitter and the manufacturer must provide adequate instructions along with the module to explain any such | | |
| requirements. A copy of these instructions must be included in the application for equipment authorization. For | | |
| example, there are very strict operational and timing requirements that must be met before a transmitter is | | |
| authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation | | |
| under Section 15.231(e), in which case there are separate field strength level and timing requirements. | | |
| Compliance with these requirements must be assured. | | |
| The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in | Yes | |
| Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), | | |
| require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF | | |
| Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 | | |
| are required to address RF Exposure compliance in accordance with Section 15.247(b)(4). Modular transmitters | | |
| approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure | | |
| concerns, typically by providing specific installation and operating instructions for users, installers and other | | |
| interested parties to ensure compliance. | | |

Respectfully,

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