

May 22, 2008

Subject: Original certification of the Avnera AVMD7211 family of modular transmitters

References: FCC ID V3CAVMD7F11A and IC: 7853A-AVMD7F11A

To whom it may concern:

Avnera Corporation submits documentation (under separate cover) in support of FCC and Industry Canada certification of the AVMD7211 family of modular transmitter products. This device has been tested and is classified as a portable device per FCC Part 2.1093.

The Avnera AVMD7211 family of wireless modules is optimized for the transmission of wireless CD-quality streaming digital audio information to a companion AVMD7211 listener (the subject of a copending certification application), over distances of up to 30 meters. The modules are based on Avnera's AV7211 integrated wireless audio transceiver IC, and include all necessary components except an audio input transducer or source and the necessary power supply; optional configurations allow for digital or analog audio input formats, differing mounting schemes (pin header or SMT), and high- and low-power RF output capabilities. Modules within the AVMD7211 family are available with two factory-set output power settings based on the use (or non-use) of an external PA. The end user will not be able to vary the output power. As part of the multipath mitigation strategy, the modules use a pair of identical antennas oriented at 90 degrees to one another; only one antenna is used at any given time, and that antenna serves both transmit and receive functions.

The transmission protocol is proprietary; in addition to the forward channel for streaming audio, the protocol supports bi-directional data transfer for link management as well as a medium-fidelity microphone back channel for gaming and headset applications. The AVMD7211 modules utilize a 2.4-2.5GHz ISM-band transceiver and are therefore classified as intentional emitters under FCC Part 15.247:2006 and Industry Canada RSS-210:2007 regulations.

Respectfully submitted,

Frederick G. Weiss

Avnera Fellow for RF and Analog Architecture

Avnera Corporation

16505 NW Bethany Court, Suite 100

Beaverton, OR 97006

503-718-4100 503-718-4101 (Fax)



## List of documents submitted in support of FCC and IC certification of the Avnera AVMD7211 family of modular transceiver products

- 1 Certification agreement (TCB 415; common to both the AVMD7211 and 7211 applications)
- 2 Certification cover letter for Avnera AVMD7211 modular transmitter products (this document)
- 2.1 Application for FCC certification of Avnera AVMD7211 modular transmitter products
- 2.1 Letter of attestation to FCC for AVMD7111 and AVMD7211 co-certification
- 2.2 Application for IC certification of Avnera AVMD7211 modular transmitter products
- 2.2 Letter of attestation to IC for AVMD7111 and AVMD7211 co-certification
- 3 Labeling of Avnera AVMD7211 modular transmitter products
- 4 External photos of Avnera AVMD7211 modular transmitter products
- 5 Internal photos of Avnera AVMD7211 modular transmitter products -- For public release
- 5.1 Internal photos of Avnera AVMD7211 modular transmitter products -- Confidential
- 6 AVMD7211 module schematics Confidential
- 7 Frequency Block Diagram of Avnera AVMD7211 modular transmitter products -- Confidential
- 8 Antenna information for AVMD7211 modular transmitter products -- Confidential
- 9 RF Exposure (supplied by NW EMC)
- 10 Avnera agent authorization letter
- 10.1 NW EMC agent authorization letter
- 11 Operational description of AVMD7211 modular transmitter products Confidential
- 11 AVMD7211 module data sheet (User Manual equivalent) Confidential
- 13 Request for FCC confidentiality regarding Avnera AVMD7211 modular transmitter product information
- 13.1 Request for IC confidentiality regarding Avnera AVMD7211 modular transmitter product information
- 13.2 Request for short-term confidentiality -- FCC certification of Avnera AVMD7211 modular transmitter products
- 14 AVMD7211 emissions test report (supplied by NW EMC)
- 15 AVMD7211 test setup photos (supplied by NW EMC)
- 16 Modular Approval Requirements Letter to FCC
- 16.1 Modular Approval Requirements Letter to Industry Canada