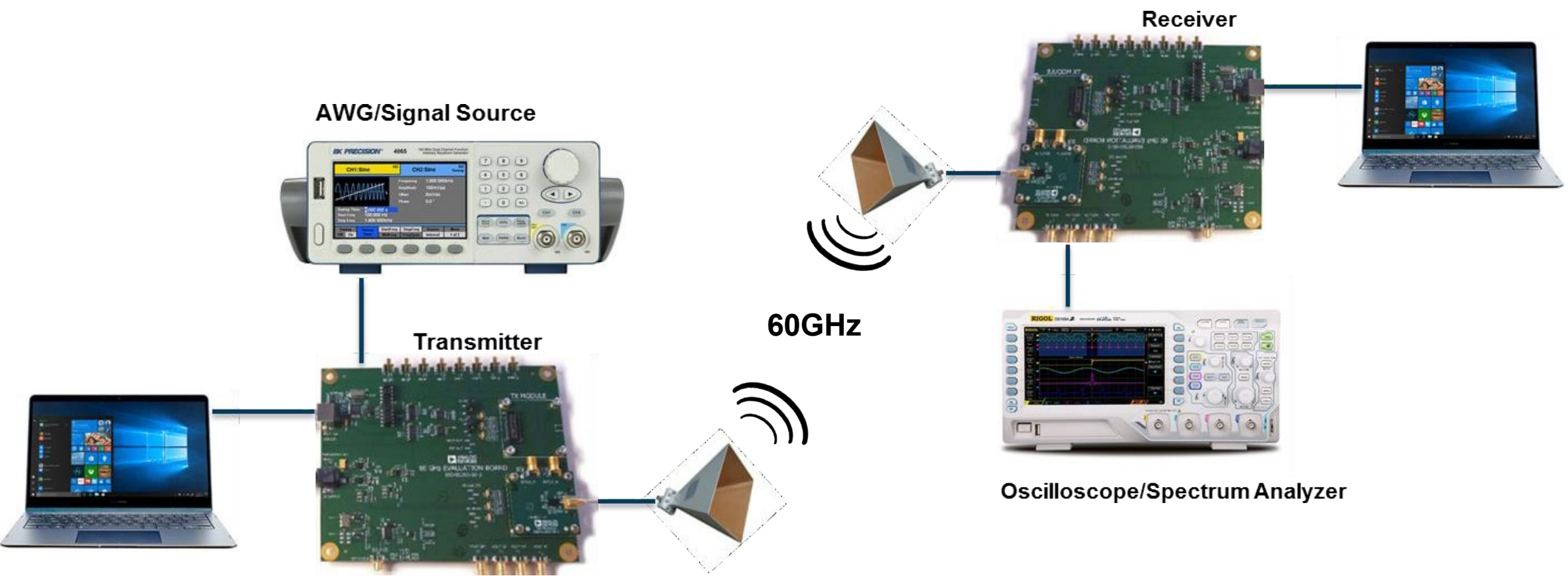
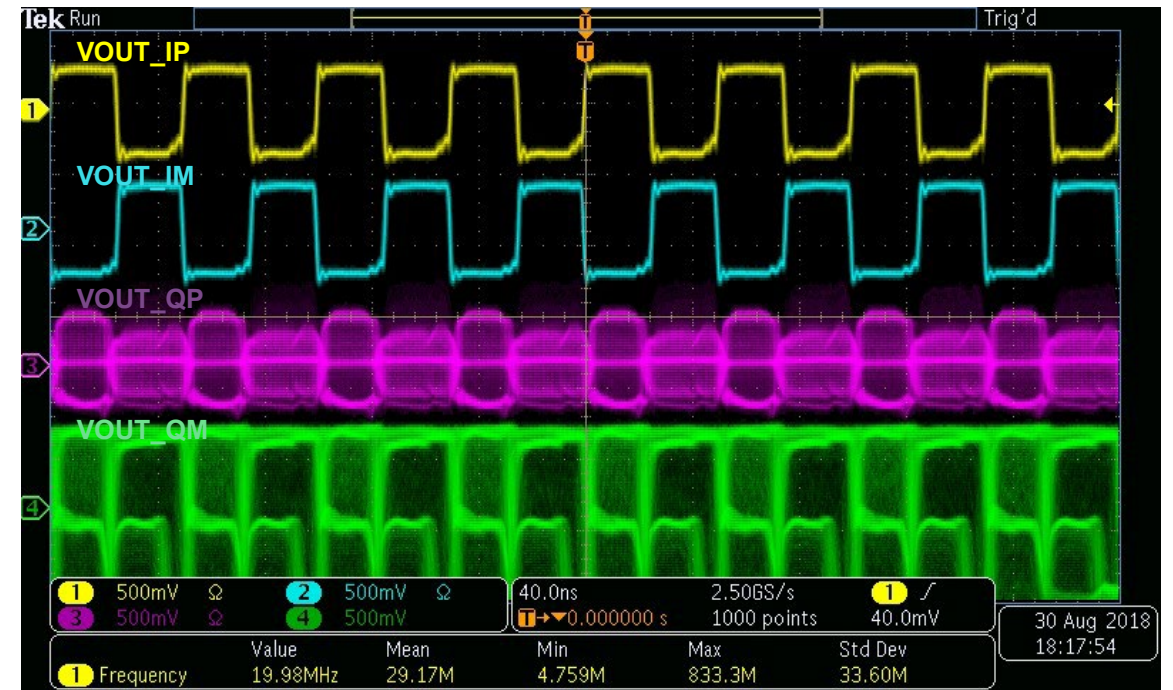
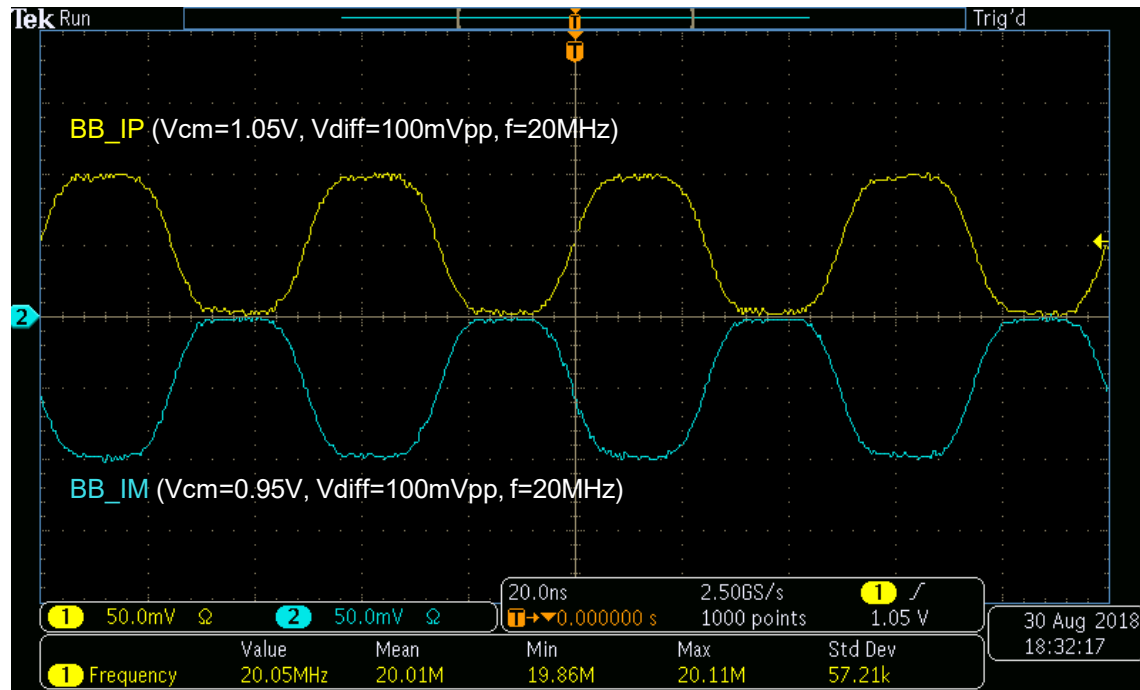


60Ghz Chipset OOK Mode

60 GHz Wireless Data Link – Demo Setup



TEST 3 - BB_IP and BB_IM, ZERO-IF, AM Detector ON



Summary

- ▶ HMC630x Chipset setup for the operation in OOK-Mode
 - HMC6300 - Baseband signal has to be differential with $V_{cm} = 1.6V$, $V_{pp} = 5...750mV$
 - Positive signal $V_{cm+} = V_{cm} + V_{pp}/2$
 - Negative signal $V_{cm-} = V_{cm} - V_{pp}/2$
 - Consider that the evaluation TX daughter board has blocking capacitors which have to be replaced with 0R resistors in order to ensure a non-zero common mode voltage.
 - TX Detector output should be less than 0.5V for good AM.
 - HMC6301 – I-Channel provides the operational output signal
 - AM-Detector has to be ON (direct demodulation at the IF-Band 8.1...9.1 GHz)
 - Register settings for the receiver
 - Basic setting to enable AM Detector
 - Row1<7:0>=(dec: 2)
 - Settings to enable AM-Detector and shut down unnecessary I/Q blocks
 - Row0<7:0>=00110100 (dec: 52)
 - Row1<7:0>=01000010 (dec: 66)