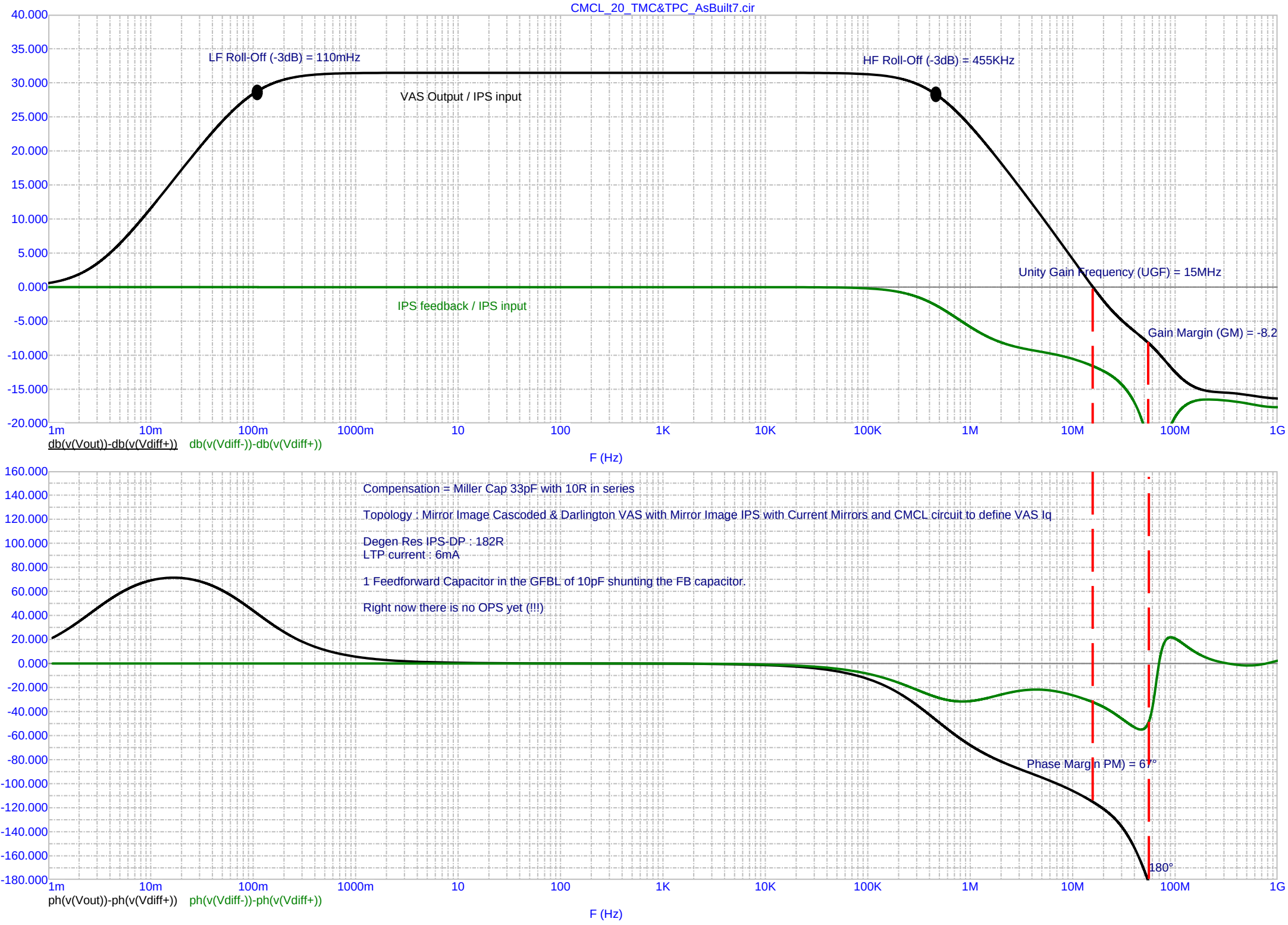
CMCL_20_TMC&TPC_AsBuilt7.cir
LF Roll-Off (-3dB) = 110mHz
HF Roll-Off (-3dB) = 455KHz
VAS Output / IPS input
Unity Gain Frequency (UGF) = 15MHz
IPS feedback / IPS input
Gain Margin (GM) = -8.2
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
-5.000
-10.000
-15.000
-20.000
1m
10m
100m
1000m
10
100
1K
10K
100K
1M
10M
100M
1G
db(v(Vout))-db(v(Vdiff+))
db(v(Vdiff-))-db(v(Vdiff+))
F (Hz)
Compensation = Miller Cap 33pF with 10R in series
Topology : Mirror Image Cascoded & Darlington VAS with Mirror Image IPS with Current Mirrors and CMCL circuit to define VAS Iq
Degen Res IPS-DP : 182R
LTP current : 6mA
1 Feedforward Capacitor in the GFBL of 10pF shunting the FB capacitor.
Right now there is no OPS yet (!!!)
Phase Margin PM) = 67°
180°
160.000
140.000
120.000
100.000
80.000
60.000
40.000
20.000
0.000
-20.000
-40.000
-60.000
-80.000
-100.000
-120.000
-140.000
-160.000
-180.000
1m
10m
100m
1000m
10
100
1K
10K
100K
1M
10M
100M
1G
ph(v(Vout))-ph(v(Vdiff+))
ph(v(Vdiff-))-ph(v(Vdiff+))
F (Hz)