EXHIBIT G Technical Description

Technical Description

This 900MHz 20 channel wireless handfree operates in the 902.4 – 925.8MHz Industrial, Scientific and Medical (ISM) band. It consists of the Hummingbrid baseband controller U3 R6753, U2 RF105 transceiver.

Baseband Controller

The baseband controller consisters of an ASIC, into which are integrated a baseband modern, and audio modern, and a linear audio codec.

It requires a 9.6 MHz crystal oscillator to generator the system reference clock

The baseband modem provides all modulation, encoding, spreading, scrambling, TDD control, AGC, AFC, decoding, and timing required for a diSSTance wireless handfree system (Conexant's diSSTance (digital Spread Spectrum) technology.)

The audio modem consists of an ITU G.726-compliant 40kbps or 32kbps ADPCM engine that interface to the audio codec.

The controller, and embedded MC19(6502) micro-controller core, performs all control and montioring functions required for a digital spread spectrum (DSS) handfree. Interfaces are provided for all peripheral functions needed for a complete DSS handfree.

The audio codec is ITU G.714-compliant. It converts analog signals form the PSTN and microphone to an from digital voice samples for the audio modem. It has built-in electric microphone interfaces and independent audio channels for speaker interfaces.

Transceiver

The RF105, a fully integrated transceiver device, provides the transmit, receive, and frequency synthesis functions for 900MHz diSSTance (digital Spread Spectrum Technology) systems. It implements a direct conversion architecture and time division duplexing of the transmit and receive signals to minimize circuit complexity.

The receive path of the RF105 provides complete RF-to-baseband I& Q demodulation which includes an LNA, double-balanced quadrature mixers, fully integrated channel selection filters, and baseband variable-gain architecture. The transmit path is a variable-gain direct conversion modulator, These paths are shown in Figure 1.

A 902-928 MHz frequency synthesizer with on-chip VCO and resonator are also included in the IC to provide the LO frequency for both transmit and receive modes.

The RF105 features low-voltage operation (2.7V to 5V) for low power consumption. The RF105, combined with Conexant's RF106 power amplifier, forms a complete system solution for a direct conversion 900 MHz diSSTance radio which is fully compliant with FCC part 15 regulations in the ISM band.