

SC1 Prototype – Jan-March 2019

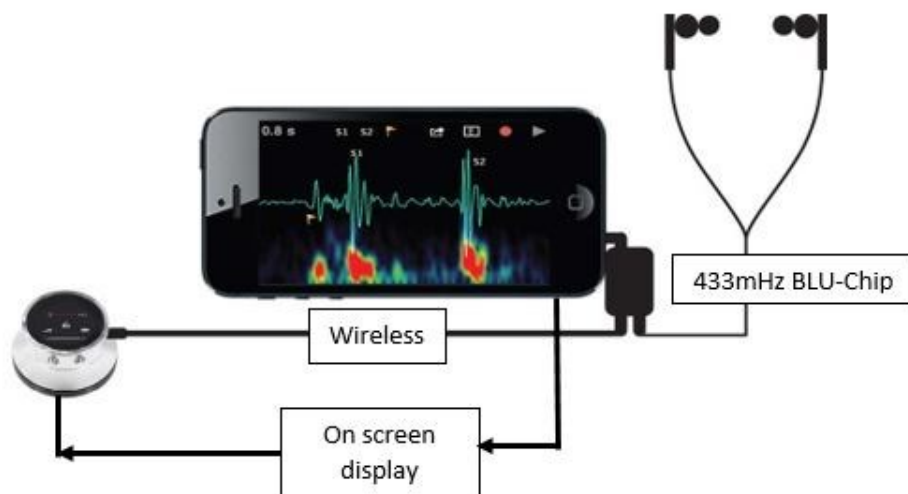
Overview of Wireless Digital Stethoscope

Salient Features

1. Ergonomically designed handheld portable device.
2. Diaphragm based pickup for auscultation.
3. Sound output on wired headphones or Blue-tooth Headset.
4. Excellent ambient noise immunity.
5. Optimized for characteristic low frequency sounds by use of Advance filtering techniques enabling better cardiac diagnostic capabilities.
6. Useful in monitoring barely audible sounds and murmurs of heart.
7. Wireless transmission over Bluetooth, a first in industry.
8. Supported by Mobile application in Symbian / Android to capture the wireless data and plot the graph of the acoustic signal
9. Waveform can be stored for monitoring progress and/or transmitted for remote diagnosis in tele-care settings.

Existing technology on design needs to be improvised by giving a radiation intermixed interlock ear piece for hearing live beats of heart rate.

Works focussed mainly on modification of electrochip in stethoscope, thinklink based monitoring unit, Future scope in jacketed stethoscope.



Budget estimation

Third-party Smartphone app - \$ 37

Wireless earpiece - \$73

OLED display - \$14

3.5mm jack to microusb convertor - \$ 25

Blu-chip - \$ 30

Total budget quote: \$ 180