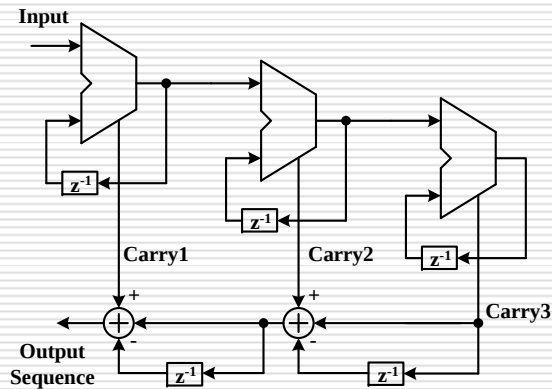


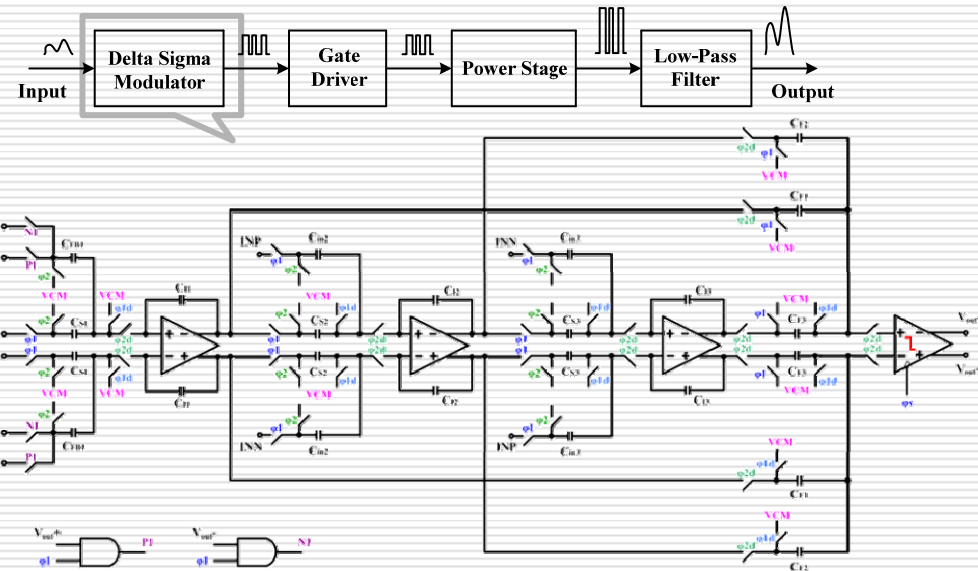
I. Digital DSM for Fractional-N Synthesizer:



Simulation Result:

Tech.	TSMC rf-018
Resolution	$1/2^{16}$
Input Bits	16
Output Bits	4 (with 1 sign bit)
Operation Freq.	80 MHz
Supply Voltage	1.2V
Architecture	MASH 1-1-1
Order	3
Power Composition	970 uW

II. DSM for Class-D Audio Amplifier:



Simulation Result:

	Condition	Simulation Result
Max. Input Voltage		3.3 V
Max. Output Power	Output Power @ 1kHz	343 mW
Quiescent Current	Worst Case	6.23 mA
SNR	Max. Value	96.40 dB
SNDR	Max. Value	73.89 dB
THD+N	Max. Output Power	0.064 %
Efficiency	Max. Output Power	89.6 %