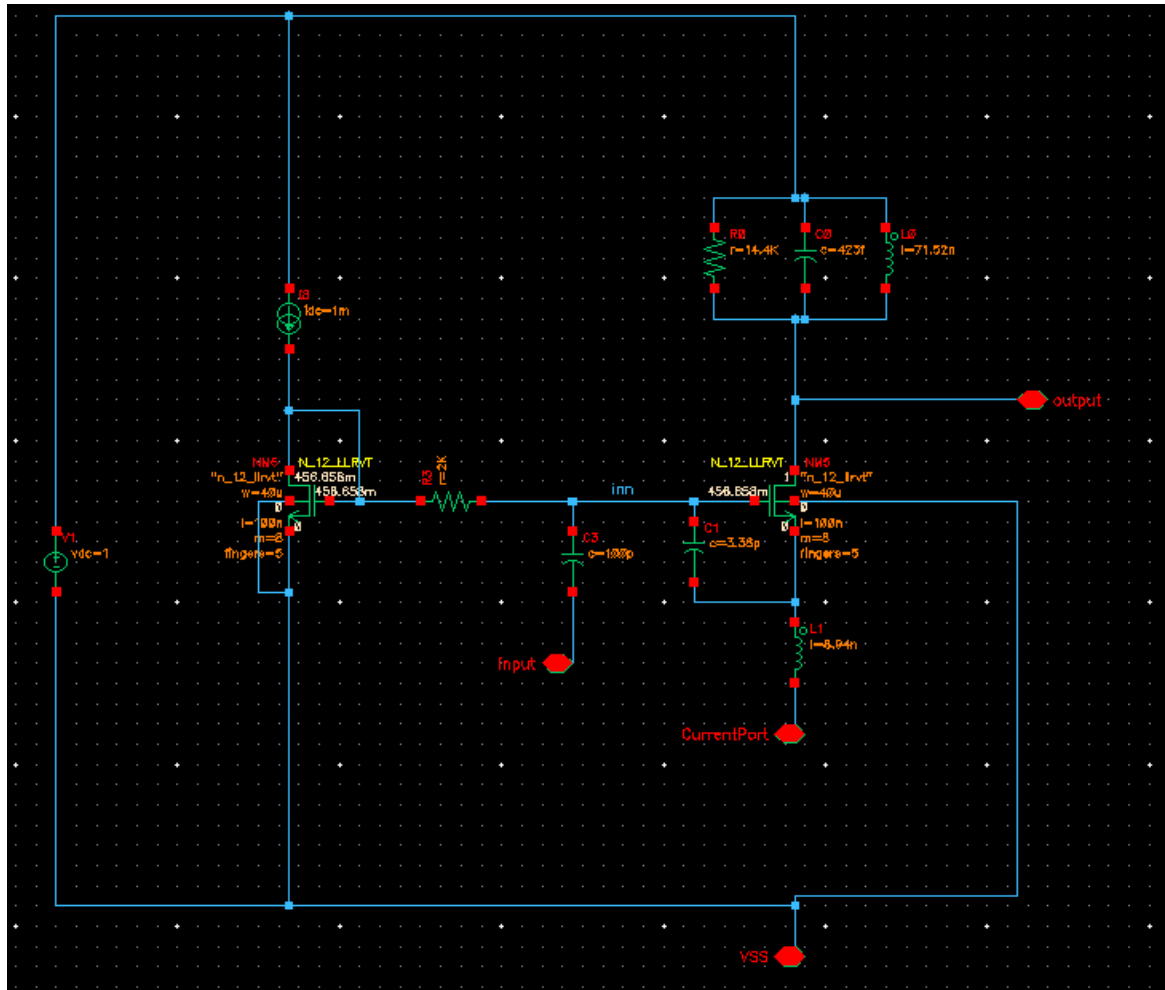
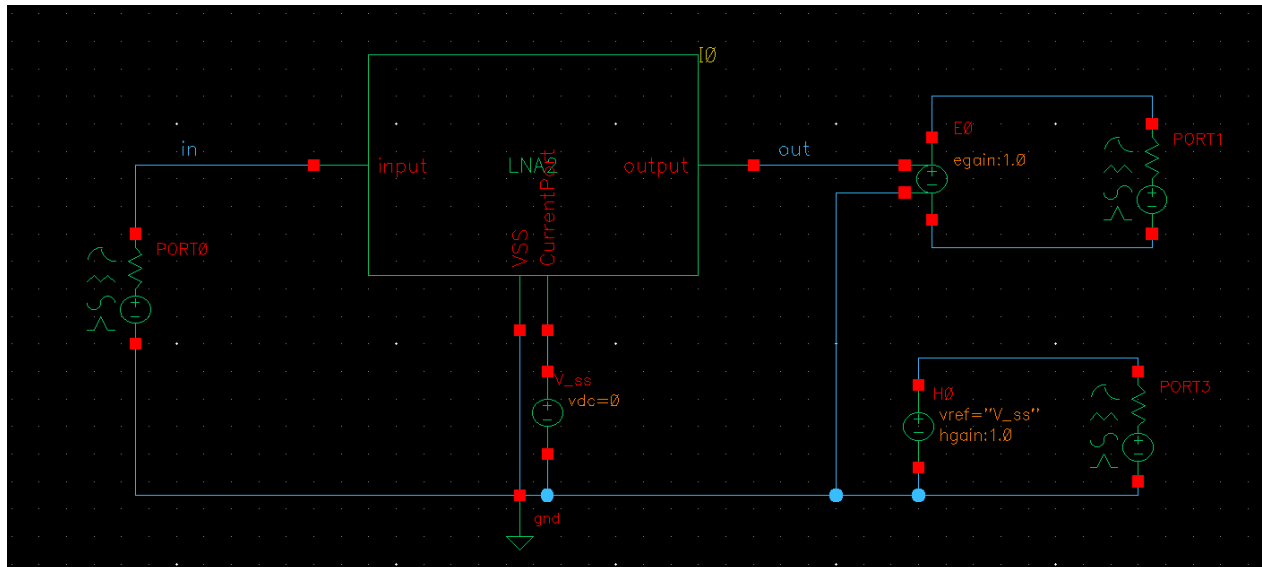


LNA:



TB:



Port0 Configuration:

User Property	Master Value	Local Value	Display
lvignore	TRUE		off

CDF Parameter	Value	Display
Port mode	☒ Normal ☐ HarmonicPort	off
Resistance	50 Ohms	off
Reactance		off
Port number		off
DC voltage		off
Source type	sine	off
Frequency name 1	freq1	off
Frequency 1	f1 Hz	off
Amplitude 1 (Vpk)		off
Amplitude 1 (dBm)	Piip3	off
Phase for Sinusoid 1		off
Sine DC level		off
Delay time		off
Display second sinusoid	☐	off
Display multi sinusoid	☐	off
Display modulation params	☐	off
Display small signal params	☒	off
PAC Magnitude (Vpk)		off
PAC Magnitude (dBm)	Piip3	off
PAC phase		off
AC Magnitude (Vpk)	1 V	off
AC phase		off
XF Magnitude (Vpk)		off
Display temperature params	☐	off

OK Cancel Apply Defaults Previous Next Help

PSS Configuration:

Choosing Analyses -- ADE Explorer (on selsrv2.epfl.ch) x

Analysis

☐ tran

☐ xf

☐ stb

☐ envlp

☐ pnoise

☐ qpac

☐ hb

☐ hbbsp

☐ dc

☐ sens

☐ pz

☒ pss

☐ px

☐ qpnoise

☐ hbac

☐ hbxf

☐ ac

☐ dcmatch

☐ lf

☐ pac

☐ psp

☐ qpxf

☐ hbstb

☐ hbnoise

☐ noise

☐ acmatch

☐ sp

☐ pstb

☐ qpss

☐ qpssp

☐ hbstb

☐ hbnoise

Periodic Steady State Analysis

Engine

☒ Shooting

☐ Harmonic Balance

Fundamental Tones

#	Name	Expr	Value	Signal	SrcId
1	freq1	f1	915M	Large	PORT0

freq1

f1

915M

Large

PORT0

Clear/Add

Delete

Update From Hierarchy

☒ Beat Frequency

☐ Beat Period

915M

Auto Calculate

☐

Output harmonics

Number of harmonics

2

Accuracy Defaults (errpreset)

☐ conservative

☒ moderate

☐ liberal

Transient-Aided Options

Run transient?

☒ Yes

☐ No

☐ Decide automatically

Detect Steady State

☐

Stop Time (tstab)

Run Envelope tstab

☒ yes

☐ no

Accuracy Defaults (errpreset)

☐ conservative

☒ moderate

☐ liberal

Transient-Aided Options

Run transient?

☒ Yes

☐ No

☐ Decide automatically

Detect Steady State

☐

Stop Time (tstab)

Run Envelope tstab

☒ yes

☐ no

Save Initial Transient Results (saveinit)

☐ no

☐ yes

Dynamic Parameter

☐

Oscillator

☐

☒ Sweep

1

☒

Variable

Frequency Variable?

☒ no

☐ yes

Variable Name

Piip3

Select Design Variable

Sweep Range

☒ Start-Stop

Start

-40

Stop

-5

☐ Center-Span

Sweep Type

☒ Linear

☐ Step Size

20

☐ Logarithmic

☒ Number of Steps

Add Specific Points

☐

New Initial Value For Each Point (restart)

☐ no

☐ yes

Exchange Order With

☐

Loadpull

☐

Enabled

☒

Options...

OK

Cancel

Defaults

Apply

Help

PAC Configuration:

Choosing Analyses -- ADE Explorer (on selsrv2.ep...) [X]

Analysis

☐ tran	☐ dc	☐ ac	☐ noise
☐ xf	☐ sens	☐ dcmatch	☐ acmatch
☐ stb	☐ pz	☐ lf	☐ sp
☐ envlp	☐ pss	☒ pac	☐ pstb
☐ pnoise	☐ pxf	☐ psp	☐ qpss
☐ qpac	☐ qpnoise	☐ qpxf	☐ qpsp
☐ hb	☐ hbac	☐ hbstb	☐ hbnoise
☐ hbsp	☐ hbxf		

Periodic AC Analysis

PSS Beat Frequency (Hz)

Sweeptype Sweep is currently absolute

Input Frequency Sweep Range (Hz)

Freq

Add Specific Points ☐

Add Points By File ☐

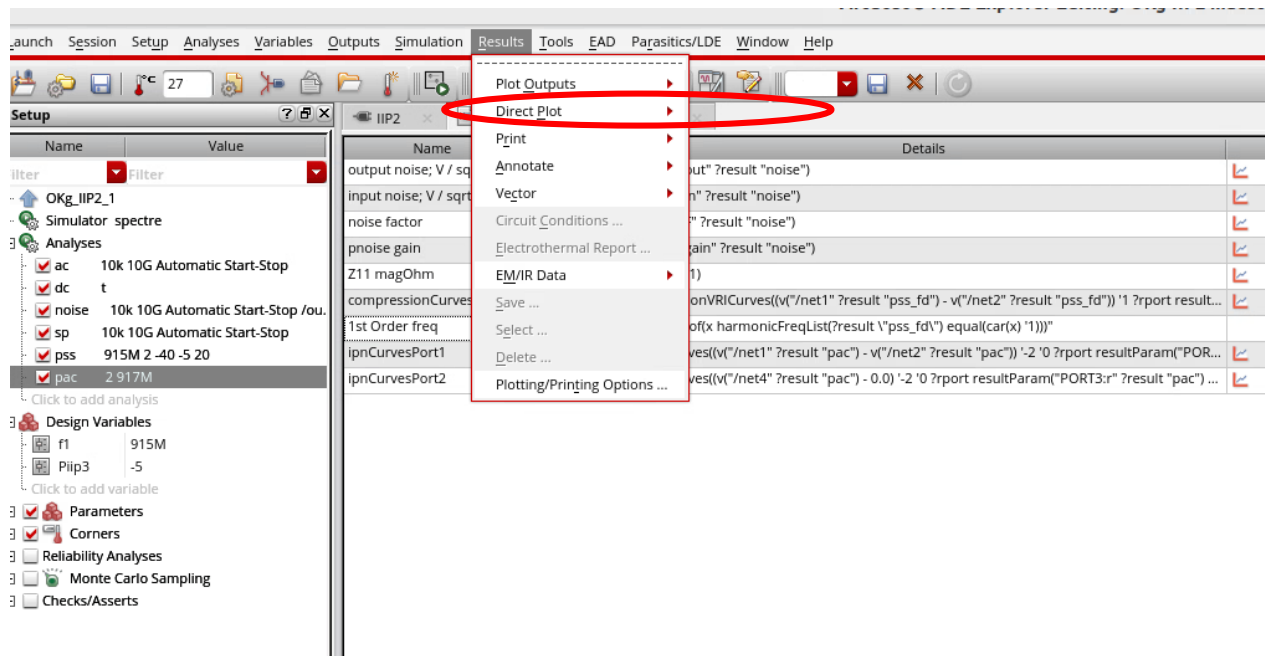
Sidebands

When using shooting engine, default value is 7.

Specialized Analyses

Enabled ☒

Results -> Direct Plot -> Main Form



Direct Plot Form (on selsrv2.epfl.ch)

Plotting Mode: **Append**

Analysis

☐ dc ☐ ac ☐ noise ☐ sp ☐ pss

☒ pac

Function

☐ Voltage ☐ Voltage Gain

☐ Current ☒ IPN Curves

Select: **Port (fixed R(port))**

Circuit Input Power: ☐ Single Point ☒ Variable Sweep ("Piip3")

"Piip3" ranges from -40 to -5

Input Power Extrapolation Point (dBm): **-40**

Plot: ☒ Curves ☐ Points

Input Referred IP3: **Input Referred IP3** Order: **3rd**

3rd Order Harmonic

Order	Frequency	Power
-2	913M	
-1	2M	
0	917M	
1	1.832G	
2	2.747G	

1st Order Harmonic

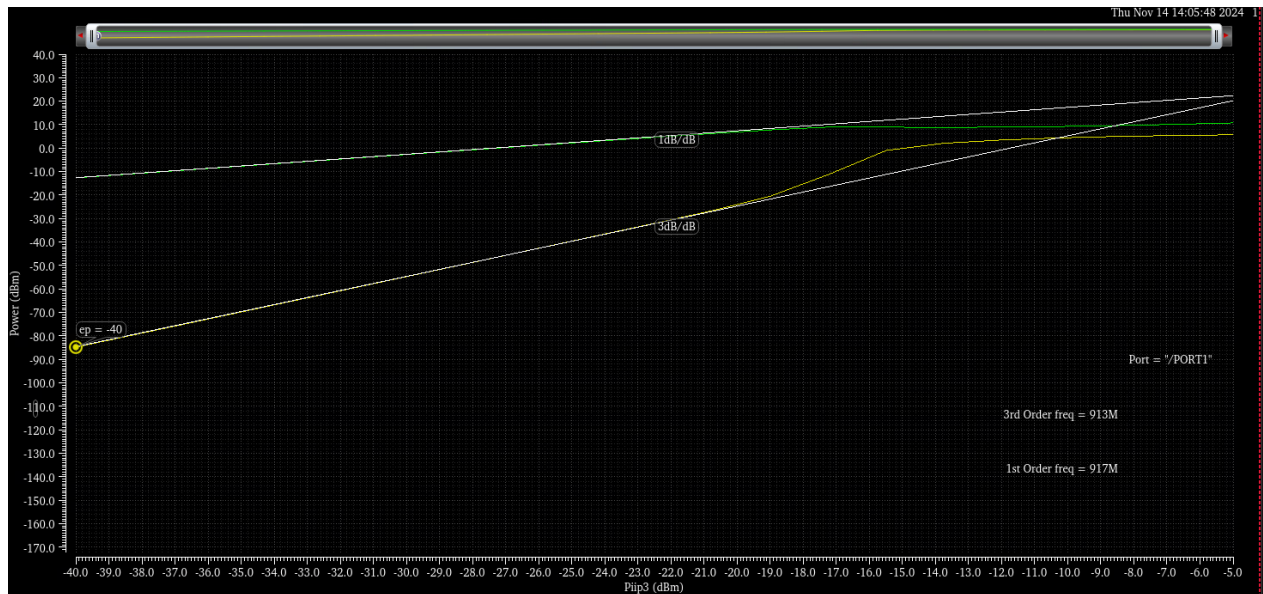
Order	Frequency	Power
-2	913M	
-1	2M	
0	917M	
1	1.832G	
2	2.747G	

Add To Outputs: ☒

freqaxis = absout

> Select Port on schematic...

Then, choose Port1 or Port3.



For 1dB compression Point:

From PSS analysis →

