TEXAS INSTRUMENTS

LAB Vital Signs 68xx – Release Notes

Overview

This lab demonstrates the use of mmWave technology to accurately measure vital signs such as heart rate and breathing rate.

Features

- Supports mmWave SDK 3.1.1.2
- Supports IWR6843 ISK
- mmWave sensor can be placed in front or in the back of seat
- Ported from Driver Vital Signs xWR16xx specifically for IWR6843.

Resolved Incident Reports – None

Known Issues – None

Work Arounds for Major Known Issues – None

Limitations

The following is a list of known limitations for this release that were known at the time of release.

- The user has to be relatively still for at least 10-15 seconds for the demo to effectively work
- The breathing signal from the back might be very weak for some people.
- The heart-rate value might jump during measurements. This can be due to several reasons (e.g. noise, alignment issues, interference from other objects, breathing harmonics overlapping with the heart rate frequency etc.). If the subject stays stationary, the heart-rate values ultimately should converge to the correct value

▪ One reason the heart rate might display a wrong value is the presence of breathing harmonic overlapping the heart-rate spectrum region i.e. [0.8 – 2.0] Hz. In the current demo the 2nd breathing harmonic is cancelled. For example if the person has a breathing rate of 26 bpm and the heart rate happens to be ~ 52 bpm it will be discarded as the algorithm will interpret this as a breathing harmonic rather than a correct heart-rate

Installation Instructions

- Refer to Developer's Guide