

Date: March 5, 2013

Subject: FCC Cover Letter

## **Introduction**

The Model 3140 Zoom Wireless Transmitter (ZWT) is a new product for the Guidant Corporation (a wholly owned subsidiary of Boston Scientific Corporation doing business as Boston Scientific Cardiac Rhythm Management, hereinafter referred to as BSC). The ZWT is an accessory for the Model 3120 in-clinic Programmer/Recorder/Monitor (PRM). The ZWT provides radio frequency (RF) telemetry in the 402-405 MHz MICS band for use with (RF) enabled BSC implantable pulse generators. This is a new product and will therefore be an original certification.

BSC is seeking approval of the Model 3140 Zoom Wireless Transmitter (ZWT) which includes a transceiver subsystem operating at 402-405 MHz for communication with BSC implantable devices. The FCC ID chosen for this product is based on previously similar products and is ESCCRM314013. The FCC rules applicable to this product include CFR FCC Part 95I, Part 2.1046, Part 2.1091, Part 15.107, Part 15.109, Part 15.205, Part 15.207, and Part 15.209.

## **Device Description**

The Zoom Wireless Transmitter (ZWT) is a USB powered medical device that communicates with BSC radio frequency (RF) enabled implantable devices via a 402-405 MHz RF link. The ZWT provides the 402-405 MHz RF telemetry subsystem for the BSC Model 3120 in-clinic Programmer/Recorder/Monitor (PRM). The Model 3120 PRM with Model 3140 ZWT is used by trained medical professionals during the implantation and periodic checks of patients with BSC implantable pulse generators.

A custom BSC software application is run on the ZWT embedded microprocessor that controls all of the devices features/functions. The RF transceiver configuration and mode of operation is controlled via the on board processor.

Figure 1 shows the ZWT. The high level assembly includes two printed circuit assemblies, one of which contains all of the device processing and RF circuitry, the second contains the systems two antennas. The device includes two internal RF cables that route the RF signals to/from the device antennas. The software application selects one antenna for both transmit and receive based on the RF link performance. Prior to starting a telemetry session, the software application runs an algorithm that complies with the band channel access requirements. The ZWT includes an LED indicator that is illuminated when the device has power and the embedded firmware is functional. All other user interface functions related to the ZWT are integrated into the Model 3120 PRM interface. The ZWT

USB port is used as the data interface with the 3120 PRM. The device also receives 5VDC power from this port.

**Figure 1 BSC Model 3140 Zoom Wireless Transmitter**

