LMK05318B
DPLL REF Lock Testing

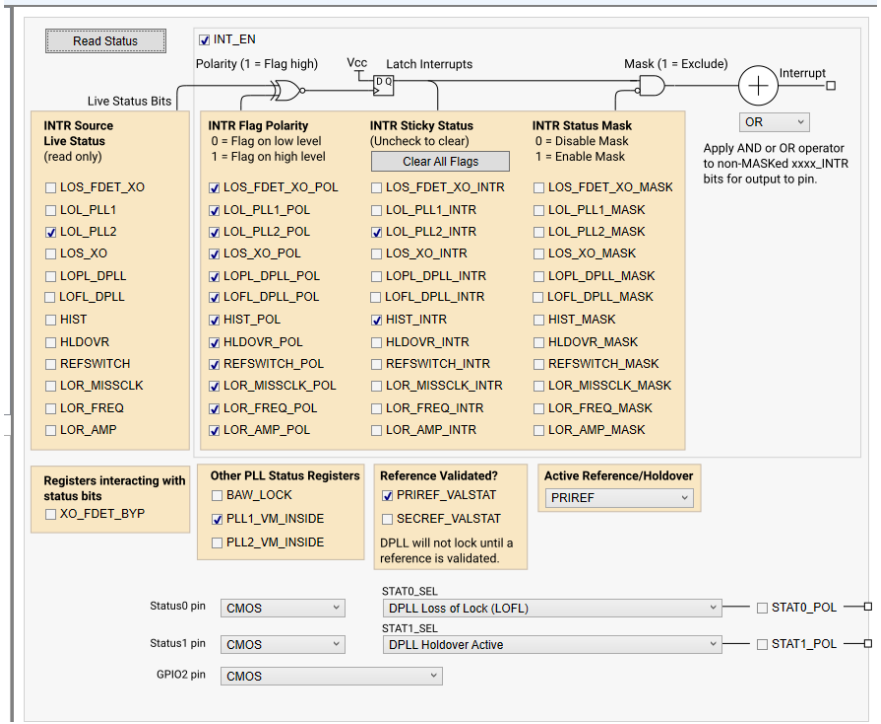
CTS Apps

Test Setup

- PRIREF/SECREF center frequency = 80566406 Hz
- Shifting input frequency:
  - +/- 20 ppm
  - +/- 40 ppm
- Procedure:
  - Change input frequency by changing SigGen input to PRIREF/SCREF, the output would follow this change when in lock.
  - No need to adjust PRIREF/SECREF on TICS Pro software and recalculate DPLL settings for frequency shifting.

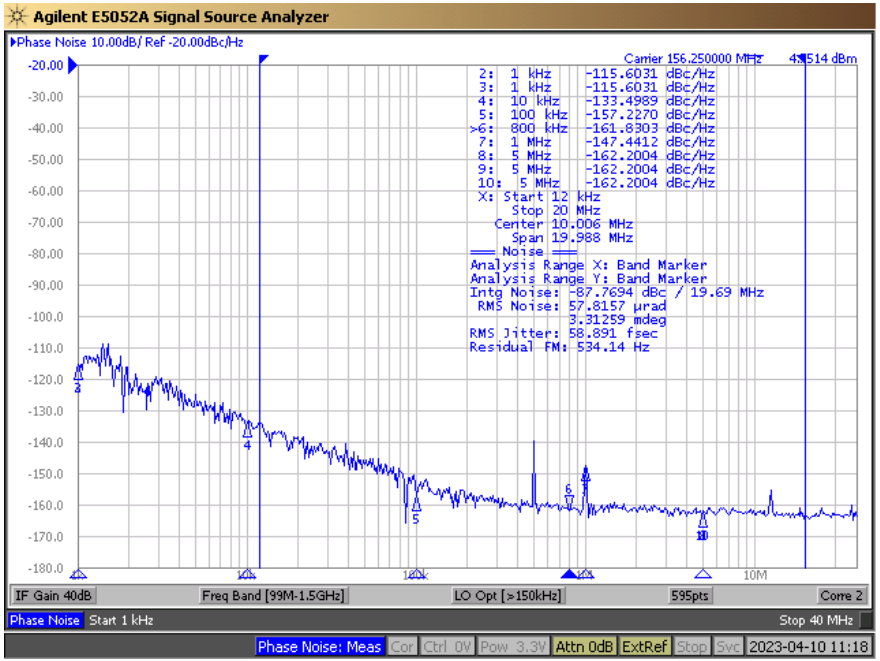
Status Page

- While shifting the input reference, the output will follow the shift as it stays in lock.
- LOPL_DPLL and LOFL_DPLL are low.



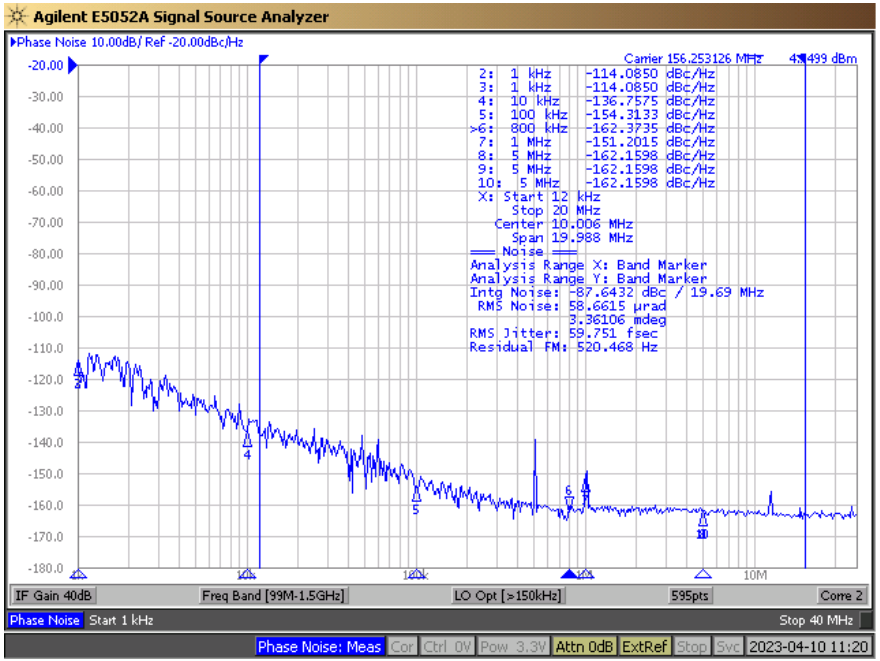
PRIREF/SECREF = 80566406 Hz

- OUT0 156.25 MHz locks to center frequency 80566406 Hz.



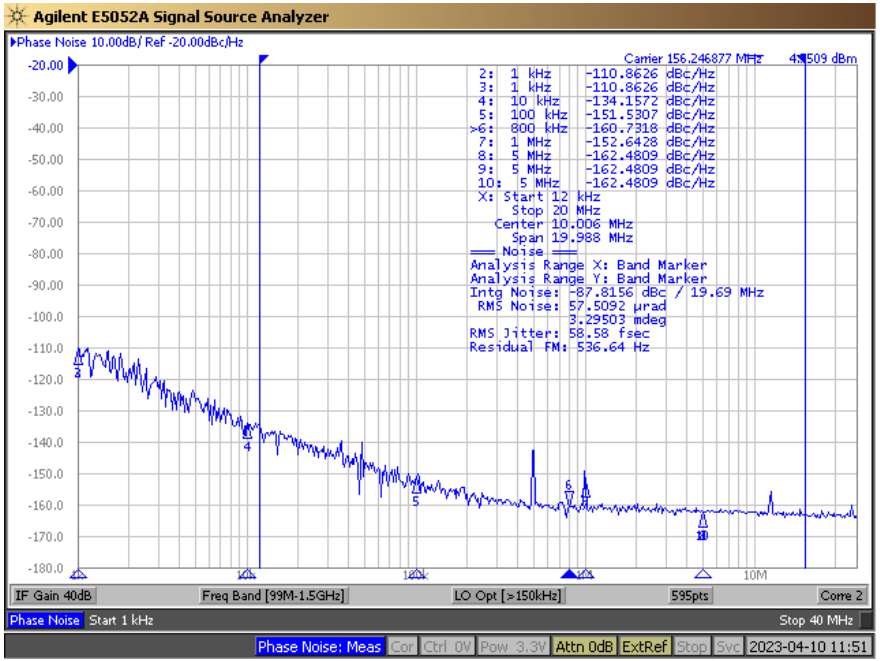
PRIREF/SECREF = 80566406 Hz + 20 ppm

- OUT0 156.25 MHz follows +20 ppm drift on the reference 80566406 Hz.
  - 80566406 Hz + 20 ppm = 80568017 Hz
  - 156.25 MHz + 20 ppm = 156.253125 MHz



PRIREF/SECREF = 80566406 Hz - 20 ppm

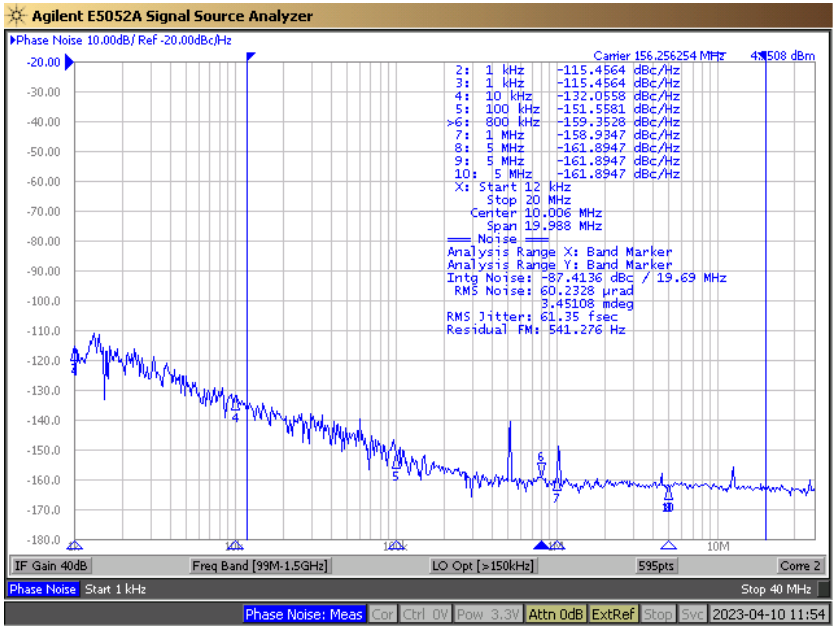
- OUT0 156.25 MHz follows -20 ppm drift on the reference 80566406 Hz.
  - 80566406 Hz - 20 ppm = 80564795 Hz
  - 156.25 MHz - 20 ppm = 156.246875 MHz



PRIREF/SECREF = 80566406 Hz +/- 40 ppm

80566406 Hz + 40 ppm = 80569629 Hz

156.25 MHz + 40 ppm = 156.256250 MHz



80566406 Hz - 40 ppm = 80563183 Hz

156.25 MHz - 40 ppm = 156.243750 MHz