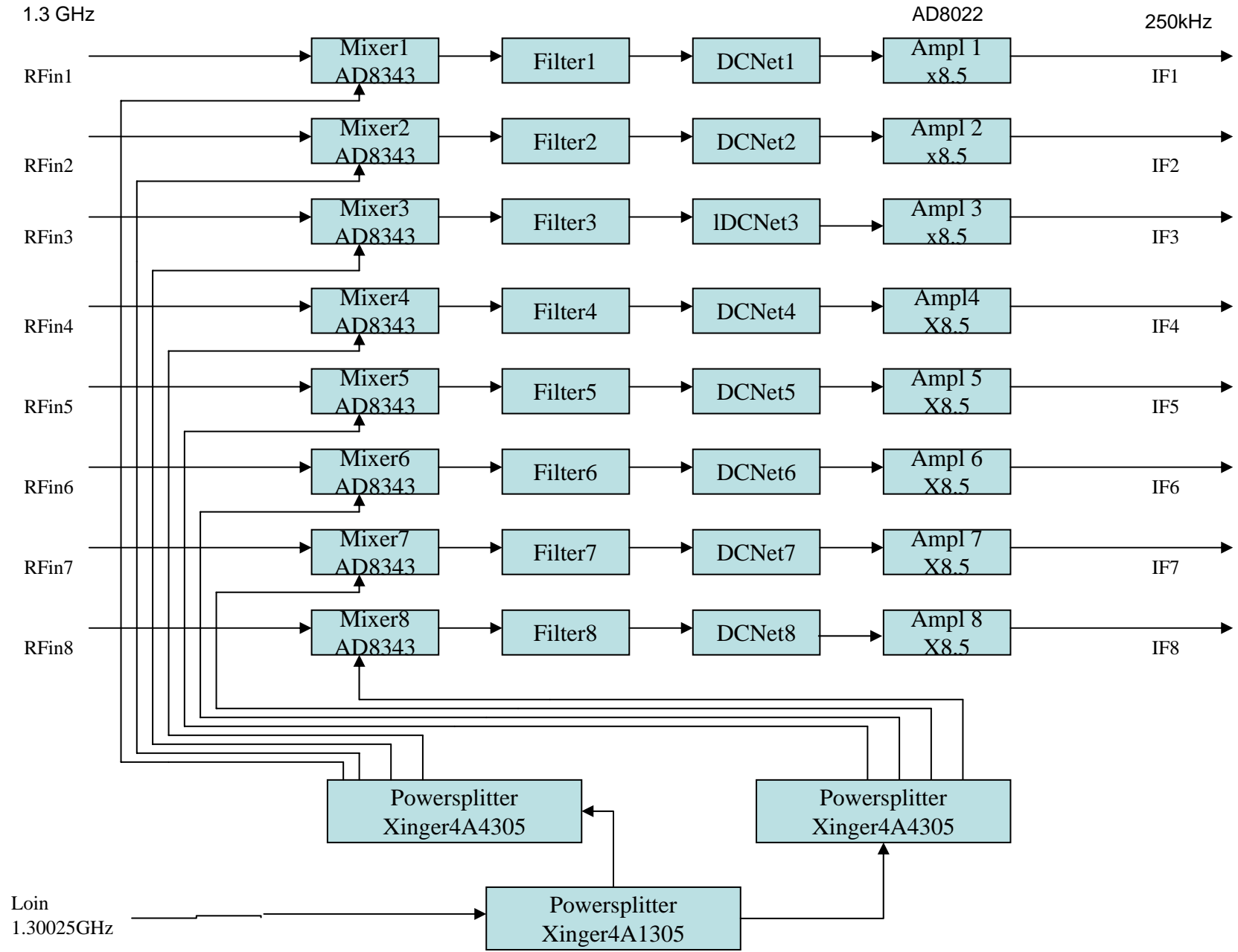
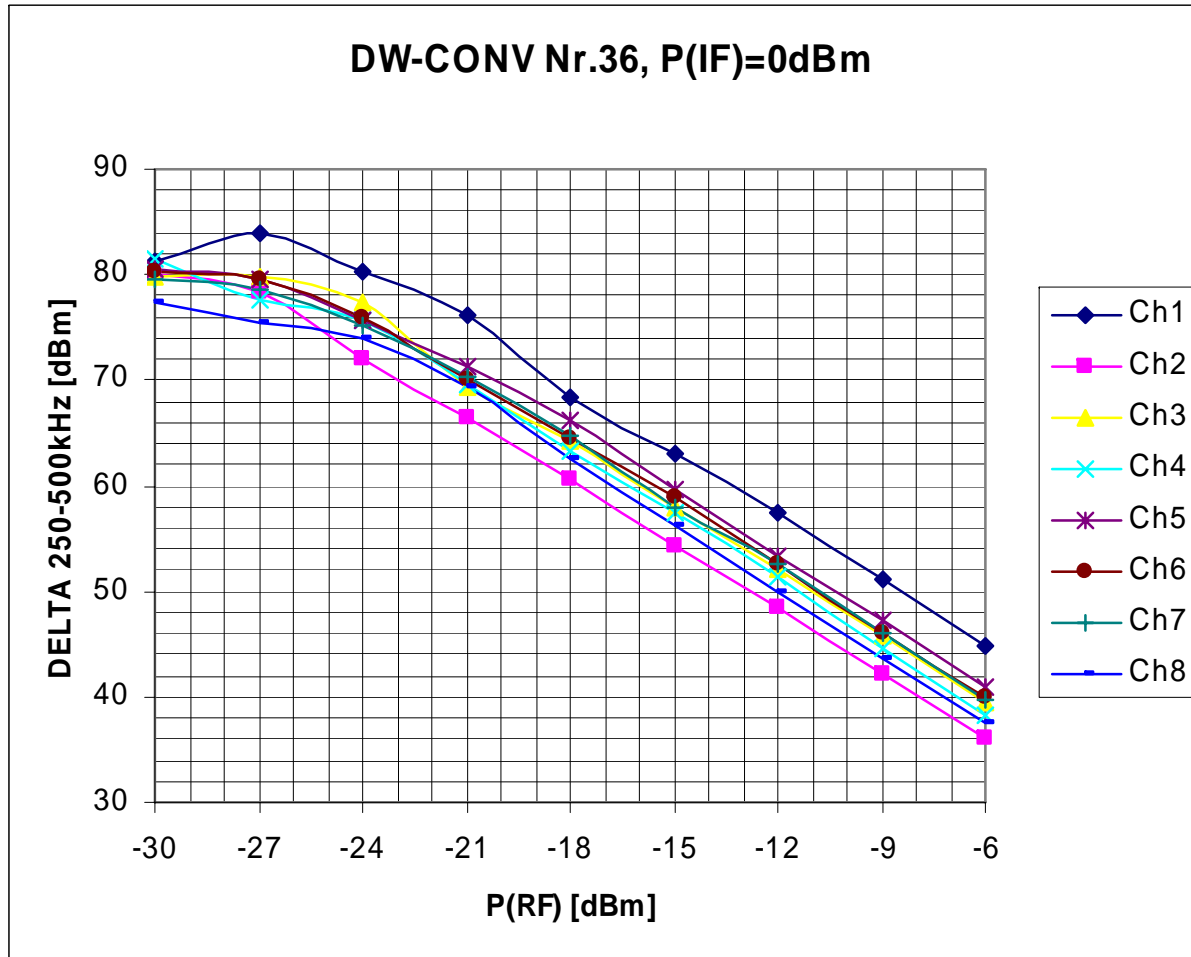


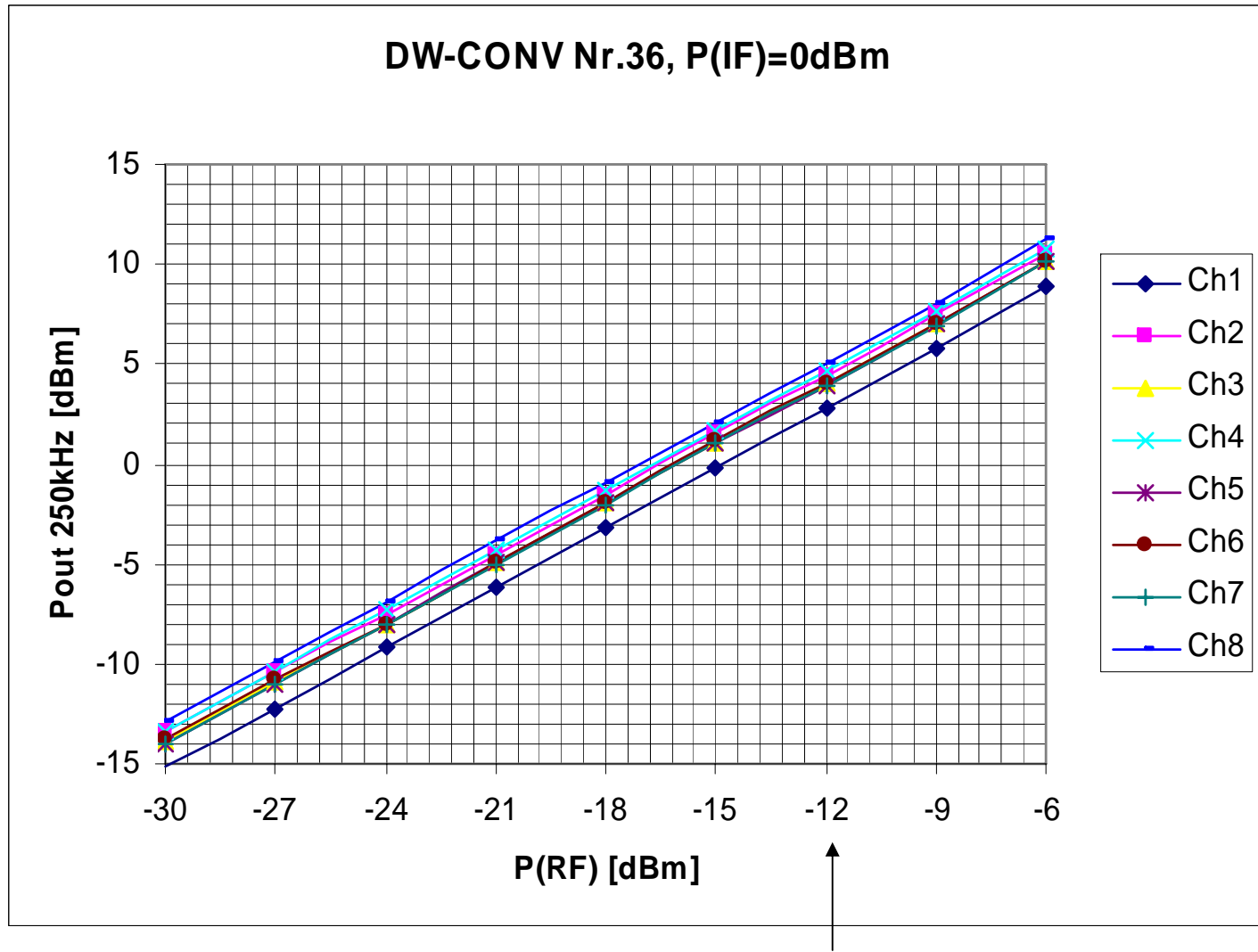
Blockdiagramm 8channel Downconverter



Linearity:
Distance 1st to second Harmonic of IF 250 to 500 kHz
Linearity > 50dB for Rfin < -12dBm

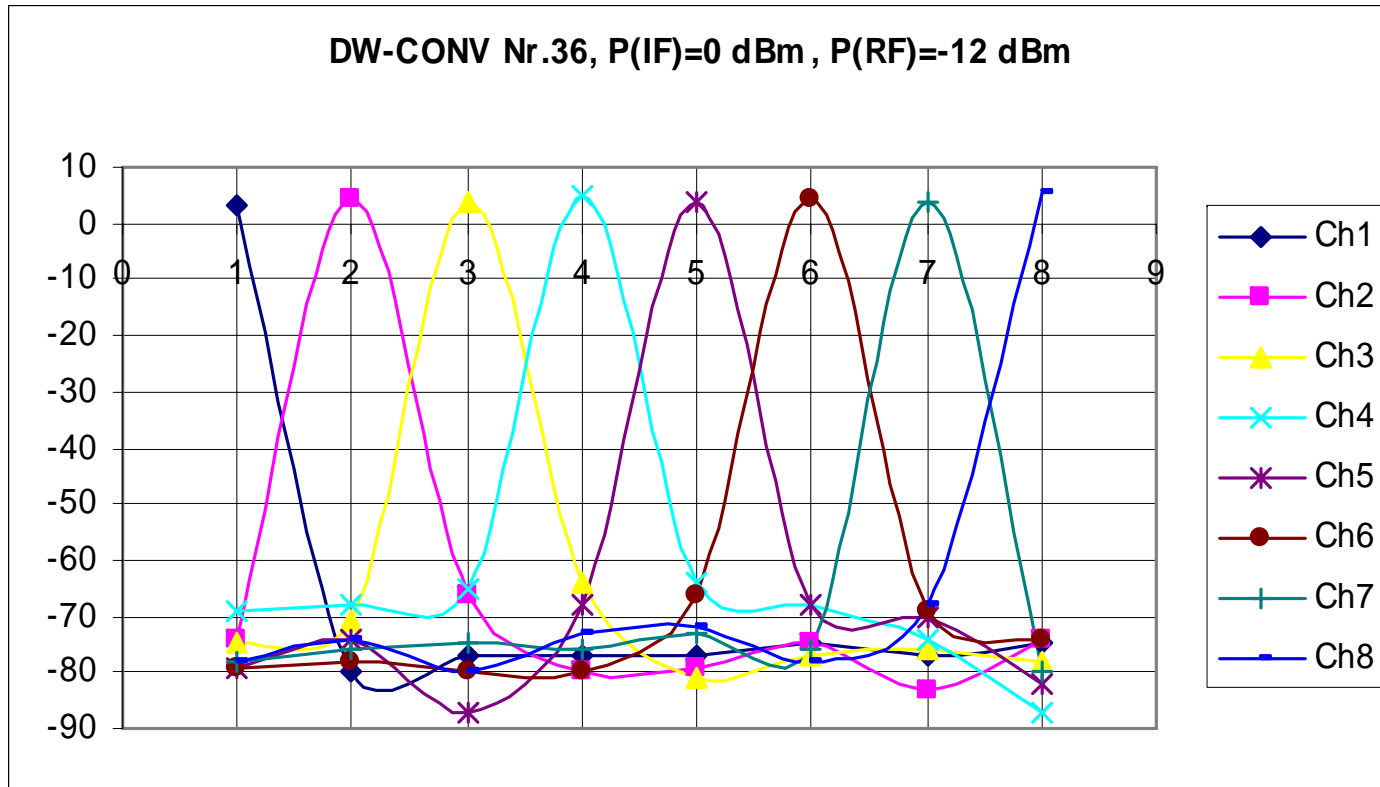


Dynamic behaviour of IF frequency



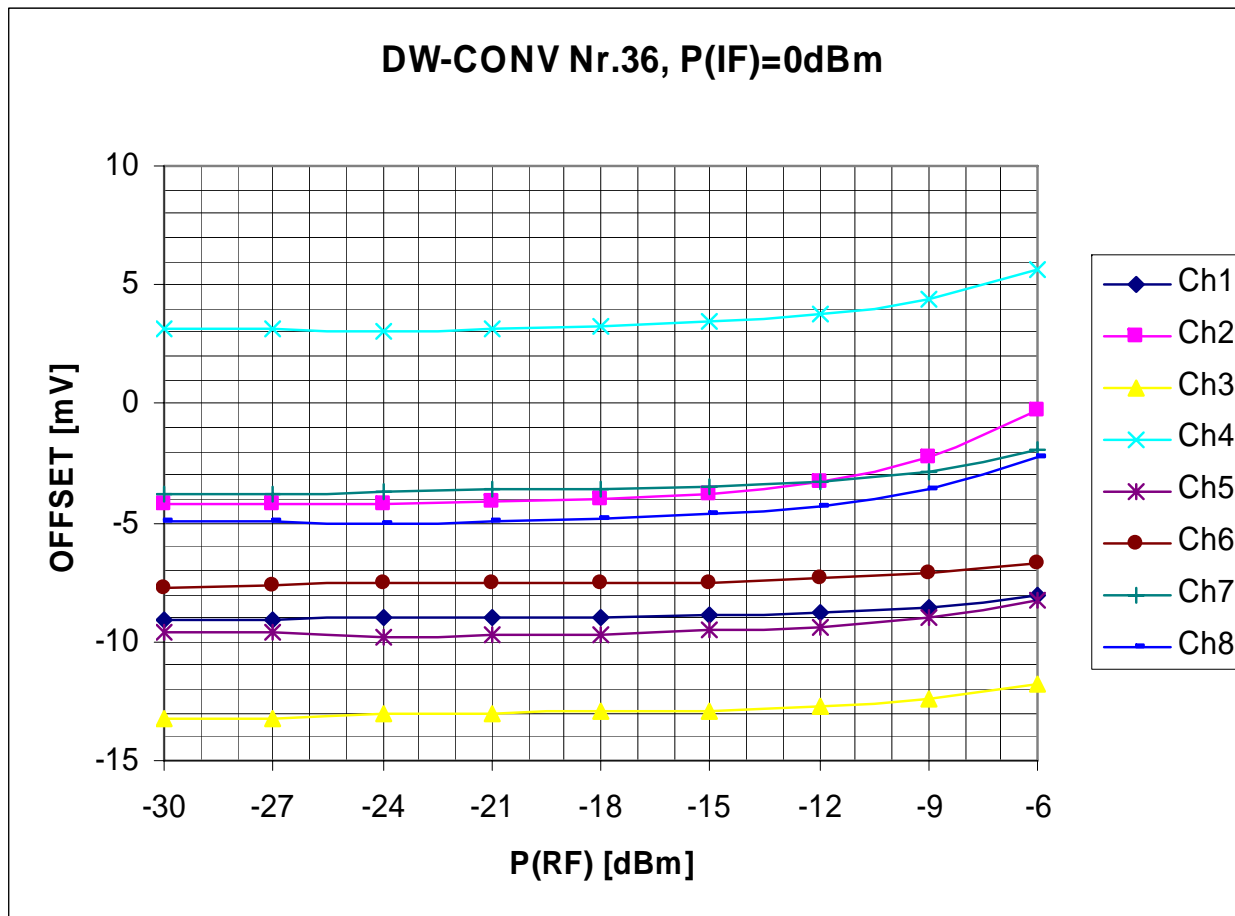
Max Output Level between +3 and +6 dBm for IF of 25 KHz

Crosstalk



Crosstalk of < 60 dB

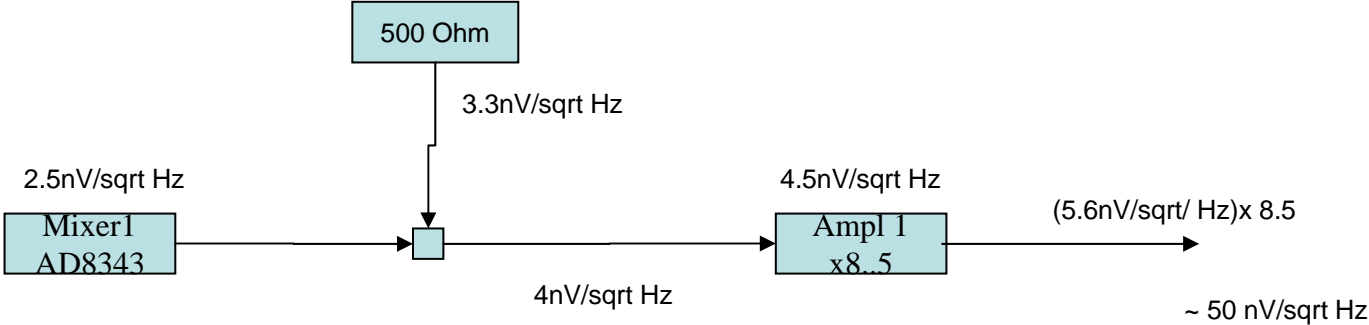
Offset Behaviour



Offset < 1mV for RFin < -12dBm

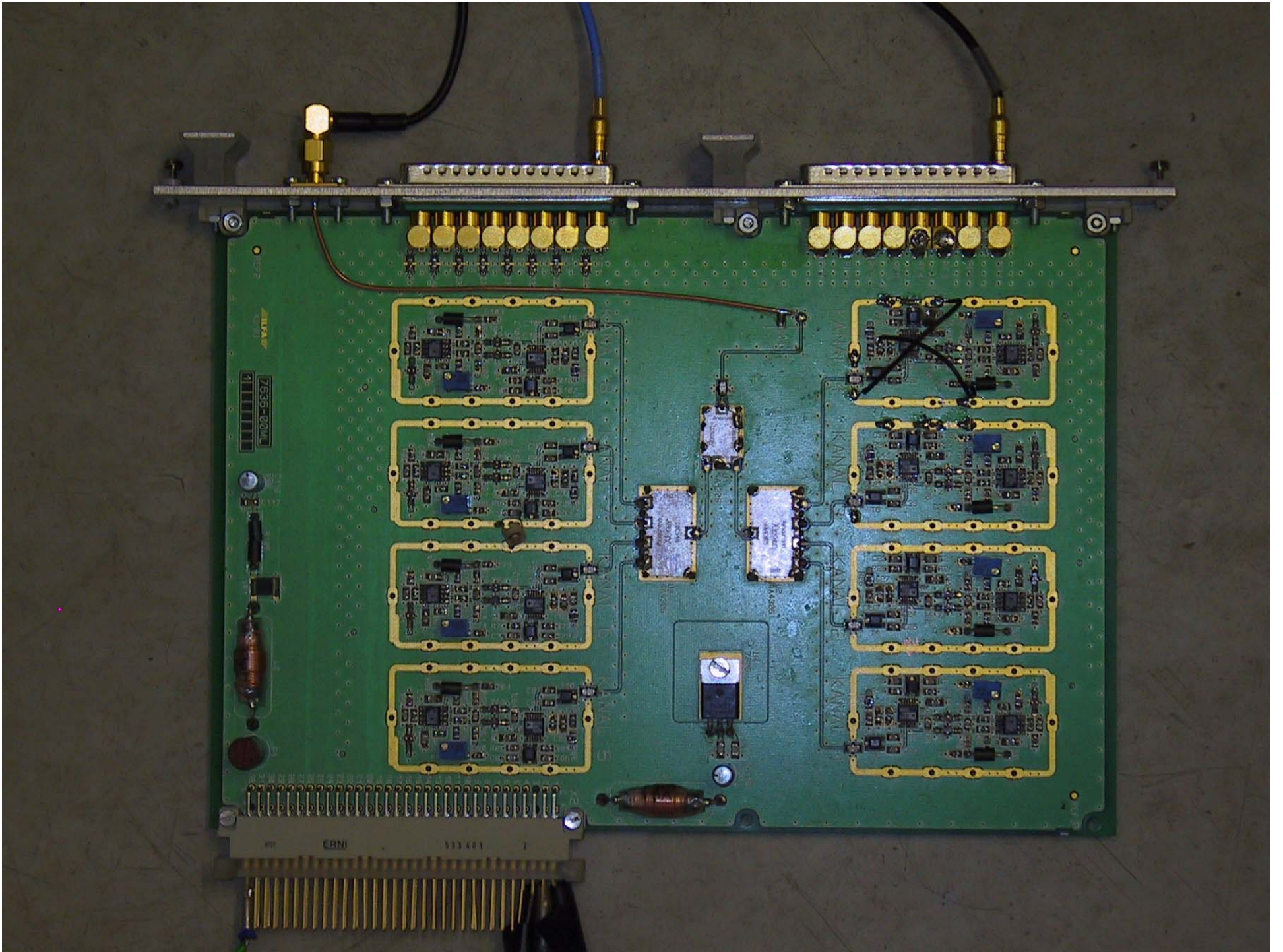
Temperature Drift < 1mV/deg C or 0.2 deg RF Phaseshift per 1 deg C

Noise estimation for one channel Downconverter based on AD8343 mixer



Noise measured with HP 3556A shows $70 \text{ nV}/\sqrt{\text{Hz}}$ in the range 0 to 100KHz

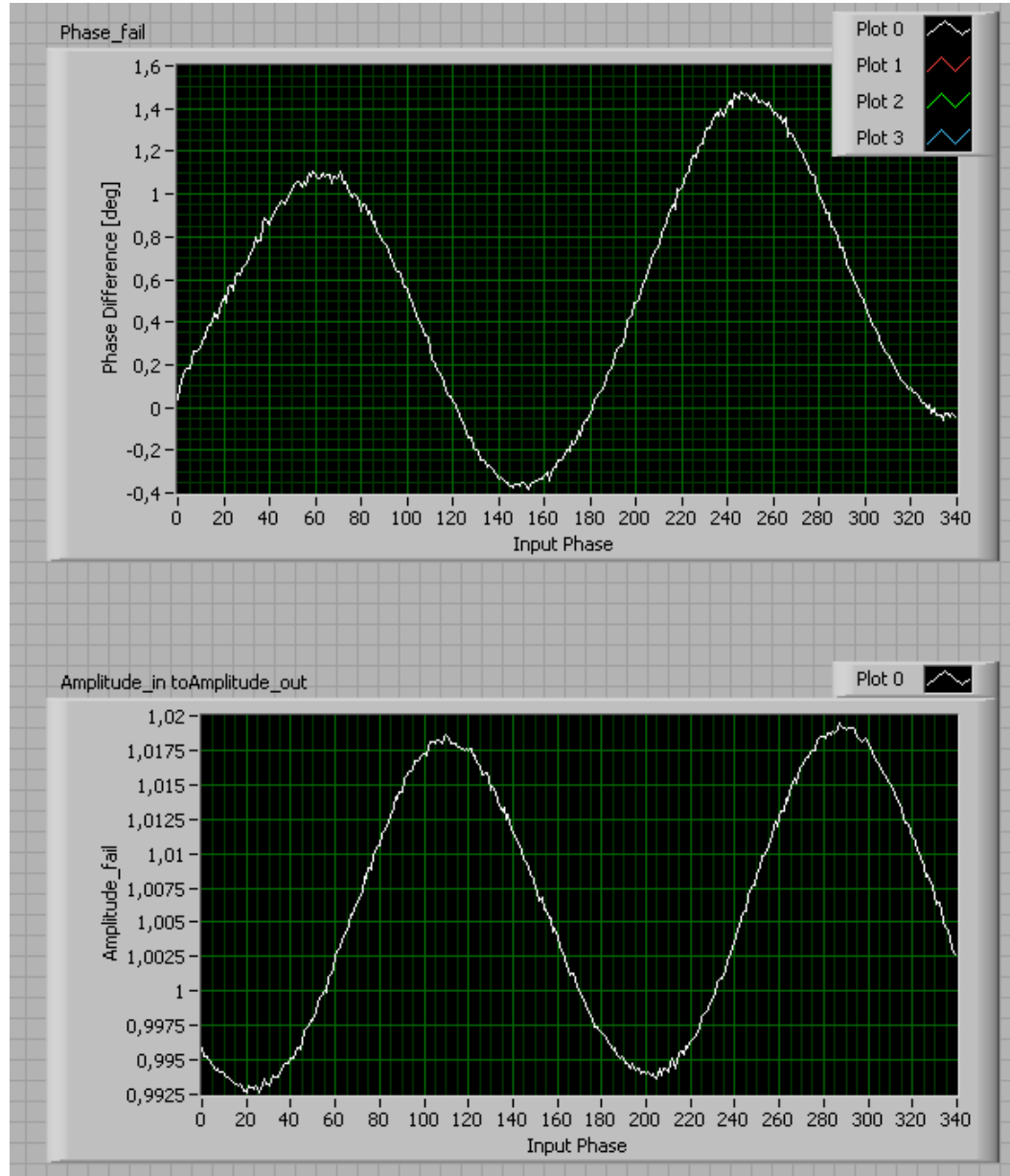
Noise for 200 kHz Bandwidth $\sim 30 \text{ uV rms}$



Vektormodulator
AD8349
With I and Q Signals
± 750 mV pp

Phasefailure
2.0deg_pp for 360deg

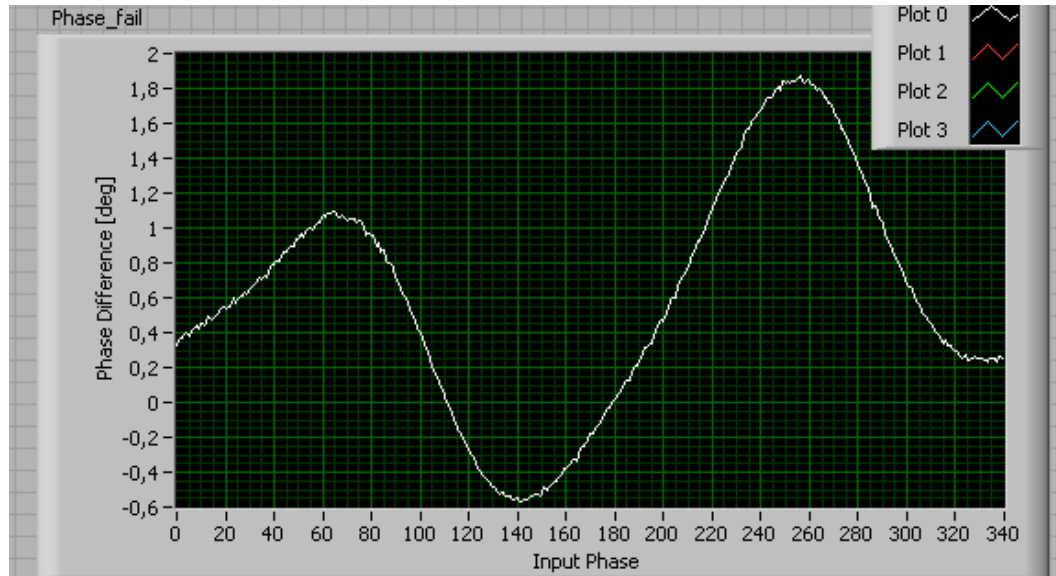
Amplitudedefailure
± 1 %



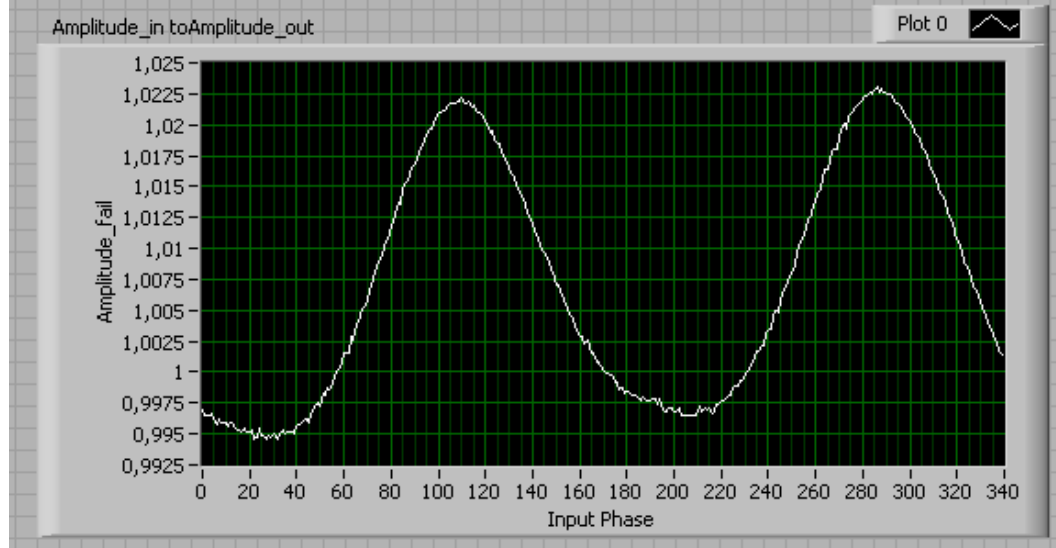
Measured with
R&S type ZVRE
Networkanalyzer
and
2x Agilent 33220A
Waveform
Generator

Vektormodulator
AD 8349
With I and Q Signals
+- 1.5 Volts

Phase failure
2.5 deg pp

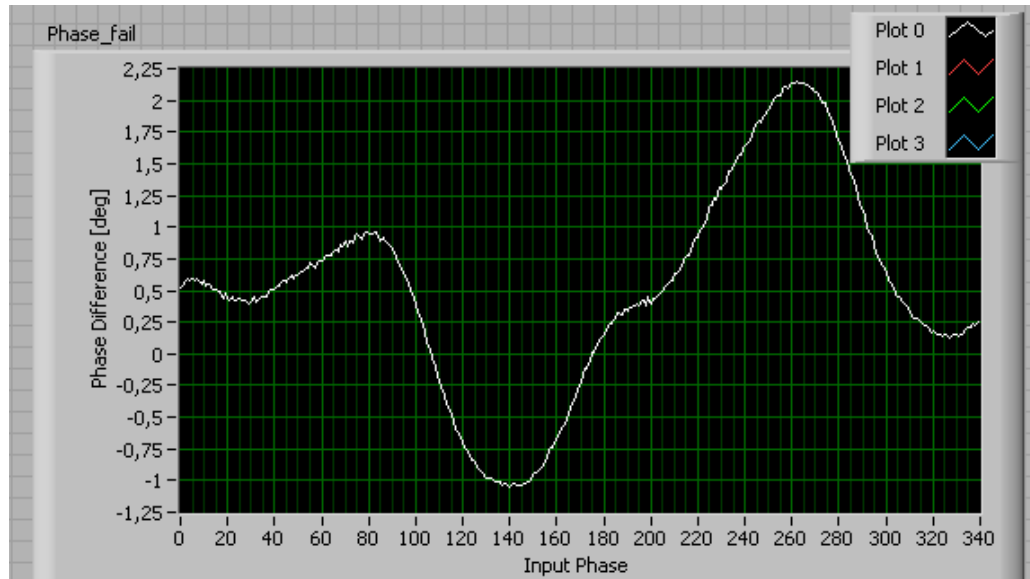


Amplitude failure
+- 1.25% pp



Vektormodulator
AD8349
With IQ input signals
+- 2.0 Volts

Phase failure
3.1 deg



Amplitude failure
+- 2.6 %

