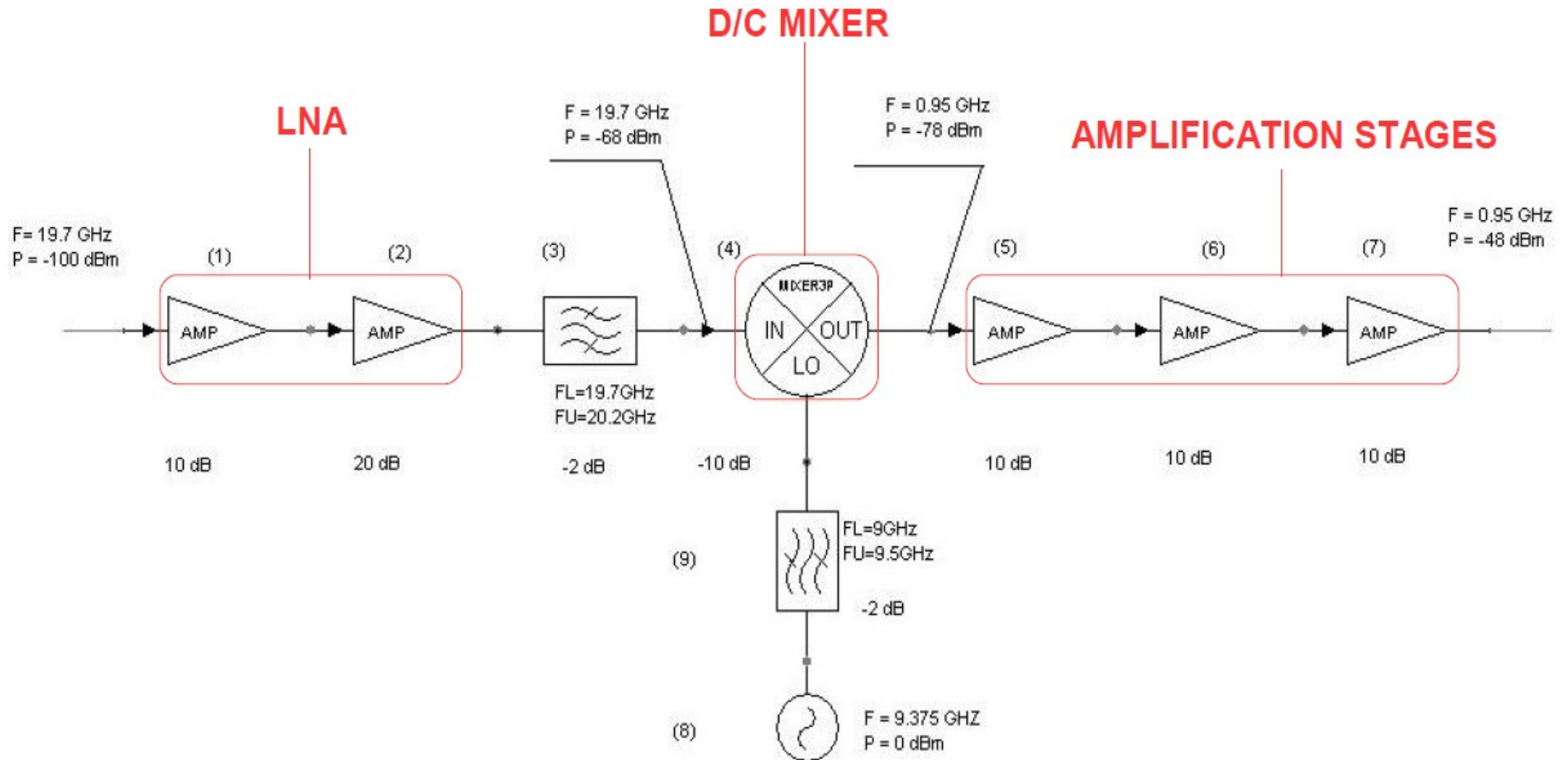


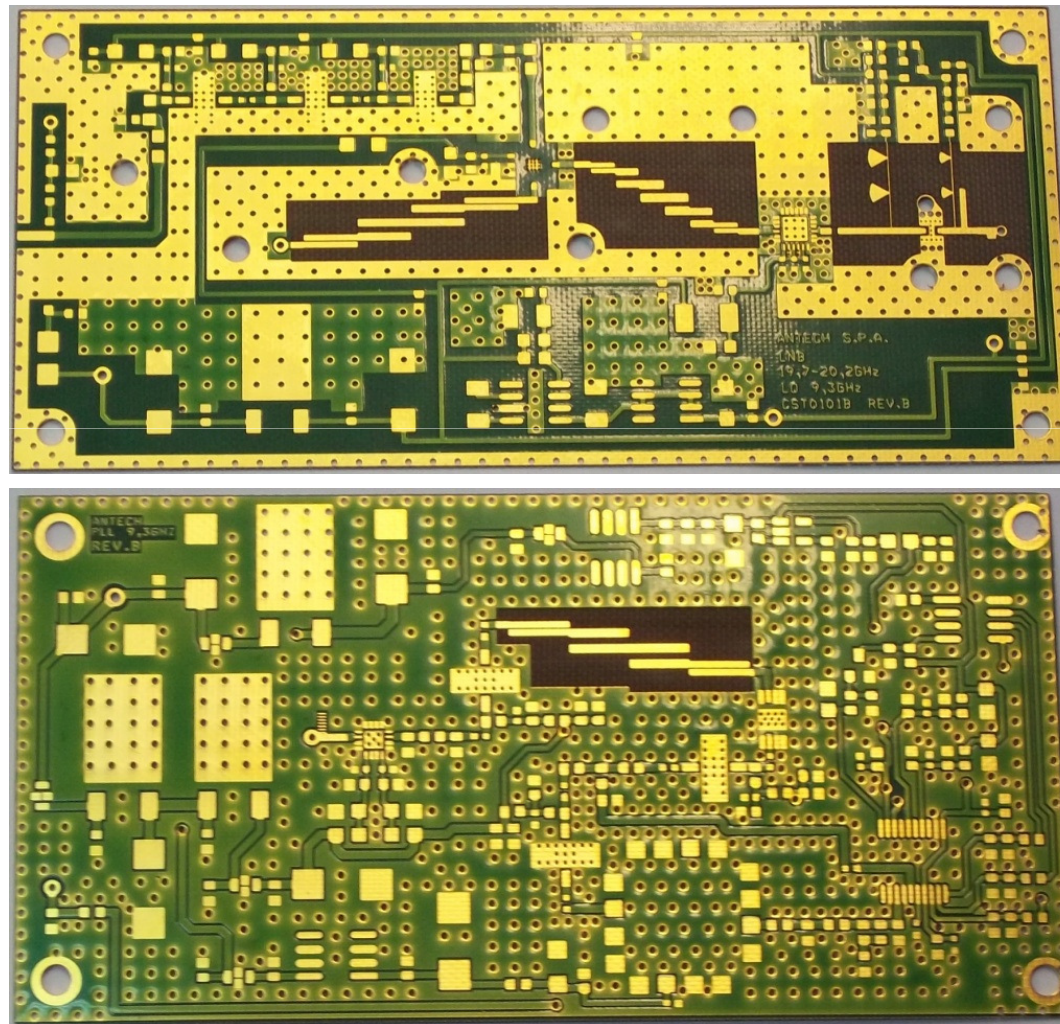
DESIGN EXAMPLE – KA BAND LNB



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MEASUREMENT TYPE	EXPECTED VALUE	MEASURED VALUE
GAIN	≥ 50 dB	≥ 53 dB
GAIN FLATNESS FULL BAND	± 1.5 dB max	± 1 dB max
GAIN FLATNESS 40 MHZ	± 0.25 dB max	± 0.2 dB max
RETURN LOSS (INPUT)	-12 dB max	-13 dB max
RETURN LOSS (OUTPUT)	-13 dB max	- 13 dB max
NOISE FIGURE	≤ 1.6 dB	≤ 1.48 dB
PHASE NOISE @ 1 KHZ (F = 1.1 GHZ)	≤ -65 dBc/Hz	≤ -67 dBc/Hz
PHASE NOISE @ 10 KHZ (F = 1.1 GHZ)	≤ -75 dBc/Hz	≤ -78 dBc/Hz
PHASE NOISE @ 100 KHZ (F = 1.1 GHZ)	≤ -90 dBc/Hz	≤ -92 dBc/Hz
PHASE NOISE @ 1 KHZ (F = 1.3 GHZ)	≤ -65 dBc/Hz	≤ -68 dBc/Hz
PHASE NOISE @ 10 KHZ (F = 1.3 GHZ)	≤ -75 dBc/Hz	≤ -79 dBc/Hz
PHASE NOISE @ 100 KHZ (F = 1.3 GHZ)	≤ -90 dBc/Hz	≤ -91 dBc/Hz
PHASE NOISE @ 1 KHZ (F = 1.6 GHZ)	≤ -65 dBc/Hz	≤ -67 dBc/Hz
PHASE NOISE @ 10 KHZ (F = 1.6 GHZ)	≤ -75 dBc/Hz	≤ -77 dBc/Hz
PHASE NOISE @ 100 KHZ (F = 1.6 GHZ)	≤ -90 dBc/Hz	≤ -93 dBc/Hz

DESIGN EXAMPLE – KA BAND LNB

MEASUREMENT TYPE	EXPECTED VALUE	MEASURED VALUE
GROUP DELAY	≤ 3 ns	≤ 2 ns
FREQUENCY STABILITY (WITHIN 24 HRS)	± 5 E-8	± 5 E-8
AMPLITUDE STABILITY (WITHIN 24 HRS)	± 0.2 dB	± 0.1 dB
GAIN STABILITY OVER TEMPERATURE (-40 TO +60° C)	± 0.4 dB	± 0.28 dB
