PCB for SMA or BNC R/A thru-hole connectors

Input Power:
-20 dBm input is 5.32W/11p or 100mW.
0.0055-Ω resistor should be OK to 125 mW.

Input Impedance:
51p in parallel with 2010 gives Z_in = 49R?

Op-Amps:
Input-stage: LHM6702,
output-stage: LHM6609,

Power supply filtering & Voltage regulation
Sheet: Sheet56C127B02
File: TOL PSU.sch

Suggestions for next version:
- the long transmission line from U1D1 to output "rings", solved with 100pF cap, but is there a better way?
- matched-pair resistors where applicable?

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1dB compression @ 14.8 dBm, IP3 @ 31 dBm (10 MHz)
reverse isolation 120 dB, channel-to-channel isolation 80dB
measured @ 162 dBc/Hz phase-noise at 10 MHz

Anders Wallin (anders.e.e.wallin "at" gmail.com)
Sheet: /File: fa_2017.03.sch
Title: Anders' Frequency Distribution Amplifier 2018.11
Rev: 2016.11
Size: A4
Date: 2016-11-27
KICad E.D.A. Head 5.0.1-33ee836bubuntu16.04.1
C206 is used to limit gain-peeling and BW variations among the B outputs.

RC-filter with R201
C206 = 3 pF limits BW to ca 30 MHz

R209: use 100 nF cap for AC-coupled Output use C06 or other low-tempo to avoid phase-drift
C206 is used to limit gain-peaking and BW variations among the B outputs.

RC-filter with R201

C206 = 5 pF limits BW to ca 30 MHz.

LPM6609M/NMP8-ND

R209; use 100 nF cap for AC-coupled Output
use C06 or other low-tempo to avoid phase-drift.
C06 is used to limit gain-peeling and BW variations among the B outputs.

RC-filter with R201
C206 = 5 pf limits BW to ca 30 MHz

R209; use 100 nF cap for AC-coupled Output
use C06 or other low-tempo to avoid phase-drift
C206 is used to limit gain-peeling and BW variations among the B outputs.

RC-filter with R201
C206 = 5 pF limits BW to ca 30 MHz

R202: use 100 nF cap for AC-coupled Output
use C06 or other low-tempo to avoid phase-drift.
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gain-peeling increases from ch1 -> ch8
Anders Wallin (anders.e.e.wallin "et" gmail.com)
C206 is used to limit gain-piling and BW variations among the B outputs.

cap. with R201
C206 = 5 pf limits BW to ca 30 MHz

R202: use 100pF cap for AC-coupled Output
use C06 or other low-temco to avoid phase-drift

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C206 is used to limit gain-peeling and BW variations among the B outputs.

RC-filter with R201
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vregs get quite hot – improve cooling or derate heating in next version
FB: 1210-size FERRITE 210Ohm @100MHz not installed. C901, C902, C903, C904
Anders Wallin (anders.e.e.wallin "at" gamil.com)
Sheet: /Sheet56CIB202/
File: FB4_PSURev.sch

Title: Anders' Frequency Distribution Amplifier 2017.03
Size: A4
Date: 2017-01-28
Rev: 2017.01
Kicad E.D.A. Head 5.0.1-33r8686ubuntu16.04.1
Id: 9/10
C206 is used to limit gain peaking and BW variations among the B outputs.

RC-filter with R201
C206 = 5 pF limits BW to ca 30 MHz

L202: use 100nF cap for AC-coupled Output
use C05 or other low-temco to avoid phase-drift