| Applica | Applicant/Grantee Broadcom Corporation | | | | | | | | | |
|---|--|--------------------------|---|--|--------------|--|--|--|--|--|
| | FCC ID: QDS-BRCM1084 | | | | | | | | | |
| Section 15.212 Modular Transmitters | | | | | | | | | | |
| Request for Modular Approval Request for Limited Modular Approval | | | | | | | | | | |
| 1000 | | Requirements | | EUT Conditions | Comply (Y/N) | | | | | |
| | | <u> </u> | lodular A | Approval Requirements | (=1) | | | | | |
| 1 | The radio ele | ements of the modula | | Refer to external photos. Shield is over | Y | | | | | |
| | transmitter must have their own | | the radio circuit module. | | | | | | | |
| | shielding. The physical crystal and | | | | | | | | | |
| | tuning capacitors may be located | | | | | | | | | |
| | | he shielded radio eler | nents. | | | | | | | |
| 2 | | | All inputs to the modules are buffered | Y | | | | | | |
| _ | buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 | | through logic or microprocessor inputs. | | | | | | | |
| | | | Refer to Schematics. | | | | | | | |
| | | | | | | | | | | |
| | | s under conditions of | | | | | | | | |
| | | ta rates or over-modu | | | | | | | | |
| 3 | | r transmitter must hav | | Internal 3.3V power regulator. Refer to | Y | | | | | |
| | | supply regulation. | | schematics. | | | | | | |
| 4 | | r transmitter must con | nply | Module contains a hirose connector. | Y | | | | | |
| | | enna and transmission | 1 0 | The module will go inside final product | | | | | | |
| | | irements of Sections | | where the antenna(s) will be integral to | | | | | | |
| | | nd 15.204(c). The ante | | the end product, which can be | | | | | | |
| | | be permanently attach | | considered permanently attached. | | | | | | |
| | | nique" antenna coupl | | 3 | | | | | | |
| | 1 " | ons between the modu | ` | | | | | | | |
| | the antenna, | including the cable). | The | | | | | | | |
| | | al installation" provisi | | | | | | | | |
| | _ | 03 is not applicable t | | | | | | | | |
| | modules but | can apply to limited | | | | | | | | |
| | modular app | rovals under paragra | ph (b) | | | | | | | |
| | of this section. | | | | | | | | | |
| 5 | The modular | r transmitter must be | tested | Module was tested outside. Refer to test | Y | | | | | |
| | in a stand-alo | one configuration, i.e | , the | setup photos in test report. | | | | | | |
| | module must | t not be inside anothe | er | | | | | | | |
| | device durin | g testing for complia | nce | | | | | | | |
| | | requirements. Unless | | | | | | | | |
| | | nodule will be battery | | | | | | | | |
| | powered, it i | must comply with the | AC | | | | | | | |
| | line conducto | ed requirements foun | d in | | | | | | | |
| | | 07. AC or DC power | | | | | | | | |
| | | ut/output lines conne | | | | | | | | |
| | | must not contain ferri | | | | | | | | |
| | _ | will be marketed with | | | | | | | | |
| | | Section 15.27(a)). Tl | | | | | | | | |
| | _ | ese lines shall be the l | _ | | | | | | | |
| | · · | tual use or, if that len | _ | | | | | | | |
| | | least 10 centimeters | | | | | | | | |
| | | nere is no coupling be | | | | | | | | |
| | the case of the | he module and suppo | rting | | | | | | | |

| | · | | |
|---|---|--------------------------|---|
| | equipment. Any accessories, peripherals, | | |
| | or support equipment connected to the | | |
| | module during testing shall be | | |
| | unmodified and commercially available | | |
| | (see Section 15.31(i)). | | |
| 6 | The modular transmitter must be | Refer to label provided. | Y |
| | equipped with either a permanently | 1 | |
| | affixed label or must be capable of | | |
| | electronically displaying its FCC | | |
| | | | |
| | identification number. | | |
| | (A) If using a permanently affixed label, the | | |
| | modular transmitter must be labeled with its own FCC identification number, and, if the FCC | | |
| | identification number is not visible when the | | |
| | 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. | | |
| | (B) If the modular transmitter uses an electronic | | |
| | display of the FCC identification number, the | | |
| | information must be readily accessible and | | |
| | visible on the modular transmitter or on the | | |
| | device in which it is installed. If the module is installed inside another device, then the outside | | |
| | of the device into which the module is installed | | |
| | must display a label referring to the enclosed | | |
| | module. This exterior label can use wording such | | |
| | as the following: | | |
| | "Contains FCC certified transmitter module(s)." | | |
| | Any similar wording that expresses the same | | |
| | meaning may be used. The user manual must | | |
| | include instructions on how to access the | | |
| | electronic display. A copy of these instructions must be included in the application for | | |
| | equipment authorization. | | |
| 7 | The modular transmitter must comply | Refer to manual | Y |
| ′ | with any specific rules or operating | 10101 to manual | _ |
| | | | |
| | requirements that | | |
| | ordinarily apply to a complete | | |
| | 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. | | |
| | Trr | <u> </u> | |

| 8 | The modular transmitter must comply | Refer to MPE calculation in the Test | Y |
|---|--|--------------------------------------|---|
| | with any applicable RF exposure | report | |
| | requirements in its final configuration. | | |

A **limited modular approval** may be granted for single or split modular transmitters that do not comply with all of the above requirements, *e.g.*, shielding, minimum signaling amplitude, buffered modulation/data inputs, or power supply regulation, if the manufacturer can demonstrate by alternative means in the application for equipment authorization that the modular transmitter meets all the applicable Part 15 requirements under the operating conditions in which the transmitter will be used. Limited modular approval also may be granted in those instances where compliance with RF exposure rules is demonstrated only for particular product configurations. The applicant for certification must state how control of the end product into which the module will be installed will be maintained such that full compliance of the end product is always ensured.