

Technical Note

Subject: **Operational Description - EVOQ**

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Date: 20 Mar 2007

Document ref: LKT018 03

1 Theory of Operation/Functional Description

The Bluetooth transceiver, SiW3500, runs off a 26MHz crystal generating suitable internal frequencies as well as a clock to the BelaSigna200. The SiW3500 operates in accordance with the Bluetooth Core Specification v2.0. I.e. it uses adaptive frequency hopping operating over 79 channels in the 2400-2483.5MHz range. Each channel has a 1MHz bandwidth using GFSK modulation with a maximum output power of 0dBm. It is a zero IF transmitter/receiver.

The BelaSigna200 is a DSP used for the decoding of the audio stream when using the Headset, Handsfree and A2DP profiles. The BelaSigna200 drives the external transducers directly.

The MMI consist of three buttons, volume +/- and one multifunctional button. In addition there are 2 LED's used for indication of different modes of operation of the product, e.g., charging, pairing, etc.

2 Block Diagram

