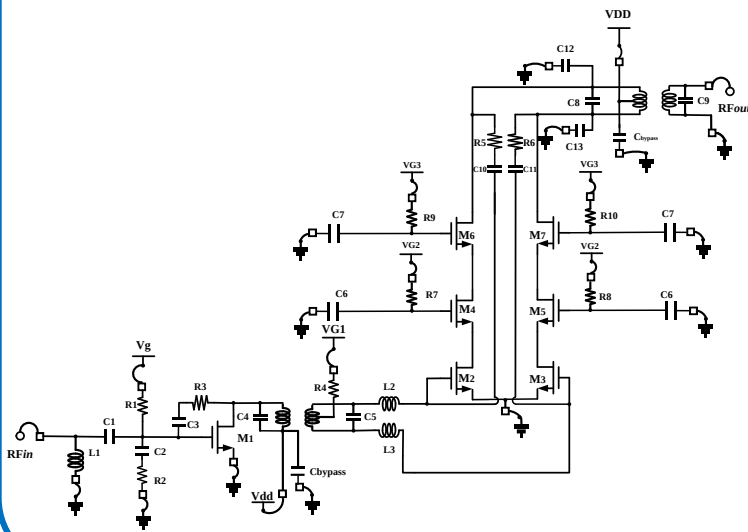
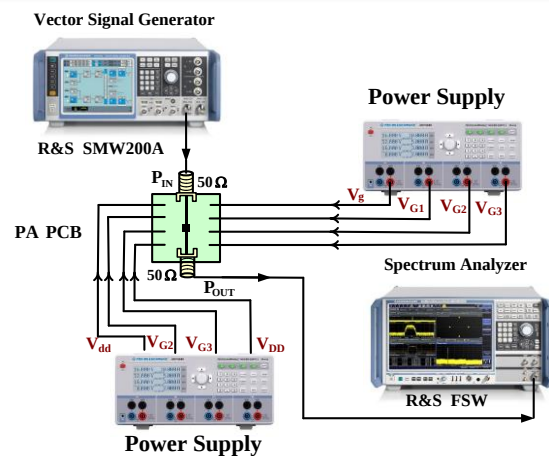


Fully Integrated 0.13 μm CMOS RF Power Amplifier for Multi-band Mobile Applications

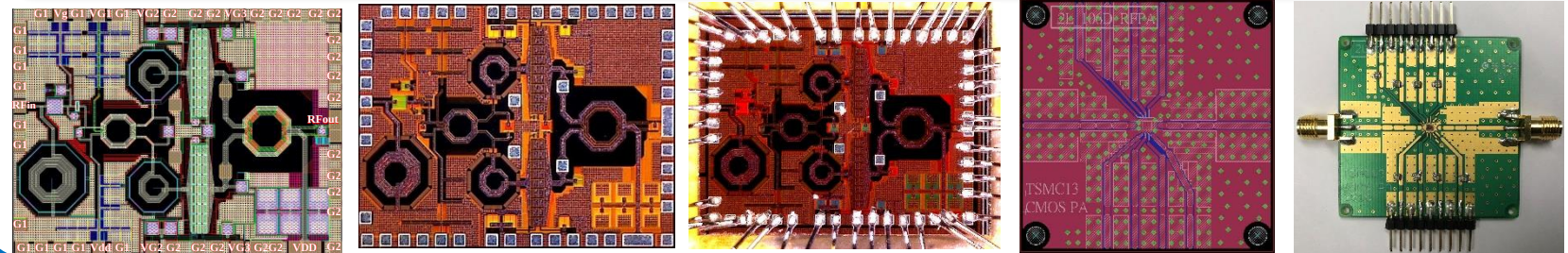
Schematic



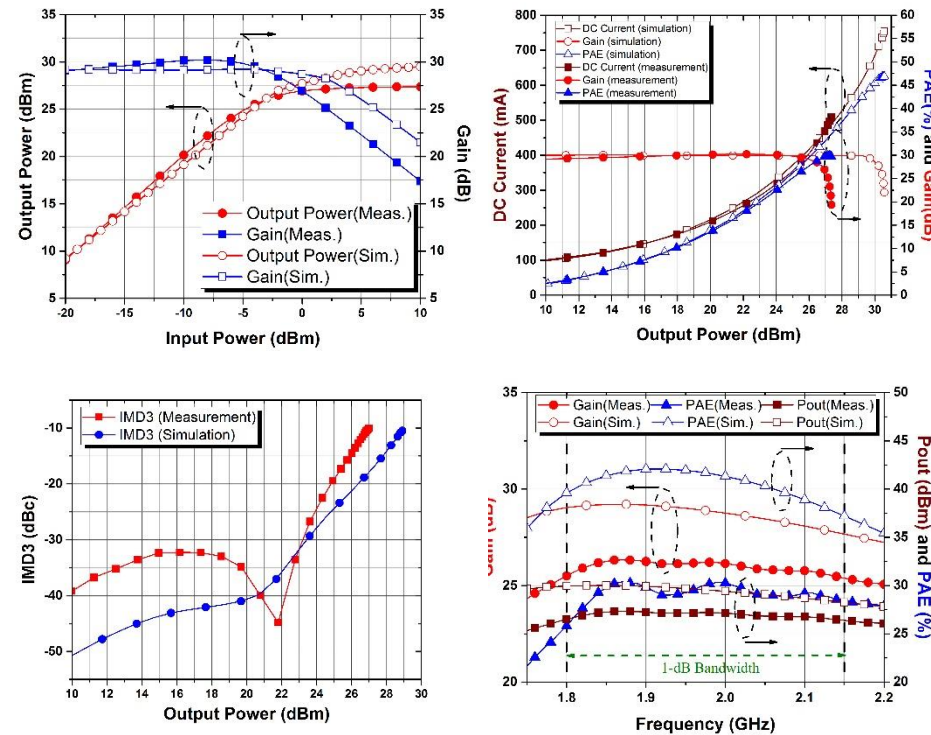
Measurement Setup



Chip & PCB



Measurement and Simulation Result



	This Work
Technology	0.13 μm
V_{DD} (V)	1.95
Frequency (GHz)	3.6
Gain (dBm)	29.1
CW P_{1dB} (dBm)	26.7
CW P_{SAT} (dBm)	27.36
CW PAE@ P_{1dB} (%)	28.9
CW PAE@ P_{SAT} (%)	30.1
Modulated Signal	LTE 16 QAM 20 MHz
P_{avg} (dBm)	22.4
Modulated PAE (%)	19
E-UTRA $_{ACLR1}$ (dBc)	-30.01
Chip Size (mm^2)	on-chip
Output Matching	2.142