



CONFIDENTIALITY REQUEST CONTAINED WITHIN

18 September, 2000

Communications Certification Lab
1940 West Alexander Street
Salt Lake City, Utah 84119

Attention: Mr. William S. Hurst

Re: Application for Modular Transmitter Approval of an Unlicensed Low Power Transceiver
Subassembly - FCC ID: ABZMCAD200

Motorola, Inc., Integrated Information Systems Group, 8201 E. McDowell Rd, Scottsdale, Arizona 85252 herein submits this application for modular transmitter approval under FCC Rule Part 15, Subpart C, for this Unlicensed Low Power Transceiver subassembly, FCC ID: ABZMCAD200. The Card Acceptance Device (CAD+) is manufactured by Motorola WSSD located at 1301 East Algonquin Road, Schaumburg, IL 60196. This application is being submitted to CCL under the FCC Public Notice, DA 00-1223, allowing Telecommunication Certification Bodies (TCB) to certify specific equipment including Unlicensed Radio Frequency Devices under Scope A1.

This application is submitted in accordance with FCC Public Notice, DA 00-1407, for Part 15 Unlicensed Modular Transmitter Approval. This Low Power transceiver module complies with the requirements specified in DA 00-1407 as described below:

- 1) **Inherent RF Shielding** - The CAD+ has board mount RF shields to minimize emissions for compliance to FCC Part 15, Subpart C requirements.
- 2) **Buffered modulation/data inputs** - Both Serial and Parallel data interfaces include RC filtering as illustrated on pages 4 and 6 of the schematics contained in Exhibit 5.
- 3) **Power Supply Regulation** - The CAD+ module contains on board regulators and filtering circuitry to generate the various voltages required by the CAD+ circuitry. A +12VDC from the terminal (via connector P8) is used as the source to generate the +5V, +5V_A, and PA_PWR voltages.
- 4) **Antenna Requirements per Section 15.203** - The module uses a unique 6 wire, 100 mm, interconnect cable/connector for each of the four (4) antenna configurations. Additionally, the final integration of the module will make this antenna interface inaccessible to the final user.
- 5) **Tested in Stand-Alone Configuration** - The CAD+ module was tested as a stand-alone device and was compliant with FCC Part 15, Subpart C, requirements as detailed in the Test Report contained in this application as Exhibit 6. The module is intended to be powered from a +12 VDC source provided by the host terminal. The users manual describes the necessary conditions for final integration when AC power is utilized by the host terminal.
- 6) **FCC ID Label** - Exhibit 1 contains the labelling requirements of the module and the users manual, Exhibit 8, contains instructions for carrying the FCC ID to the exterior of the final product.

- 7) **Comply with Specific Rules and Operation Requirements** - The module was compliant with FCC Part 15, Subpart C, specifically Section 15.225 for operation in the band of 13.553-13.567 MHz. The test results are detailed in the Test Report of Exhibit 6.
- 8) **RF Exposure Requirement Compliance** - The CAD+ complies with the Maximum Permissible Exposure (MPE) levels of ANSI/IEEE C95.1-1992 and 47 CFR 1.1310, Table 1 for an uncontrolled environments. Test Results contained in Exhibit 11.

The CAD+ module consists of seven (7) variations, the foremost being the use of four (4) different antenna board configurations. The other less significant variations include three (3) interface connector types. The variants are listed below and are also detailed in the Test Report, Exhibit 6, and the Users Manual, Exhibit 8.

Model #	Antenna Type	Connector Type	Interface Protocol
T6480A	104 x 67 mm w/ferrite	Straight	Serial; RS-485
T6481A	104 x 67 mm w/ferrite	Right Angle	Serial; RS-485
T6479A	104 x 67 mm w/ferrite	Straight	Parallel; CMOS
T6499A	50 x 25 mm w/ferrite	Straight	Serial; RS-485
T6500A	50 x 25 mm w/ferrite	Right Angle	Serial; RS-485
T6548A	100 x 110 mm	Straight	Serial; RS-485
T6501A	65 x 40 mm	Right Angle	Serial; CMOS

In addition to confidentiality for the entire application prior to grant (per 47CFR0.457(d)(1)(ii)), Motorola requests, pursuant to 47CFR0.459, post-grant confidentiality for identified sections of the filing material contained in this application with this material being withheld from public inspection following the grant of this authorization. This material includes Exhibit 4, Block Diagram, Exhibit 5, Schematic Diagram, and Exhibit 12, Theory of Operation, including any Antenna PCB photos or layout drawings. Specifically, these exhibits contain information relating to circuit function and complexity that could be of benefit to competitors. This material contains Motorola's trade secrets and confidential information which is not customarily released to the public and which, otherwise, is not generally available to the public.

Sincerely,

Gil Estrella
EMC Engineer
Motorola IISG