

# DESIGN OF GSM BASED VOICE DATA PROCESSING THROUGH BONE CONDUCTION PRINCIPLE FOR HEARING IMPAIRED PEOPLE

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## DESCRIPTION

The GSM based Sound Bite hearing system allows people to hear the sounds via bone conduction to wear an intraoral device and a small microphone in the deaf ear to regain lost hearing. This device consists of GSM modem ATmega 328 controller and audio amplifier unit. GSM modem will receive incoming calls and

automatically answer the call via AT Commands. Then incoming voice signal is converted into low frequency vibration signal that fed through the teeth to cochlea. Unlike implantable bone conduction hearing aids, Sound Bite requires no surgery. Rather, it is the world's first removable and non-surgical hearing solution to use the well-established principle of bone conduction to imperceptibly transmit sound via the teeth. Custom made for each person, Sound Bite is simple, removable, and totally non-invasive.