

Fig.1 SDR-IQ (Cost new \$400)

SETTINGS:

Center Frequency: 10.000000 MHz
 Span: 0.000500 MHz
 BW Res: 0.5 Hz

RF Gain

Use Fixed Settings: Yes
 RF Gain: -20 dB
 Use Calibrated Screen: Yes

6620 Digital Downconverter

CIC1 Rate: 16
 CIC2 Scale: 6
 CIC5 Rate: 32
 CIC5 scale: 20
 RFC Rate: 16
 RFC Scale: 0
 Total Decimation: 8192
 Final Sample Rate: 8137
 6620 IF Gain: +24 dBm

Filter Bandwidth: 5 kHz
 FFT Window Type: Hanning
 FFT/Blk Size: 16384
 FFT Average: 10
 Smoothing: 0

Noise Floor

50 Ohm Terminated: -130
 Spur: -118

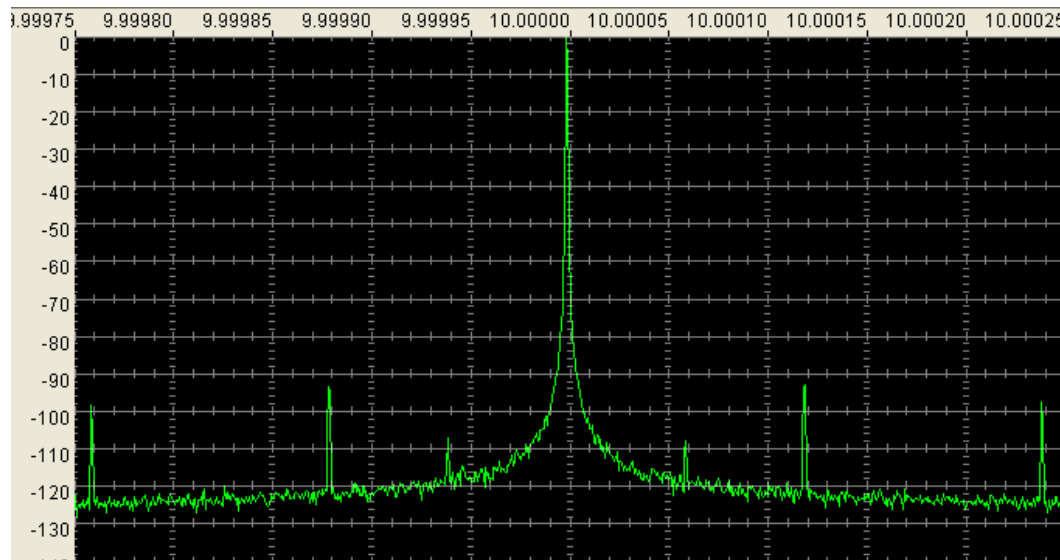


Fig.2 SDR-14 (Cost new \$1000)

SETTINGS:

Center Frequency: 10.000000 MHz
 Span: 0.000500 MHz
 BW Res: 0.5 Hz

RF Gain

Use Fixed Settings: N/A
 RF Gain: -30 dB
 Use Calibrated Screen: Yes

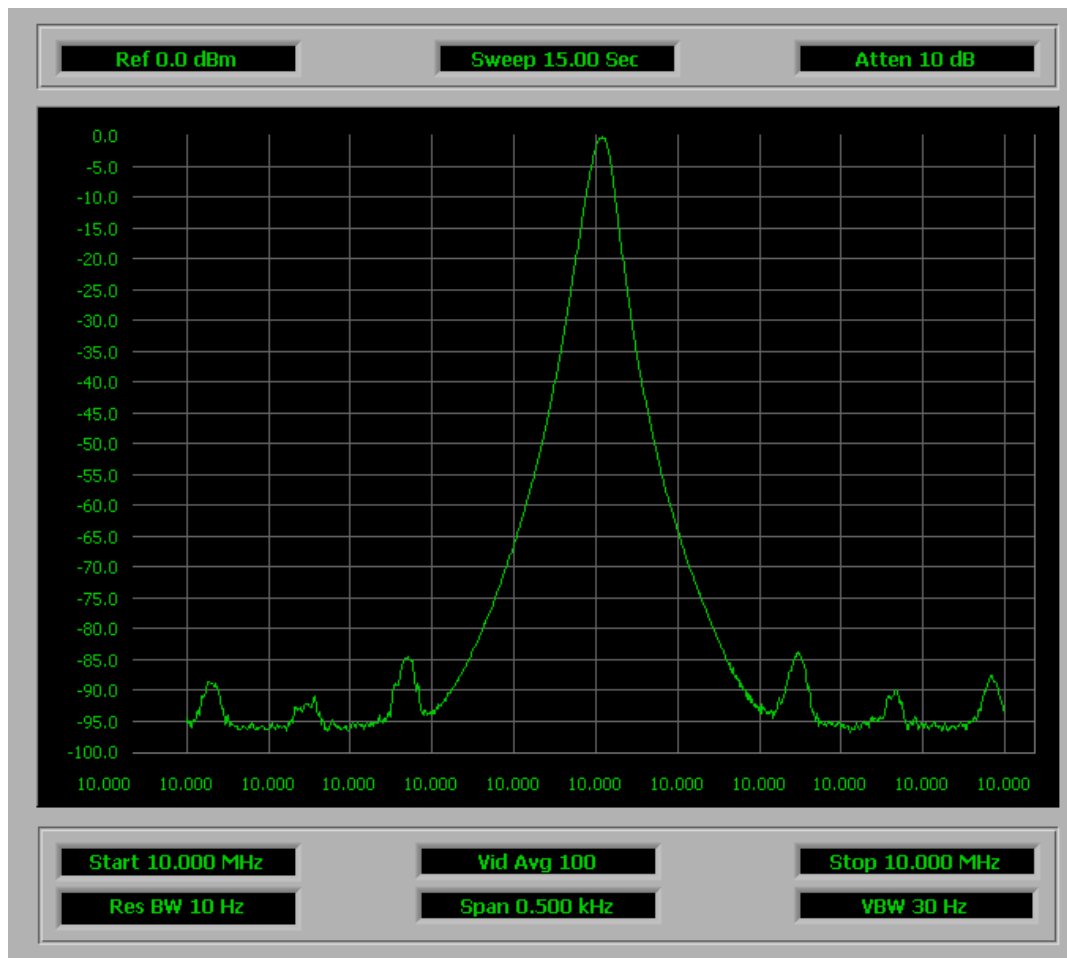
6620 Digital Downconverter

CIC1 Rate: 16
 CIC2 Scale: 6
 CIC5 Rate: 32
 CIC5 scale: 20
 RFC Rate: 16
 RFC Scale: 0
 Total Decimation: 8192
 Final Sample Rate: 8137
 6620 IF Gain: +24 dBm

Filter Bandwidth: 5 kHz
 FFT Window Type: Hanning
 FFT/Blk Size: 16384
 FFT Average: 10
 Smoothing: 0

Noise Floor

50 Ohm Terminated: -132
 Spur: -120



SETTINGS:

Center Frequency: 10.000000 MHz
 Span: 0.000500 MHz
 BW Res: 10 Hz

Noise Floor

50 Ohm Terminated: -131.6
 Spur: N/A

SSB Phase Noise
 150 Hz Offset: -104.00 dBc/Hz

**Fig.3 Agilent 8566B (Cost new \$75,800 in 1997)
 NIST Calibration 02 July, 2007**