LAB Short Range Radar – Release Notes

Overview

This lab demonstrates the use of mmWave technology and allows the user to estimate and track the position (in the azimuthal plane) and the velocity of objects in its field of view up to 80 m.

Features

- AWR1642BOOST EVM with ES 2.0 silicon
- Matlab Runtime Library – R2017a (9.2)
- mmWave SDK v3.5.0.4

New and Updated Features

The lab was ported to SDK v3.5.0.4.

Resolved Incident Reports

Table 1 provides information on IR resolutions incorporated into this release.

Table 1 Resolved IRs for this Release

IR Parent/ Child Number	Severity Level	IR Description
n/a	n/a	n/a

Known Issues

Table 2 provides information on IRs that are known issues for this release.

Table 2 Known Issue IRs for this Release

IR Parent/ Child Number	Severity Level	IR Description
n/a	n/a	n/a

Work Arounds for Major Known Issues

Following are workarounds for each known issue with a major severity that exists in this release.

- n/a

Limitations

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

- Matlab GUI may freeze when displaying a rich point cloud

Installation Instructions

- Refer to Getting Started Guide

Change Log

This section describes the changes from the SRR Lab version 2.0.0. The only change has been porting the lab to SDK v3.5.0.4.

Table 3 Table of changes

File	Change
src/srr_16xx_dss.projectspec src/srr_16xx_mss.projectspec	Changed SDK version, SYS/BIOS version, XDC tools version, TI CGT 6000 version to those available in SDK v3.5.0.4.
src/srr_16xx_dss.projectspec src/srr_16xx_mss.projectspec	Changed in postbuildstep occurrences of: ${COM_TI_MMWAVE_SDK_INSTALL_DIR}/packages/scripts/ImageCreator/xwr16xx/ to ${COM_TI_MMWAVE_SDK_INSTALL_DIR}/packages/scripts/ImageCreator/
src/srr_16xx_dss.projectspec src/srr_16xx_mss.projectspec	Replaced in compilerBuildOptions DMMWAVE_L3RAM_SIZE with appropriate values for DMMWAVE_SHMEM_BANK_SIZE and DMMWAVE_L3RAM_NUM_BANK
src/mss/mss_srr_cli.c	MMwave_open is passed an additional NULL parameter as the calibration configuration.
src/dss/dss_main.c	adcBufParams includes the SOC handle.
src/common/ detected_obj.h src/common/mmw_config.h src/common/mmw_output.h	Files moved from SDK2.0.0.4 ti/demo/io_interface to src/common. Only the functions, structures, enumerations and defines relevant to the short rage radar lab were kept.
src/srr_16xx_dss.projectspec src/srr_16xx_mss.projectspec	Added detected_obj.h, mmw_config.h and mmw_output.h files to the projectspec as project files.
src/common/mmw_messages.h	Replaced #include <ti/demo/io_interface/mmw_output.h> with #include "../common/mmw_output.h"
src/dss/dss_data_path.h	Replaced #include <ti/demo/io_interface/mmw_config.h> with #include "../common /mmw_config.h" and #include <ti/demo/io_interface/detected_obj.h> with #include "../common /detected_obj.h"

src/common/srr_config_chirp_design_SRR80.h src/common/srr_config_chirp_design_SRR120.h	Changed PROFILE_SRR_IDLE_TIME_VAL from 300 to 500.
src/common/srr_defines.h	Added the following: #define MMWDEMO_MEMORY_ALLOC_DOUBLE_WORD_ALIGN 8 #define MMWDEMO_MEMORY_ALLOC_MAX_STRUCT_ALIGN sizeof(uint64_t) #define ROUND(x) ((x) < 0 ? ((x) - 0.5) : ((x) + 0.5))