Basic debugging of PLL issues

1. Use MUXOUT to check R counter and N counter output.
   • All PLL parts can be programmed to connect the output of the R counter or the N counter to the MUXOUT pin.
2. Toggle the powerdown bit and monitoring the current drawn by the part.
   • A drop in current drawn by the PLL will show the PLL is being programmed.
3. Toggle the phase detector polarity and monitoring the output signal on a spectrum analyzer.
   • A change in output frequency will show the PLL is being programmed.

◆ If 1, 2 and 3 are good, the problem most likely relates to the loop filter.
◆ Use ADIsimPLL to design/debug the loop filter.