

INTELLIGENT INTERACTIVE SYNTHESIZER

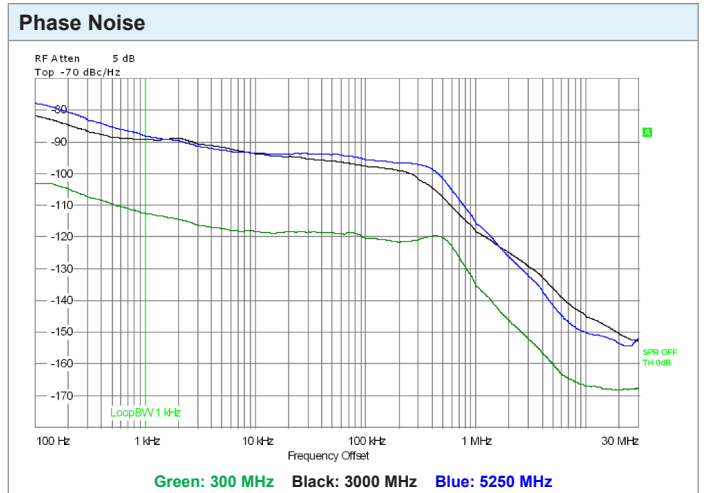
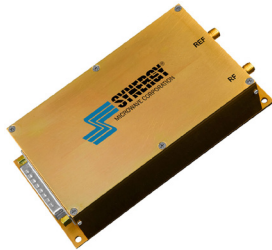
CONNECTORIZED MODEL: KMTS2500-30525-10

WIDE BANDWIDTH

300 - 5250 MHz

FEATURES:

- ▶ Multi-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 (Rev. C 5/10/18)

Output Frequency ⁴	300 - 5250 MHz
Bandwidth	4950 MHz
External Reference ¹	10 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	8 Watts (Max.)
Output Power	+6 dBm (Min.)
Spurious Suppression	50 dB (Typ.)
Harmonic Suppression	10 dB (Typ.)
Sub-harmonic Suppression	20 dB (Typ.)
Patent : http://www.synergymwave.com/patents	

Typical Phase Noise	Offset	dBc/Hz.
	1 kHz	-87
	10 kHz	-92
Settling Time²	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 Bus³	Specify SPI	

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 10 MHz.

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

³ Default bus (if unspecified) is SPI.

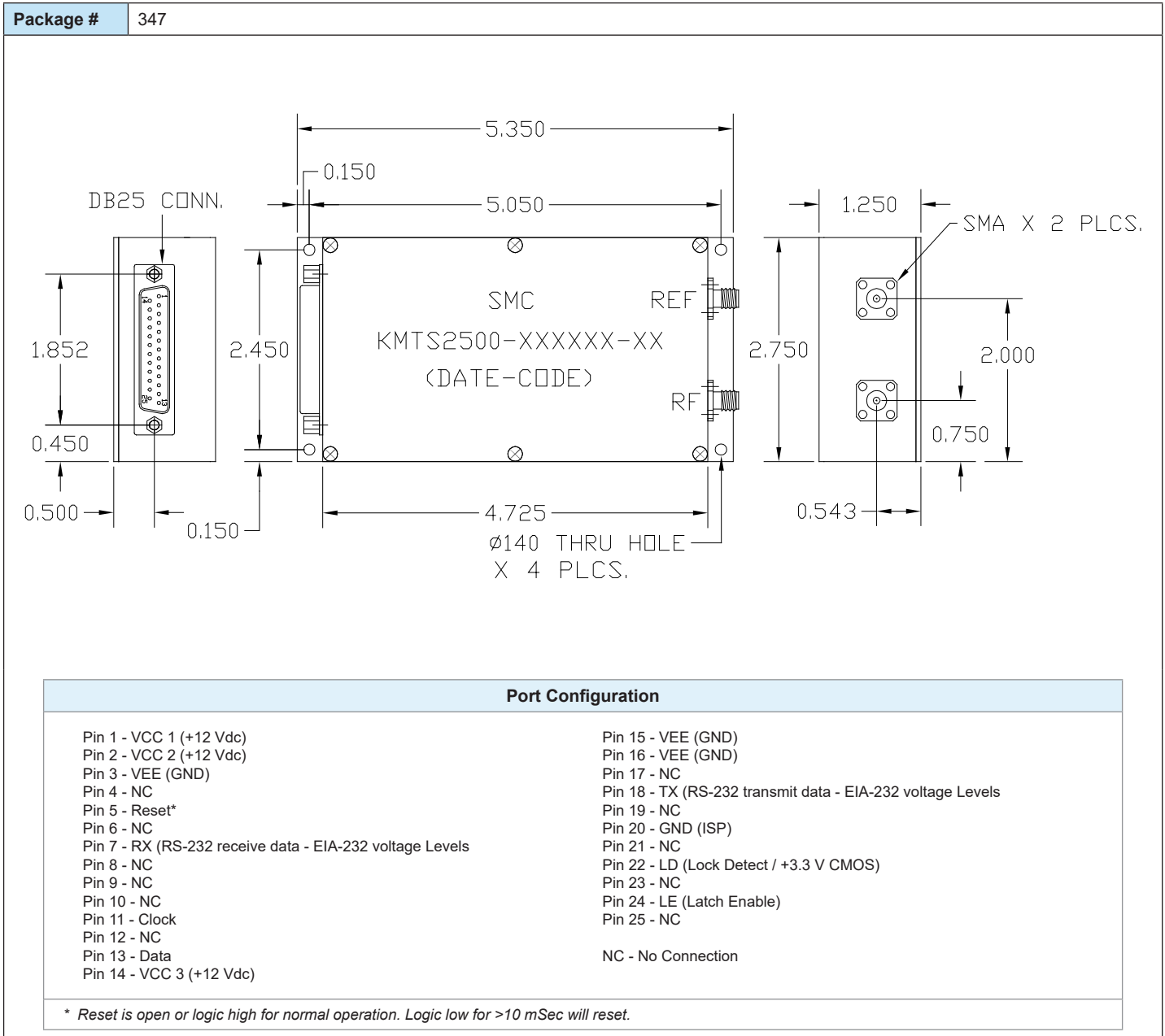
⁴ Default frequency: 3000 MHz

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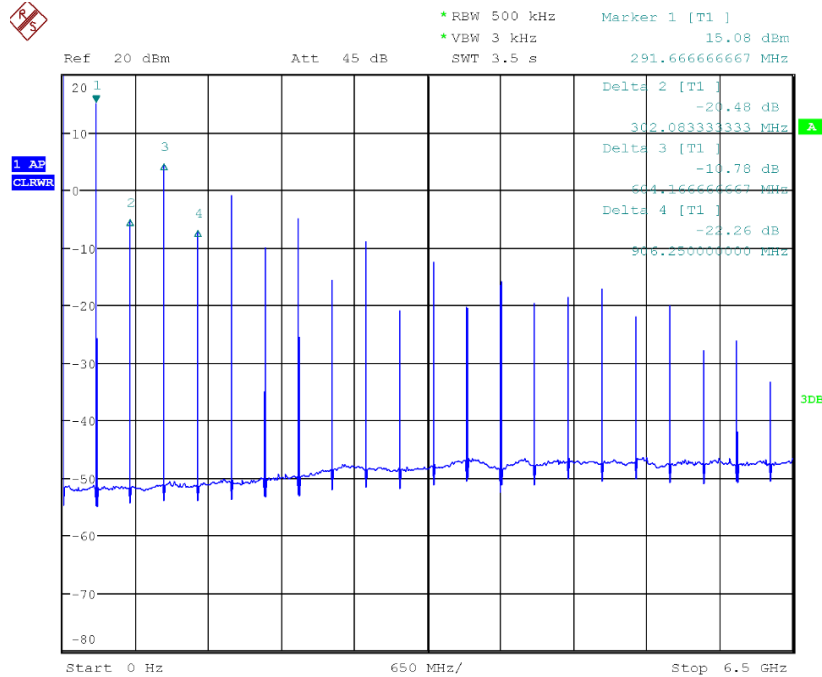
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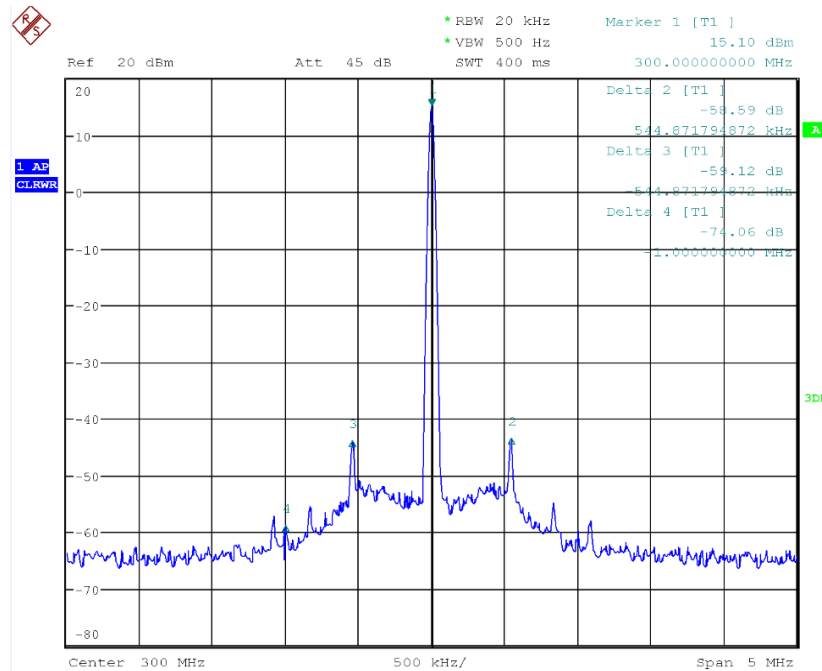
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HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION



PERFORMANCE PLOTS

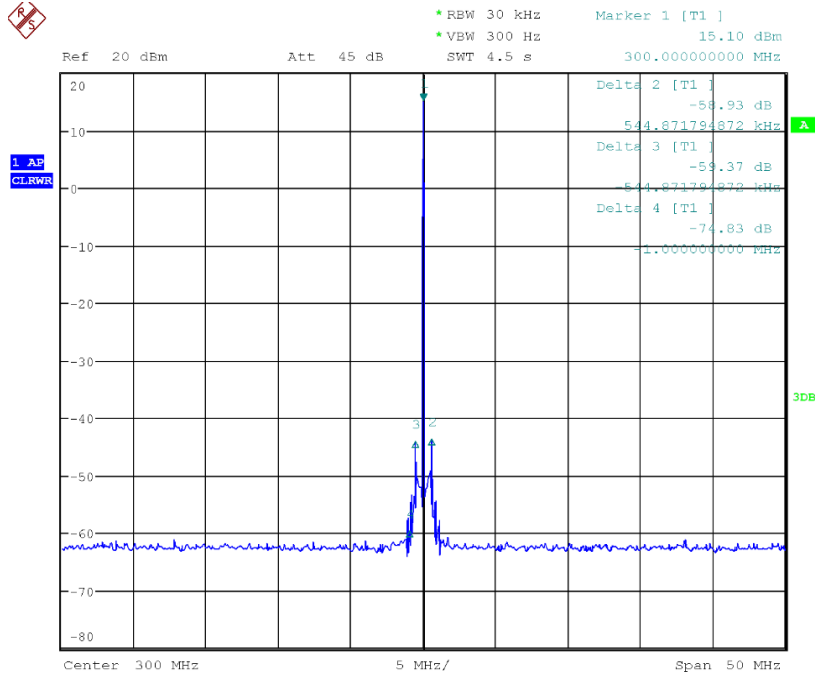
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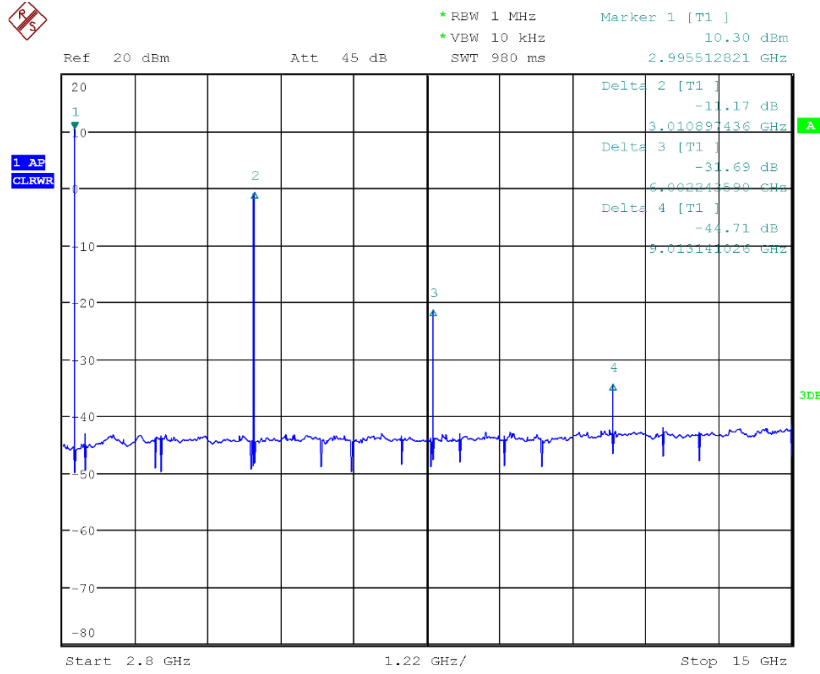
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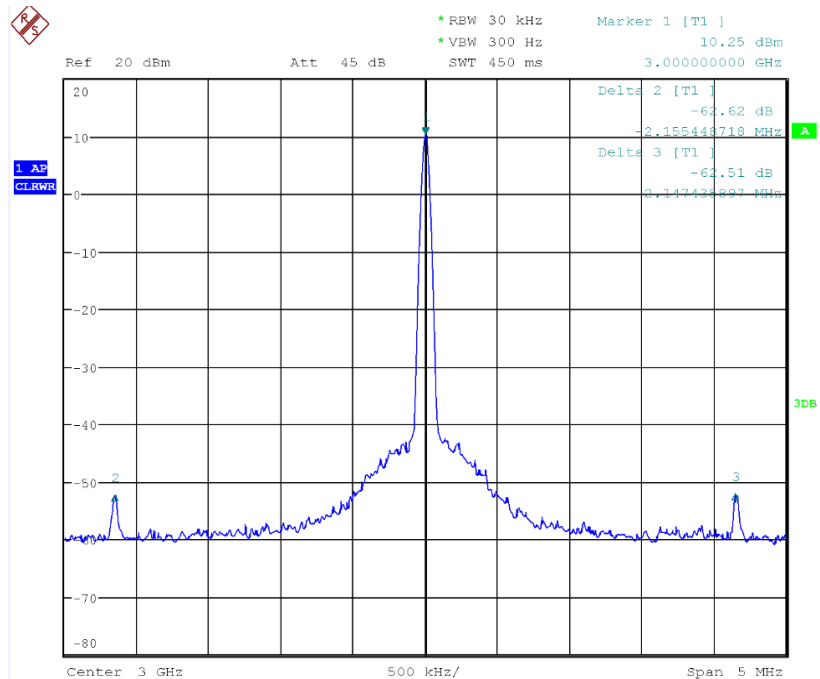
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HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION



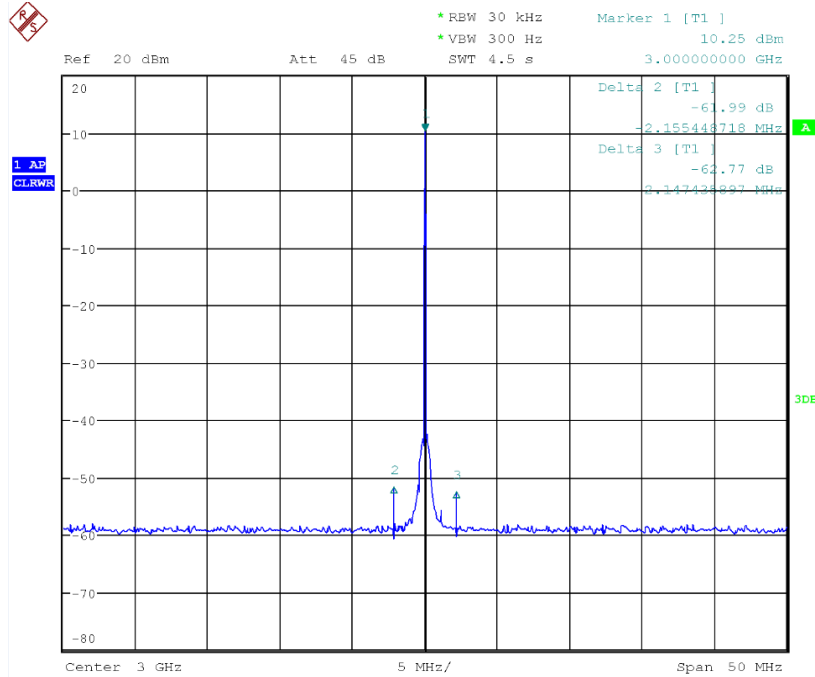
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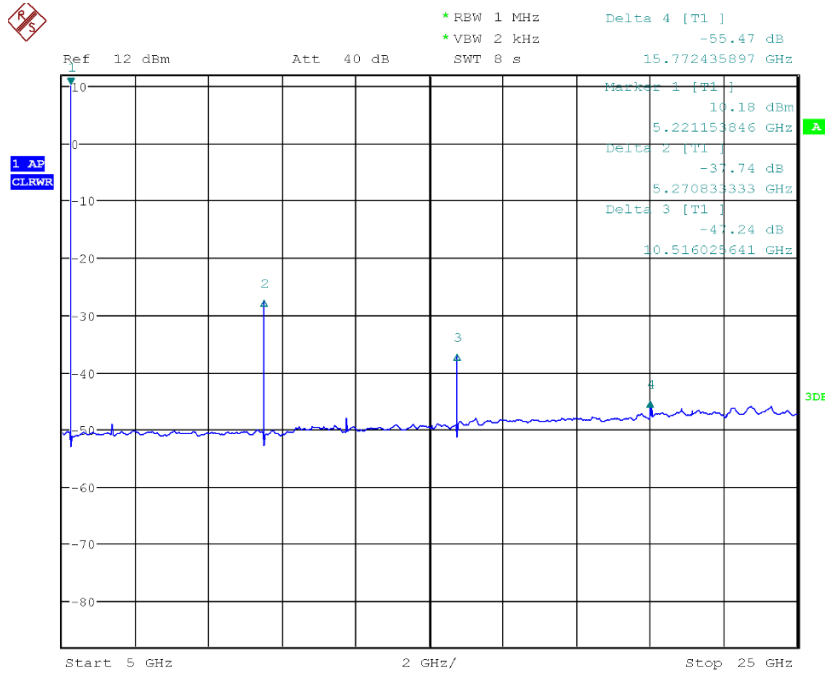
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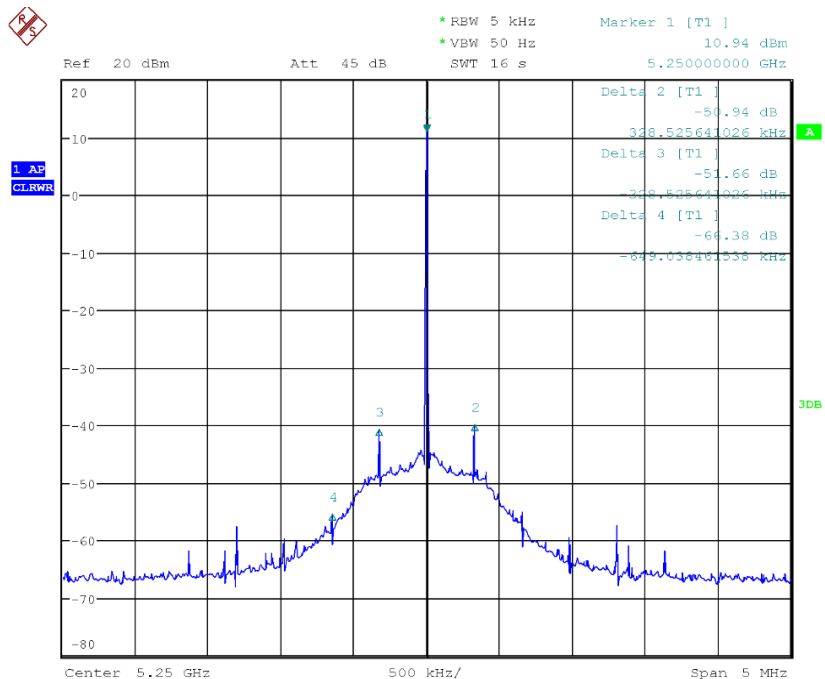
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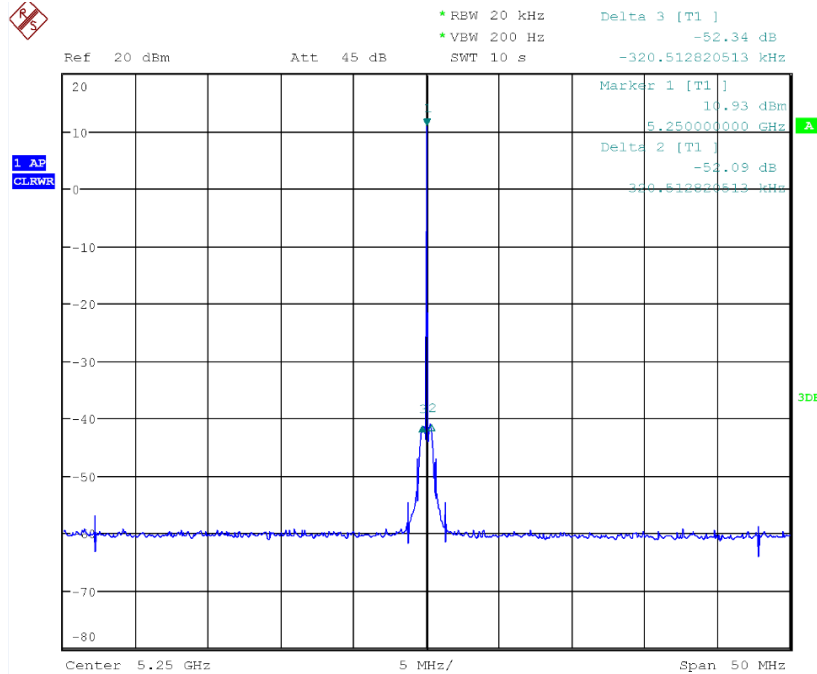
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