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"Friendship through Radio"

Hi all,

After my message inserted on several newsgroups on may 24th :

"Better to use AD9912 and not AD9910", reporting:

"following e-mail exchanges with my good friend Colin Horrabin, G3SBI, I came to know that one of his friends who heads the DDS development team for Analog Devices has told him that their lab tests have shown that the AD9912 has better spurious performance than the 9910 and as yet they don't know why this should be. So if anyone is developing boards for amateur radio applications they should obviously start with the AD9912 and not the AD9910."

I have received several enquiries about any test done on the AD9912.

Yes, my good friend Giuliano, IOCG (of AD9951 DDS fame), is performing measurements on the AD9912 and also comparisons with his already well known and appreciated DDS using AD9951 and a 500MHz clock.

Some Spectrum Analyzer screen shots on AD9912 SFDR measurements are reported and also one for comparison with AD9951.

When IOCG will release further reports I will distribute them.

73

Gian

I7SWX, F5VGU, W1-I7SWX, CE3-I7SWX

I QRP #571; G-QRP #10241; JARL-QRP #773

Ruolo d'Onore ARI # 387

www.qsl.net/i7swx

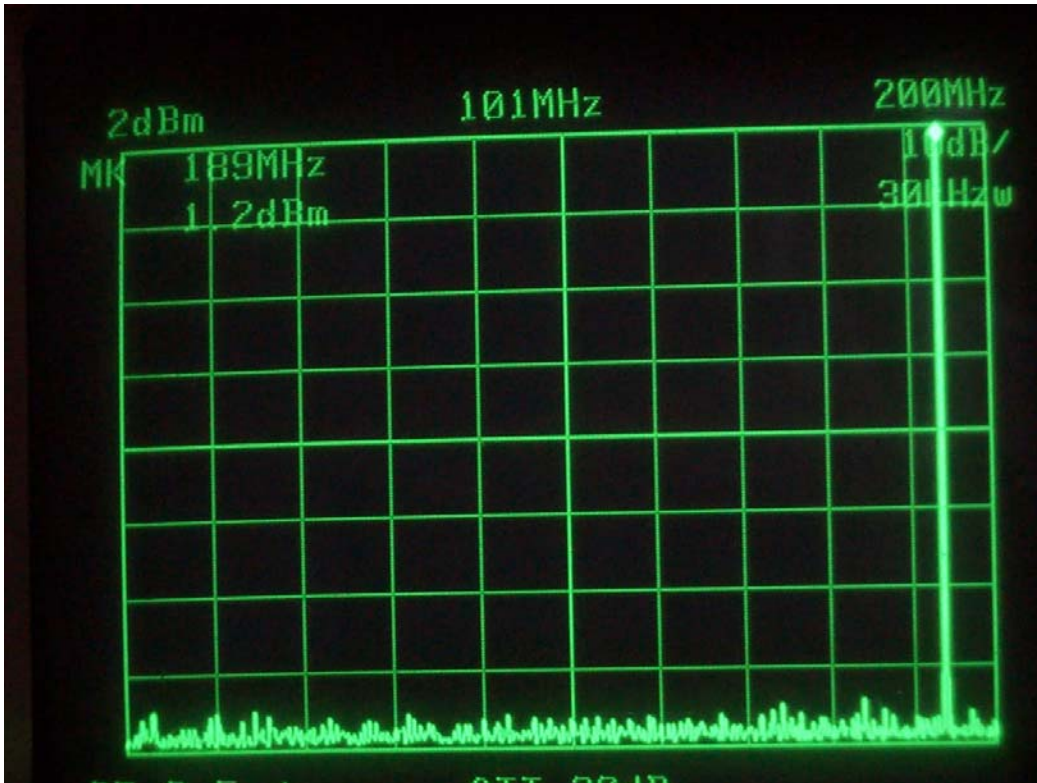
SWL I1-10089; ex I1SWX, I5SWX, I2SWX, I0SWX

President ARI - Sezione Cassano delle Murge BA -Italy (Radioclub) IQ7MU

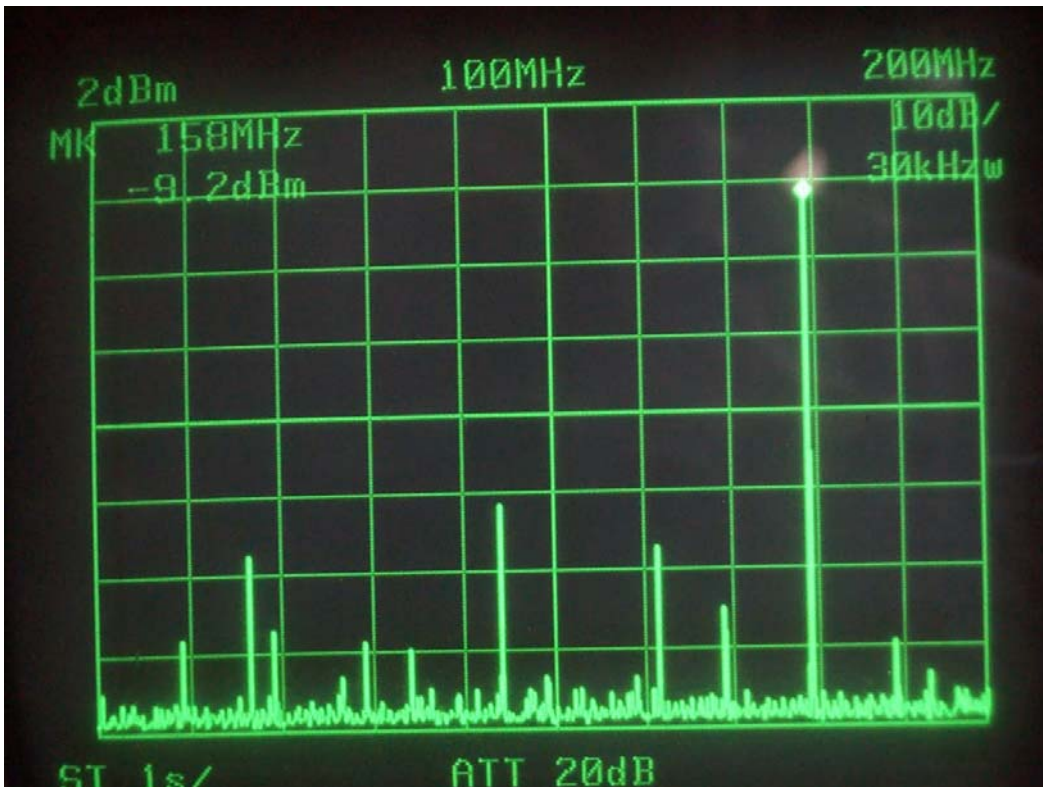
G-QRP Club (UK) Representative for Italy

May 25th, 2007

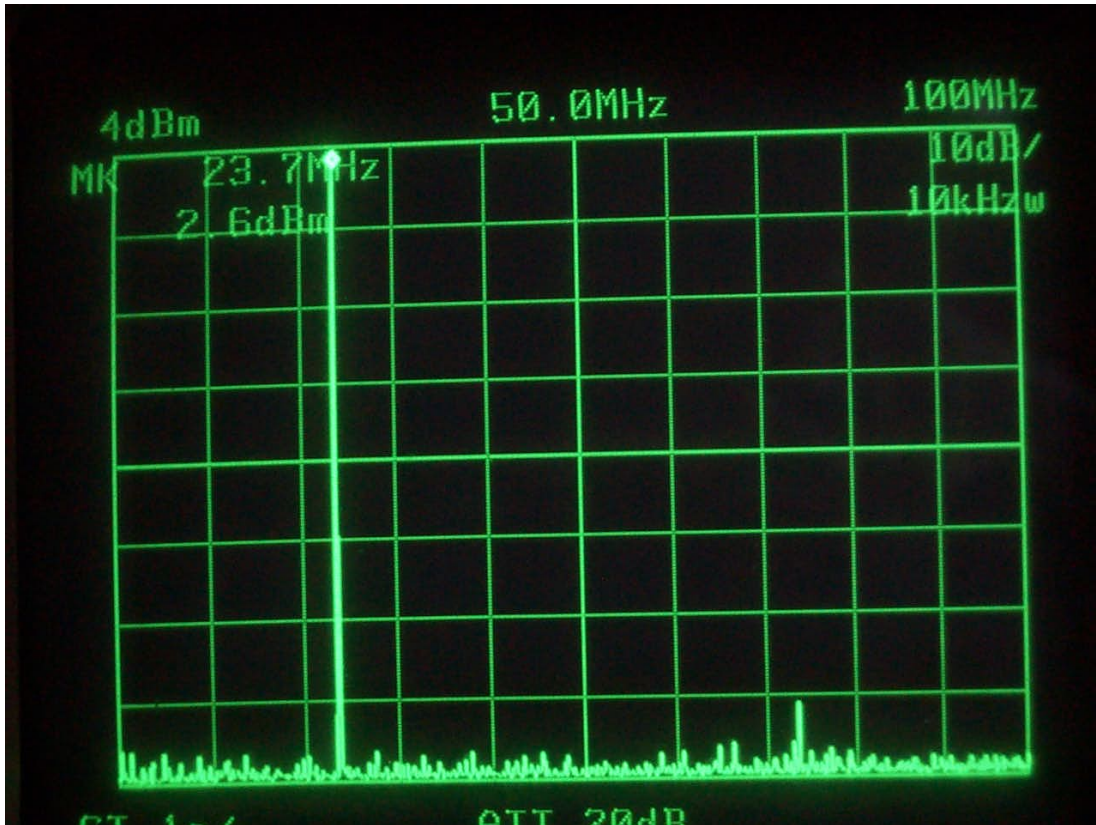
AD9912 wide-band SFDR test
Author: Carmignani Giuliano IOCG May-23-2007



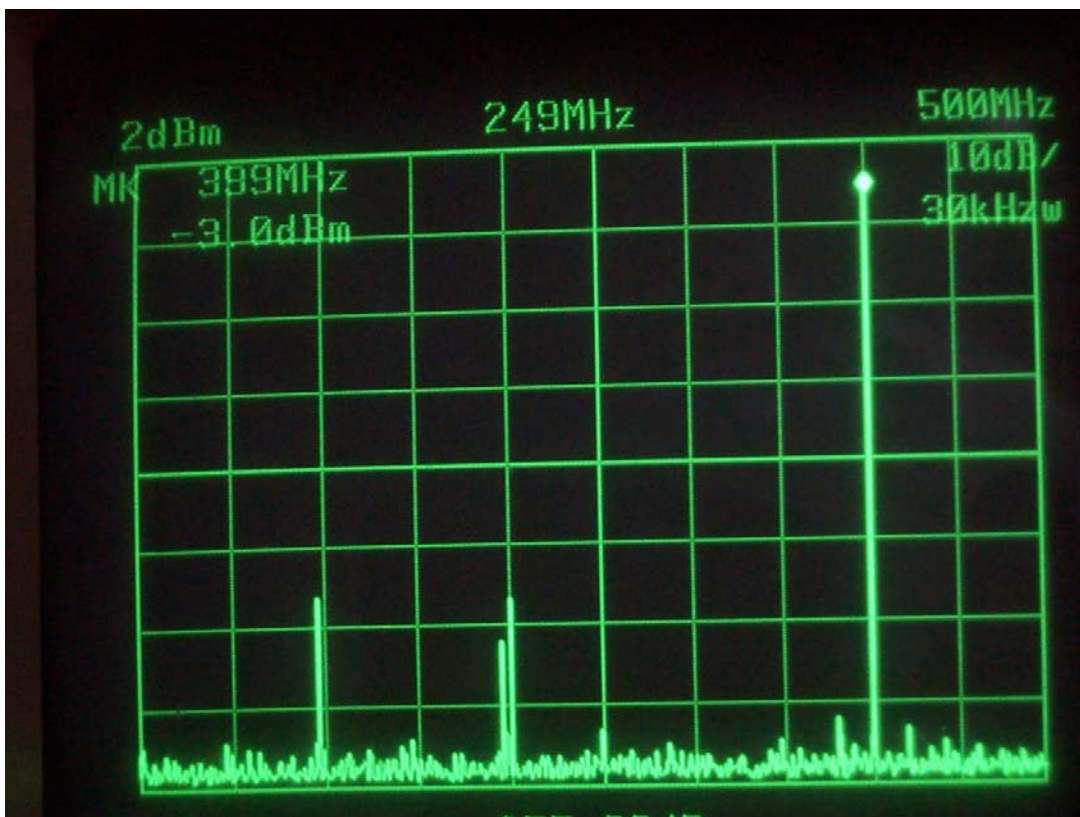
SFDR AD9912 F= 189 MHz level +1,2 dBm (without any amplifier)
Clock = 1GHz



SFDR of AD9951 at about same Frq. (158 Mhz)
Clk = 500 Mhz



Harmonic response of AD9912 F= 23.7 MHz level +2,6 dBm, span 100 MHz
Only third Harmonic visible but with Spur Killer can be suppressed



Very wide-band SFDR for AD9912 Fout= 399 MHz , Spam 500 Mhz
Clock = 1 GHz (no Aliasing filter used to the DDS output)