MOTOROLA

2nd March 2006

Authorization & Evaluation Division
Federal Communications Commission Laboratory
7435 Oakland Mills Road
Columbia, MD 21046

Subject: Application for Certification and HAC Certification of transmitter with FCC ID: AZ489FT5848, iDEN i580.

Gentlemen;

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its application for Certification of the transmitter with FCC ID: AZ489FT5848. This variable output power (0.24 to 640 milliwatts) transmitter is part of a handheld transceiver used in a SMR and EA SMR trunking system operating in the United States 806-821/851-866MHz and 896-901/935-940 MHz frequency band.

It also possesses a transmitter that operates in the ISM band (902 – 928 MHz). The two transmitters are configured so that they can only operate exclusive of each other (i.e. only one mode can operate at a time). The operation mode is selected via the user menu. Certification is also sought for this transceiver, and performance data is provided for that purpose.

The first transceiver is of the receive-first type described in International Telecommunications Union Recommendation ITU-R M.1221 entitled *Technical and Operational Requirements for Cellular Multimode Mobile Radio Stations.* It must first find, acquire and lock onto a control channel from a predefined set of control channel frequencies assigned to a companion Authorized base station (e.g. – FCC ID: ABZ89FC5794). Transmission is not possible until lock to a base station control channel has been achieved, then transmission is limited to digitally modulated service request bursts on the reverse control channel. Upon recognition of a proper request, the control channel base station transmitter will then assign the transceiver a traffic channel for transmission of digital voice or circuit-switched data from the set of frequencies for which the trunking system is licensed. Attached Exhibit 12.1 provides additional descriptive details.

To facilitate global roaming it is kindly requested that a note be provided in the Grant for Equipment Authorization, which states that this 'receive first' type of equipment is compliant for transmitter operation over the broader range 806-825 MHz when used with a compatible Authorized Base Station. This will aid equipment authorization in foreign countries, which accept a United States FCC Grant for Equipment Authorization, yet not jeopardize United States public safety or cellular systems licensed to operate in the 821-825 MHz frequency band since no compatible base station may be authorized on those frequencies in the United States.

It is also expected that this transceiver type will be marketed outside the United States and brought into the United States for itinerant "roaming" operation on compatible 806 - 821 MHz base stations located within the United States. Consequently, upon receipt of Authorization, only those units of this equipment type authorized for marketing in countries outside the United States will also bear a label with the specified FCC identifier.

In accordance with 47 CFR 2.1093(c) this transmitter may be used in “covered” SMR service so it has been subjected to routine environmental evaluation for RF exposure and found to be compliant with the limits specified in 47 CFR 2.1093(d)(2).

The subject transmitter complies with 47 CFR 90.203 of the rules in that the operator cannot directly program transmit frequencies using only the unit's normally accessible external controls.

This transceiver can function as a Part 15.3(r) computer peripheral device when functioning as an RF modem when connected to a computer via a data cable (ref: Exhibit 12.4). For this reason a Declaration of Conformity has been prepared and is provided on Page 11 of the user Manual in the Exhibit 8.

The second transceiver is a frequency hopping spread spectrum type, operating in the unlicensed ISM (902-928 MHz) band. It uses an FSK (Frequency Shift Key) modulation, 50 kHz spacing, up to 1 watt. The protocol is defined to have 10 interleaved hopsets of 50 frequencies each with 500 kHz separation between set members. All 10 hopsets span the entire ISM band. In this transceiver mode, conversations are held only via the speakerphone; the earpiece is disabled.

This radio product is equipped with a Bluetooth (BT) transceiver. BT supports both voice and data for short range wireless communications. BT Band of Operation is 2.4 - 2.4835 GHz (1 MHz channel bandwidth). It is a class 2 type device, with power rated +4 to –6 dBm (typical 0 dBm). The BT antenna is implemented on the back side, lower corner of the board on the PTT side of the phone. The BT device was tested at TIMCO Engineering Lab at Newberry, FL 32669 and it complies 15.247 (c), 15.205 and 15.209 (b).

Also, a sample of the i580 was measured in accordance with industry standard procedures for Hearing Aid Compatibility (HAC). A report of the measurement data is attached as Exhibit 11. The measurement results were compared in the report with the field strength limits in Table 7.4 of the PC63.19-2001 rd 3.6 standard. As a result, Motorola herein declares that the iDEN i580 complies with the near-field strength technical requirements of FCC Rule 47 CFR 20.19.

Enclosed is a complete Certification Application. Contact me at (954) 723-5793 if you require any additional information.

Sincerely,
/s/ Mike Ramnath (signed)
Manager, Regulatory Compliance
Email: Mike.Ramnath@motorola.com