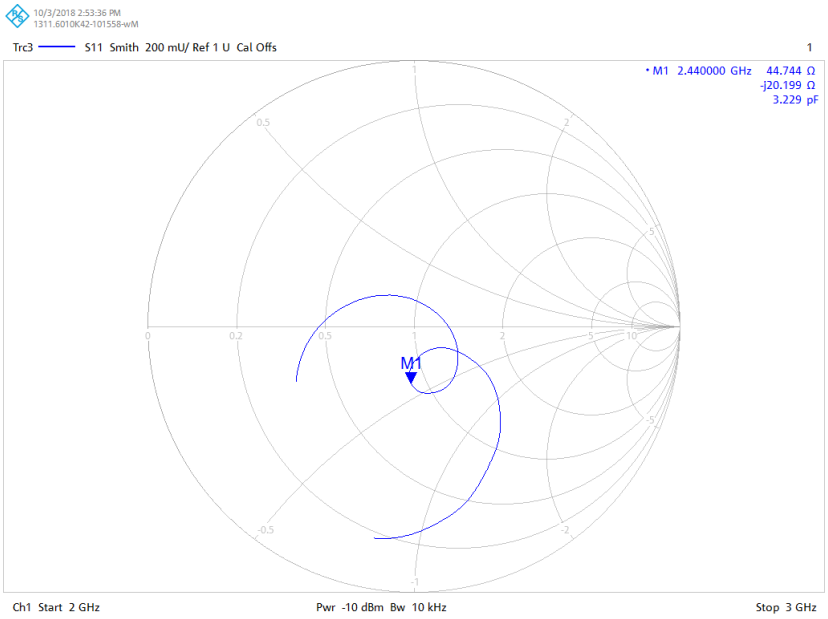
Device: nRF52840 QIAAC0
Date: 2018/10/03
Engineer: Ketil Aas-Johansen

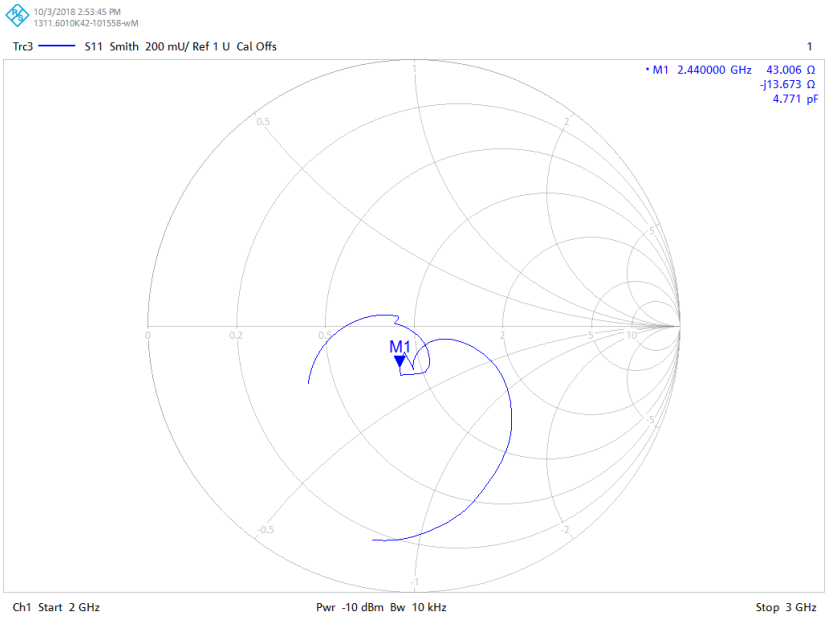
nRF52840 QIAAC0 matching network

Impedance seen into the matching network with the chip in place

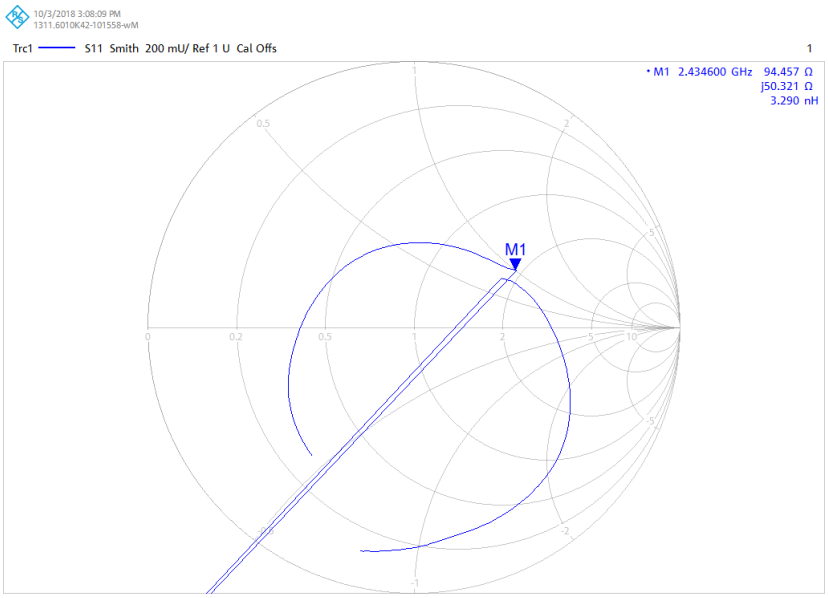
Power off

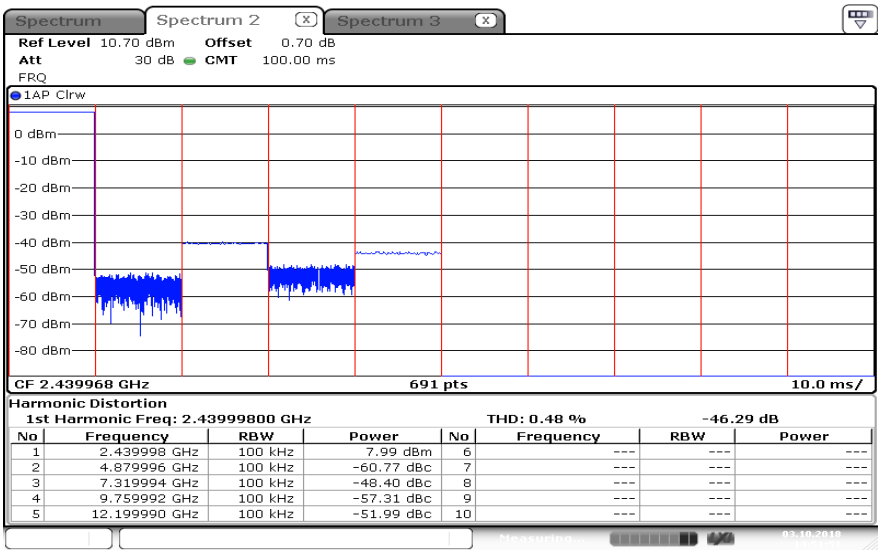


RX, 2440 MHz:



TX, 8 dBm, 2440 MHz





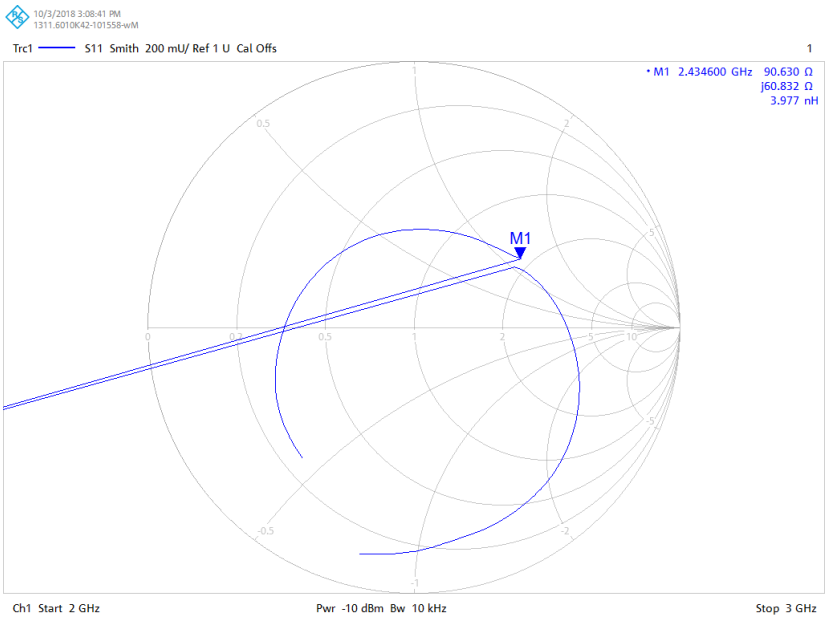
Harmonic Distortion

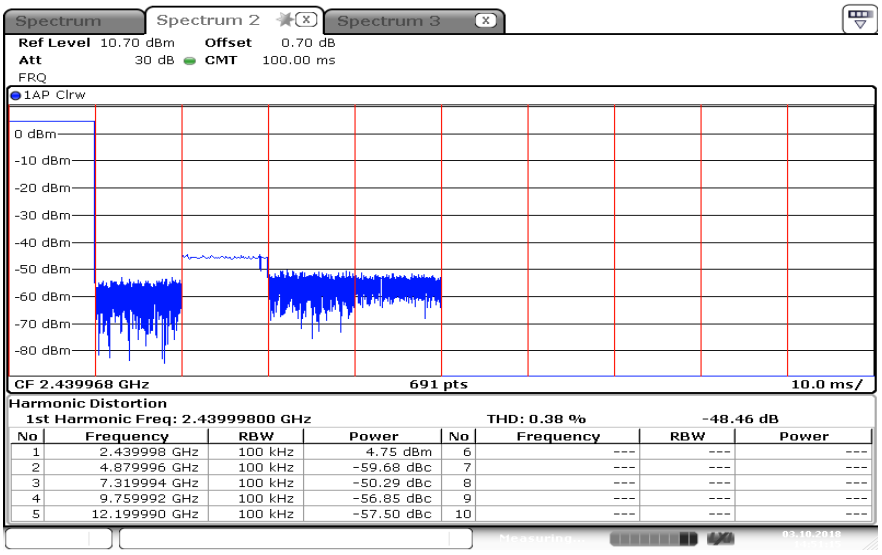
1st Harmonic Freq: 2.43999800 GHz THD: 0.48 % -46.29 dB

No	Frequency	RBW	Power	No	Frequency	RBW	Power
1	2.439998 GHz	100 kHz	7.99 dBm	6	---	---	---
2	4.879996 GHz	100 kHz	-60.77 dBc	7	---	---	---
3	7.319994 GHz	100 kHz	-48.40 dBc	8	---	---	---
4	9.759992 GHz	100 kHz	-57.31 dBc	9	---	---	---
5	12.199990 GHz	100 kHz	-51.99 dBc	10	---	---	---

Date: 3.OCT.2018 14:51:52

TX, 4 dBm, 2440 MHz





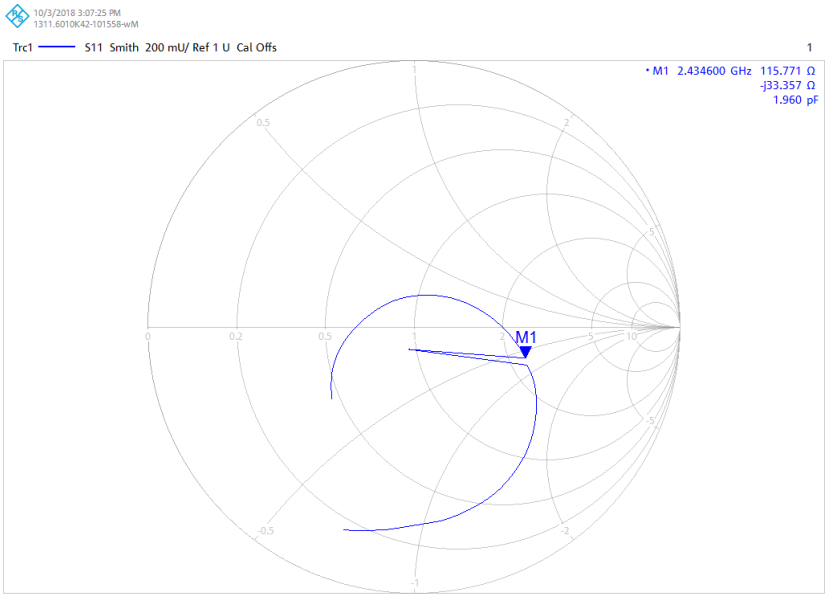
Harmonic Distortion

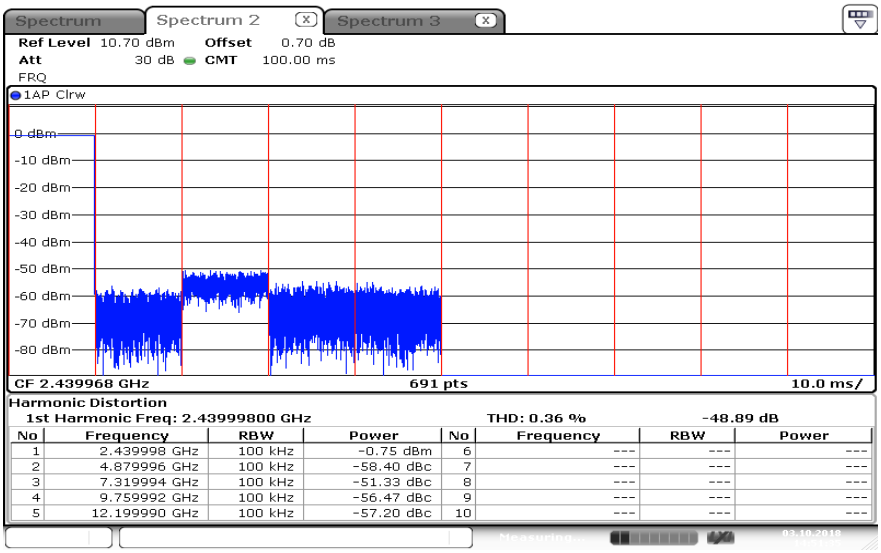
1st Harmonic Freq: 2.43999800 GHz THD: 0.38 % -48.46 dB

No	Frequency	RBW	Power	No	Frequency	RBW	Power
1	2.439998 GHz	100 kHz	4.75 dBm	6	---	---	---
2	4.879996 GHz	100 kHz	-59.68 dBc	7	---	---	---
3	7.319994 GHz	100 kHz	-50.29 dBc	8	---	---	---
4	9.759992 GHz	100 kHz	-56.85 dBc	9	---	---	---
5	12.199990 GHz	100 kHz	-57.50 dBc	10	---	---	---

Date: 3.OCT.2018 14:51:16

TX, 0 dBm, 2440 MHz





Harmonic Distortion

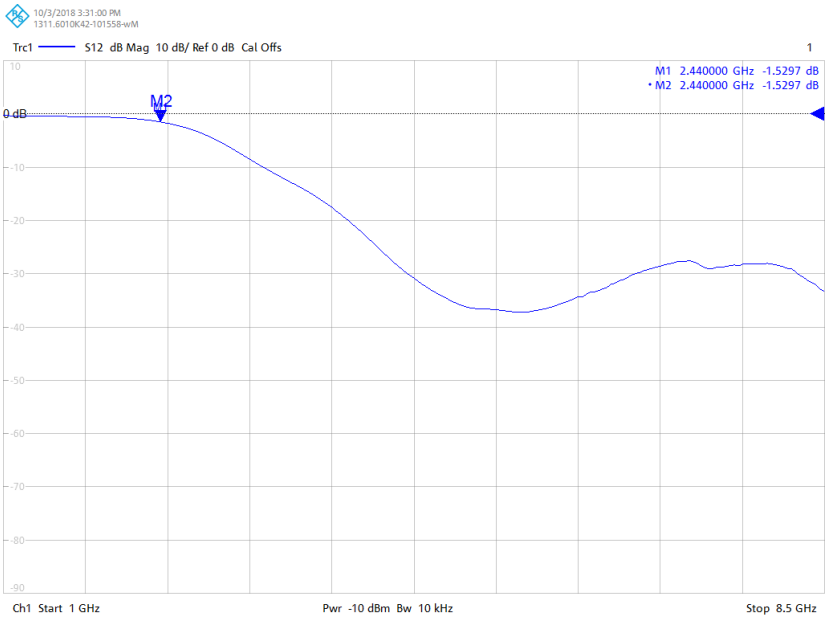
1st Harmonic Freq: 2.43999800 GHz THD: 0.36 % -48.89 dB

No	Frequency	RBW	Power	No	Frequency	RBW	Power
1	2.439998 GHz	100 kHz	-0.75 dBm	6	---	---	---
2	4.879996 GHz	100 kHz	-58.40 dBc	7	---	---	---
3	7.319994 GHz	100 kHz	-51.33 dBc	8	---	---	---
4	9.759992 GHz	100 kHz	-56.47 dBc	9	---	---	---
5	12.199990 GHz	100 kHz	-57.20 dBc	10	---	---	---

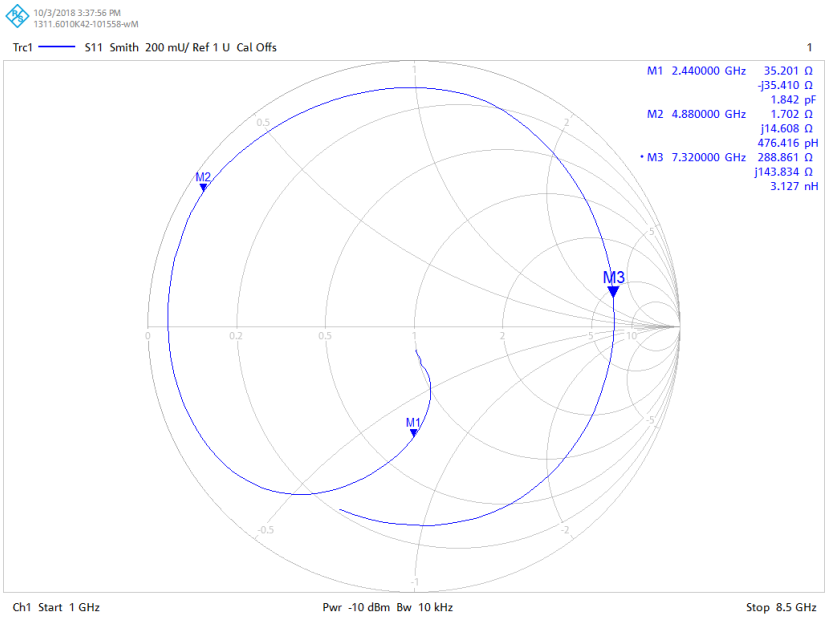
Date: 3.OCT.2018 14:51:35

Matching network 2 port measurement. Port 1 = chip side, port 2 = antenna side

S21



S11



S22

Instruments:

Rohde&Schwarz	FSV13	Cal date 2018-01	Spectrum analyzer
Rohde&Schwarz	ZNB8	Cal date 2018-01	Vector Network analyzer