Eqn $Ps = spec\_power(dBm(fs(RX\_in[::,::,1],,,,,"Kaiser")),-1e5,1e5) - WindowGain$
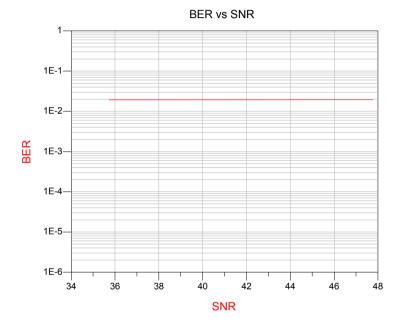
Eqn $Pn = wtodbm(dbmtow(spec\_power(dBm(fs(RX\_in[::,::,1],,,,,"Kaiser")),-4e5,-3e5)) + dbmtow(spec\_power(dBm(fs(RX\_in[::,::,1],,,,,"Kaiser")),3e5,4e5))) - WindowGain$
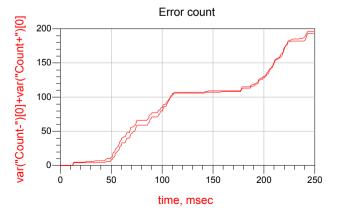
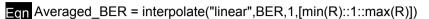**Eqn** $KaiserNENBW = 1.653$ **Eqn** $WindowGain = 10*log10(KaiserNENBW)$

Eqn $MeanPn = mean(Pn)$
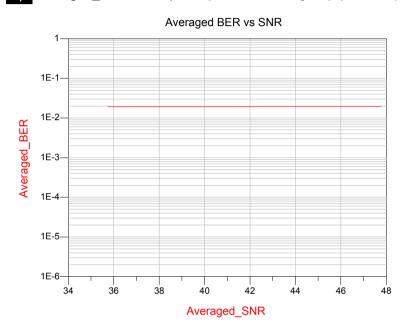
Eqn $SNR = Ps - MeanPn$

Eqn $BER = real(max(var("Count-")[::,::,0])+max(var("Count+")[::,::,0])) / Bits[0,0]$

Eqn $Averaged\_BER = interpolate("linear",BER,1,[min(R)::1::max(R)])$

Eqn $Averaged\_SNR = interpolate("linear",SNR,1,[min(R)::1::max(R)])$

BER vs SNR

Averaged BER vs SNR

Error count

Link budget simulation results

R	Ps	Pn	BER	SNR	MeanPn
100.000000	-70.029760	-117.829843	0.019600	47.769755	-117.799515
200.000000	-82.069408	-117.769187	0.019300	35.730107	