

Technical description

Zerene is a wearable BLE device that interfaces with a mouthguard to collect telemetry on the jaw as a user sleeps. Furthermore, it provides vibratory stimuli to retrain the user to stop clenching/grinding the jaw; thereby, benefiting the jaw and teeth. The radio link between the Zerene and the phone application is achieved through Bluetooth Low Energy communication in the frequency range 2.4 GHz to 2.483 GHz. All the communication is handled through EFR32BG22C112 Wireless Gecko SoC , the matching network and 2.4 GHz SMD, Above Metal, Low Profile Mini Chip Antenna 2450AT42E0100.