

29 May 2014

Dear Sir or Madam:

We, QiG Group ( a wholly owned subsidiary of Greatbatch, Inc.), located at 1771 East 30<sup>th</sup> Street, Cleveland, Ohio 44114, are providing the following Antenna Information for the Algovita Spinal Cord Stimulation (SCS) Clinician Programmer (CP), Model 4500, RF telemetry communications feature in accordance with the TCB technical requirements:

The Algovita Spinal Cord Stimulation (SCS) Clinician Programmer (CP), Model 4500, uses an etched PCB copper trace antenna (loop magnetic dipole) for the 402-405 MHz Medradio RF link and has two Ethertronics Embedded Isolated Magnetic Dipole (chip) antennas, Model M830310, for 2450 MHz wake-up RF link. The Ethertronics (chip) antennas are connected directly to an RF switch in order to support an antenna selection diversity wake-up scheme. The PCB loop antenna is an integral part of the PCB and connected directly to the intentional radiator. The Ethertronics (chip) antennas is an integral part of the PCB assembly (PCBA) and connected directly to the intentional radiator via the RF switch.

The approximate gain of the PCB loop antenna and Ethertronics (chip) antenna(s) are – 10 dBi, and -2 dBi, respectively.

Access to the antenna connections of the intentional radiator is prohibited by the enclosure. Section 47 CFR 15.203 of the FCC rules state the use of permanently attached antennas is considered sufficient to comply with the requirements of this section.

Clinician Programmer PCBA showing Integral Antenna(s).

