



# ADRV9009/ADRV9008-1 & 2 SOFTWARE RELEASE NOTES

SW6.2.2

**BUILD TYPE:** RELEASE  
**RELEASE DATE:** APRIL 26, 2022  
**INCLUDED DELIVERABLES:**

ARM Firmware Revision: 6.2.1  
Stream Revision: 1.2.17.2  
API Revision: 3.6.2.1  
GUI Revision: 3.6.2.1

(NOTE: Stream files must be generated from the GUI for the selected profile as they are use case dependent.)

**PREVIOUS BUILD:** 6.0  
(NOTE: This is the reference baseline for all changes outlined in this document.)

## OVERVIEW

The SW6.2.2 RELEASE build provides updates in the ARM firmware, stream files, API, and GUI software to support ADRV9009 and related devices. Changes outlined in this document are relative to the previous release build listed above. The updates included in this build are:

- Corrected several bugs related to PLL configuration and frequency hopping.

The following sections describe the changes and enhancements provided in this build.

## API CHANGES

1. Added new API: `TALISE_txNcoShifterSet` which can be used to configure the Tx NCO frequency and signal phase.
2. Added two new API's `TALISE_setTrackingCalsBatchSize` and `TALISE_gettrackingCalsBatchSize` which allow for the configuration of the tracking cal batch size and getting the value of the configured tracking cal batch size. These configuration settings allow the batch size of the tracking calibrations to be reduced to support channel on times as low as 200us.
3. Added additional spi write in `TALISE_enableDeframerLink` which prevents the JESD from "lock up" during initial link establishment
4. Corrected warnings that were generated for uninitialized fields in the API.
5. VCO related logical checks in API source code have been corrected.

## ARM FIRMWARE CHANGES

### PLL Setup

1. Corrected an issue that could occur when frequency hopping across LO div-by-2 boundaries – in certain cases this was causing an ARM exception.
2. Corrected an issue when programming some specific PLL frequencies that caused the ARM processor to stop responding.

## GUI CHANGES

1. Added droop file support ("\*\_tia\_offset.txt") for custom profiles.
2. Swapped order of calls in GUI Frequency Hopping sequence for `InitCals` to be run while Radio is OFF.

3. An issue was resolved where the incorrect PFIR gain was applied in certain profiles causing the Tx output power to be 6dB low.

**STREAM CHANGES**

1. None.

**KNOWN ISSUES/LIMITATIONS**

1. None

**ADDITIONAL INFORMATION**

1. None