

## DAC5652 Quick Start and Test Procedure Guide

This is the basic set-up and test procedure for the verifying DAC5652 EVMs

- Connect EVM to TSW1400 board through the CMOS connectors
- Apply 3.3V power to J13 and J12; connect ground to J15
- Set-up the clock signals through the HP8133A
  - Inject 100 MHz to External input
  - Set Channel 1 and 2 with
    - 3.3 V amplitude
    - 1.65 V offset
    - Divide by 1
    - 0 ps delay
  - Connect Channel 1 output to CMOS Clock input of TSW1400
  - Connect Channel 2 output to J3 on DAC5652 EVM
- Connect DAC output J1 to the spectrum analyzer
- Set-up the spectrum Analyzer
  - Set center frequency to 20.5 MHz
  - Set span to 4 MHz
  - Set RF Attn to 20 dB
  - Set RBW to 1 kHz
- Set up the TSW1400
  - Load the TSW1400 MultitonePattern\_v2p2 or equivalent
  - Set Sample rate to 100 MSPS (i.e. match the clock rate)
  - Set output to CMOS
  - Select Offset Bin
  - Check Load and Run
  - Set two tones at 20.1 MHz and 21.1 MHz
  - Press Green “Create and Save/Run” button
- Verify output signal at J1 and J2
  - Two tones at 20.1 and 21.1 MHz with amplitude of -10 +/- 1 dBm
  - IM delta of 75 +/- 3 dB
- Adjust channel 1 output delay if needed to eliminate timing errors