

INTELLIGENT INTERACTIVE SYNTHESIZER

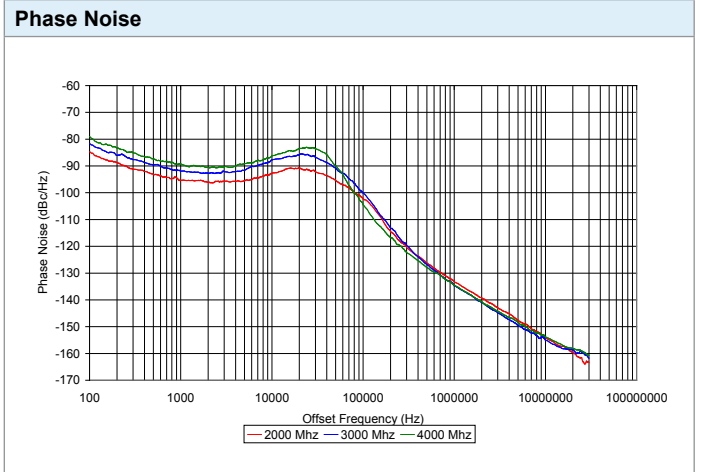
SURFACE MOUNT MODEL: KMTS2500-200400-20

WIDE BANDWIDTH

2000 - 4000 MHz

FEATURES:

- ▶ Octave bandwidth tuning
- ▶ Small step size resolution
- ▶ Outstanding spectral purity
- ▶ High spurious rejection
- ▶ Fast lock settling time
- ▶ Easy programmable format
- ▶ Patented Rel-Pro® Technology
- ▶ RoHS Compliant
- ▶ Buffered Output



SPECIFICATIONS

Output Frequency	2000 - 4000 MHz
Bandwidth	2000 MHz
External Reference ¹	20 MHz
External Reference Input	1 V p-p to 3.3 V p-p
Step Size	Programmable to 1 Hz
Bias Voltage	
VCC1	+12 VDC
VCC2	+12 VDC
VCC3	+12 VDC
Bias Power Consumption	
Bias Power Consumption	3 Watts (Max.)
Output Power	+5.5 dBm (Min.)
Spurious Suppression	50 dB (Typ.)
Harmonic Suppression	10 dB (Typ.)

Typical Phase Noise	Offset	dBc/Hz.
	1 kHz	-88
	10 kHz	-87
Settling Time ²	Within 1 kHz	<10 mSec
	Within 10 Hz	<20 mSec
Output Impedance	50 Ohms (Nom.)	
Operating Temperature Range	-20 to +70 °C	
Non-Operating Temperature Range	-40 to +85 °C	
Programming	See Application Note: AN7400	
Programming Bus ³	Specify SPI or RS-232	

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage (+12 V)	+15 V
DC Voltage Applied to RF Out	± 25 V

¹ Reference input frequency can be factory programmed for requested common reference frequencies from 10 - 25 MHz. Unless otherwise specified, the reference frequency is factory programmed for 20 MHz.

² Time between latch enable (LE) high (after user command) and final output frequency.

³ Default bus (if unspecified) is SPI.

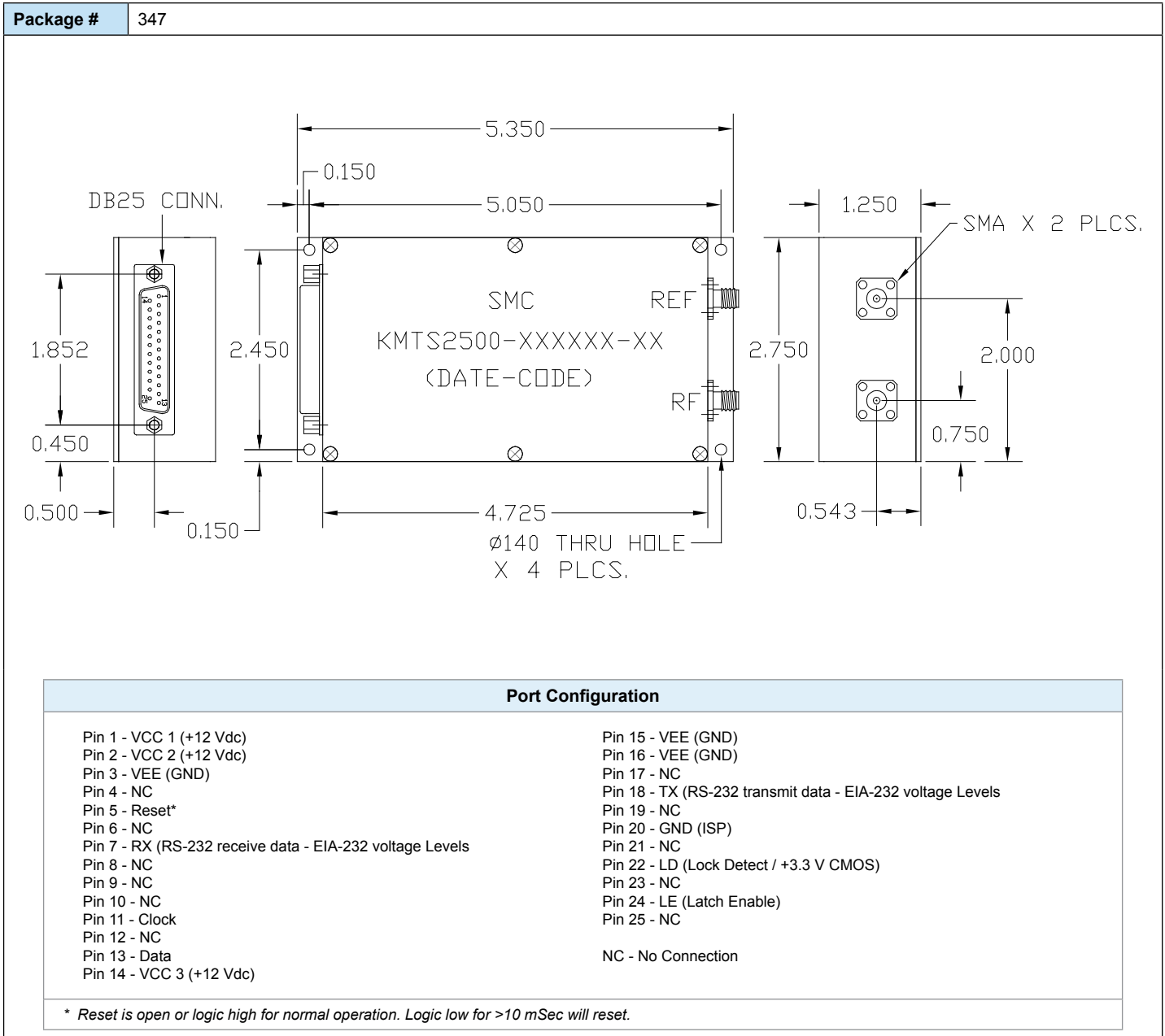
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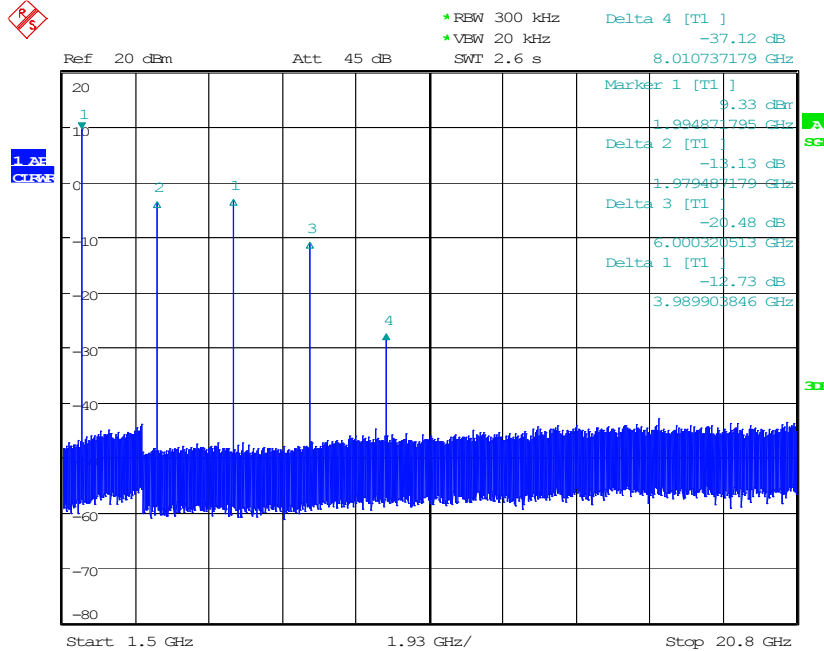
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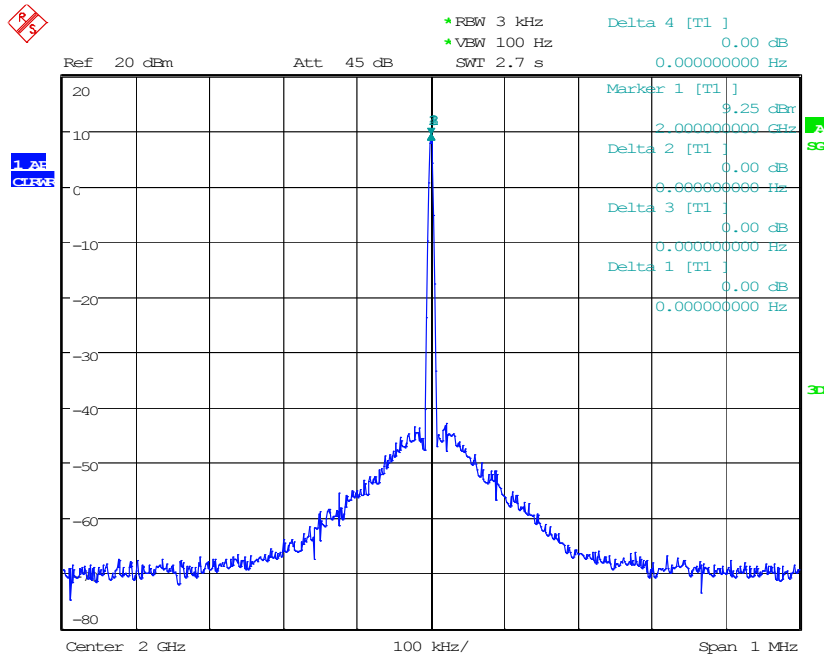
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HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION



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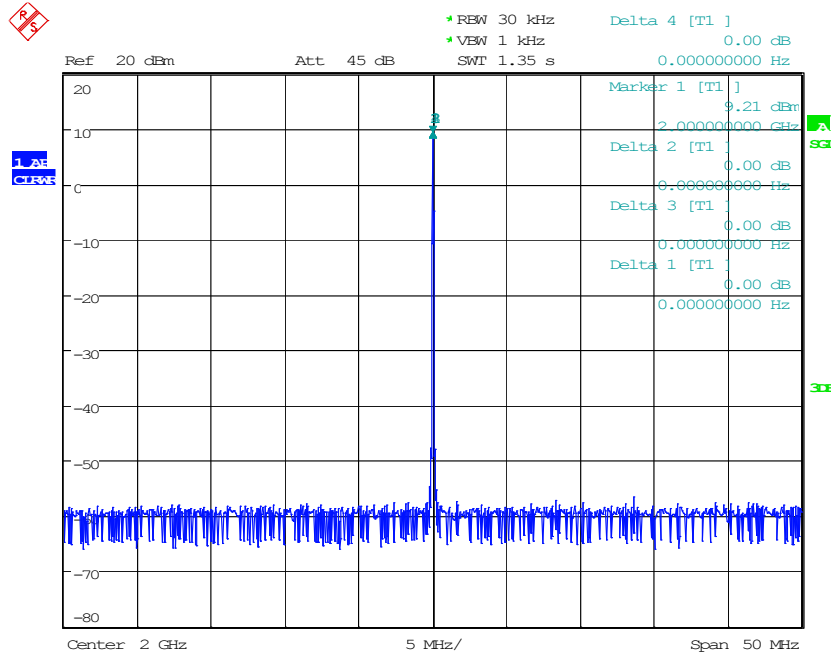
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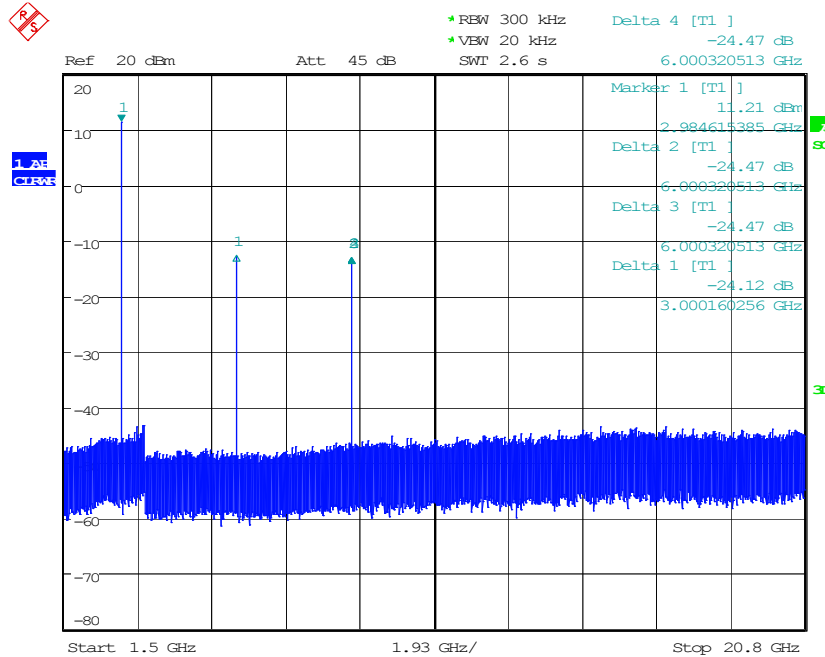
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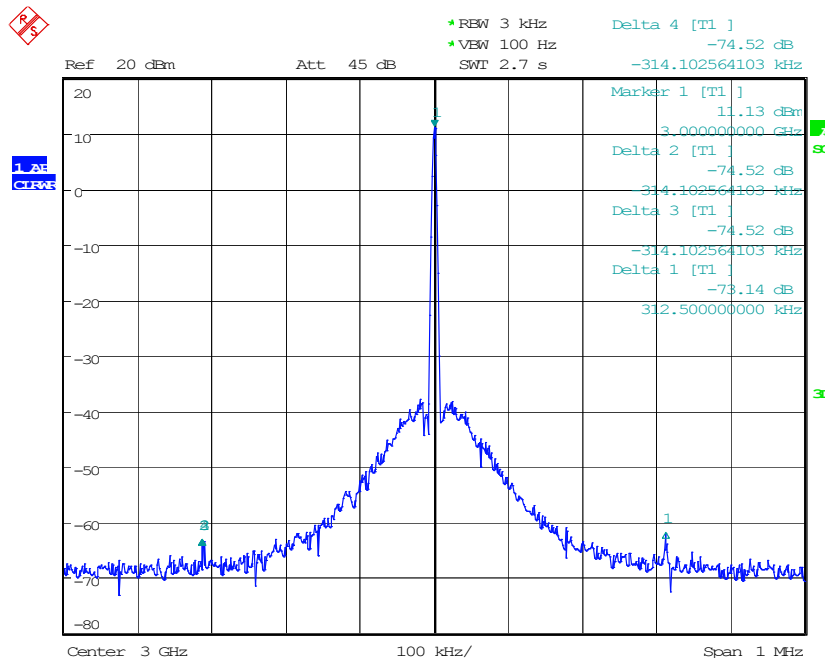
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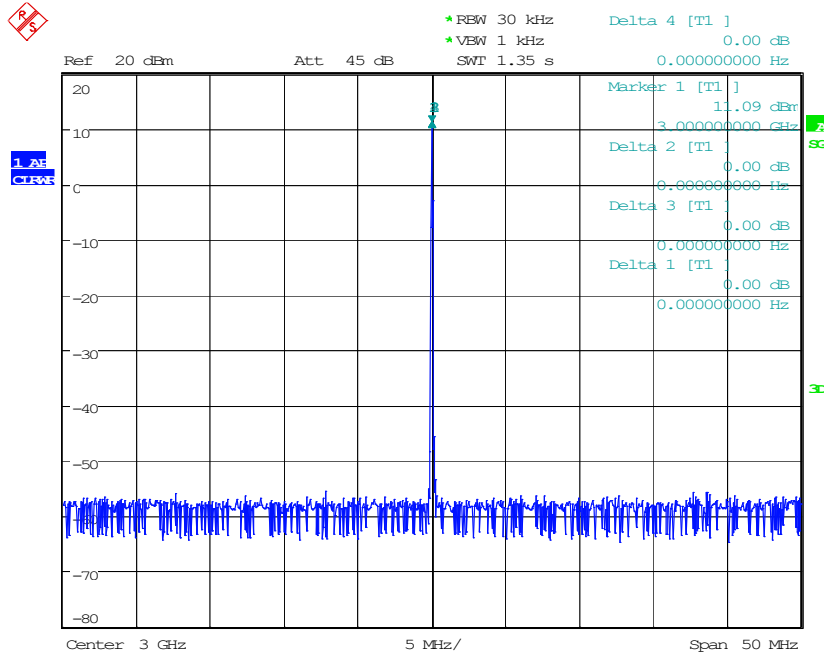
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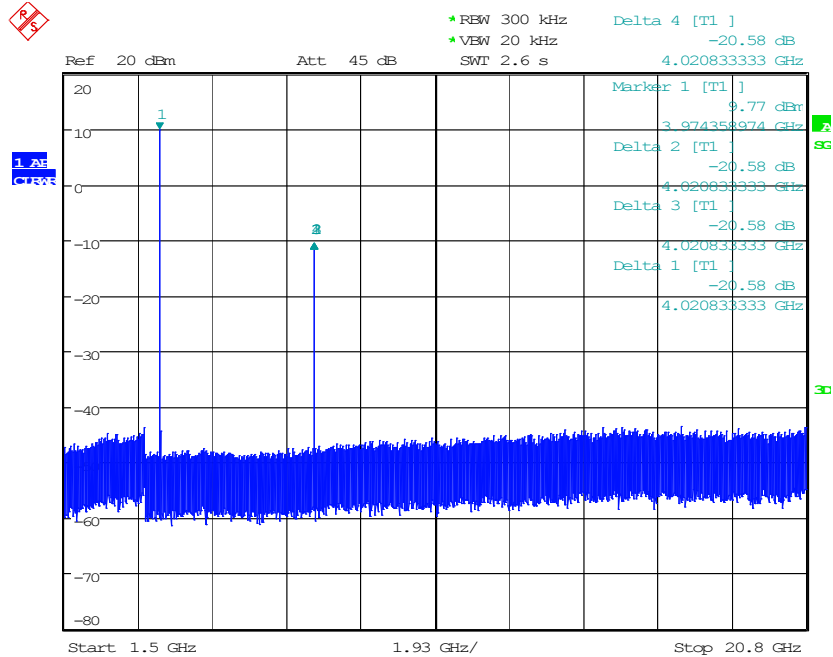
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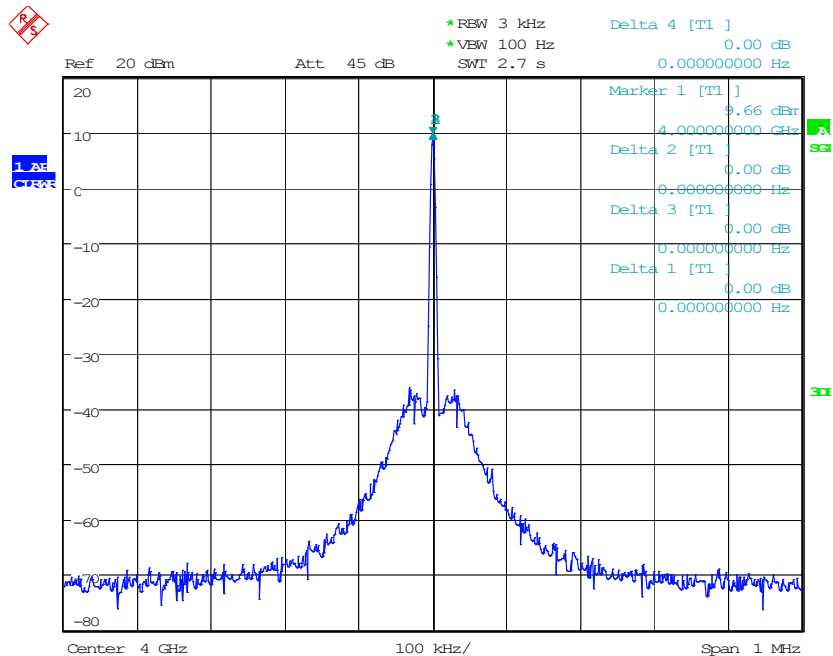
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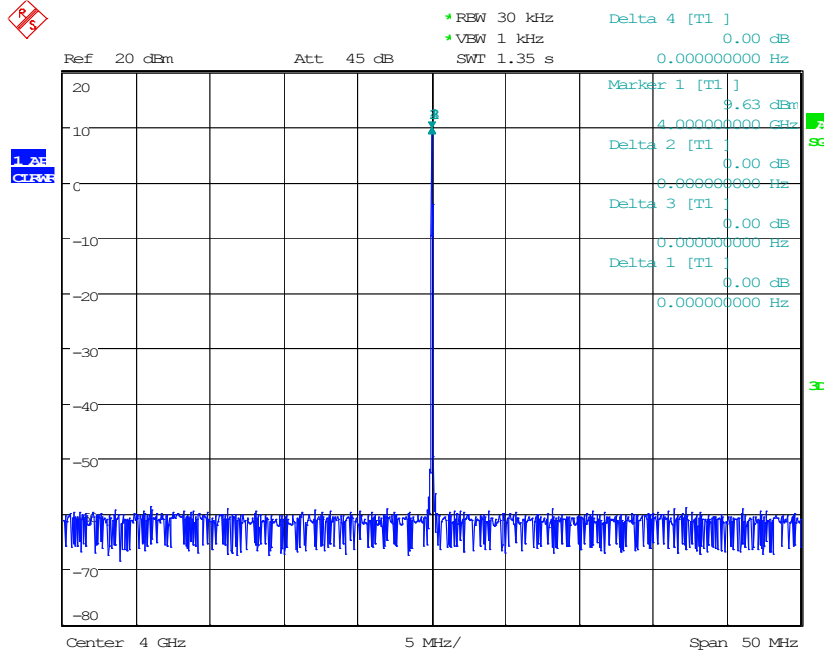
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