BZ5MXI201V Application for FCC Certification 100 Watt Digital Television Translator

## **Operational Description:**

This application requests certification for a 100 Watt Digital VHF Television Translator.

The intended use of this digital translator is to rebroadcast a television relay station or other legal source of ATSC digital television signal. The translator is designed to be driven from an ASI or SMPTE310M output directly from an ATSC IRD unit.

The output modulation format conforms with FCC Part 73.682(d), ATSC Digital Television Standards.

The MXi201V consists of three components: a 1RU Pulse Modulator unit which modulates the signal, a 3 RU RF amplifier, and an output filter. The power supply and amplifier are integral. Alternately a 70 Watt version of this product is available which utilizes a REGEN-T transcoder regenerative receiver/modulator.

The translator meets all FCC requirements for both the simple emissions mask and the stringent emissions mask. Note that these products are frequency agile in that they can be field tuned for different channels within its designated band in the VHF television spectrum.

Testing results shown in this document were conducted on channel 13 (213 MHz center frequency) with the exception of the frequency stability testing which was conducted on channel 7 (173 MHz). These test results are representative of performance on any channel in the VHF broadcast spectrum.

Wiring, shielding and construction are in accordance with accepted principles of good engineering practice. The translator's construction is such that all hazardous components are enclosed or protected against accidental contact by operating personnel.