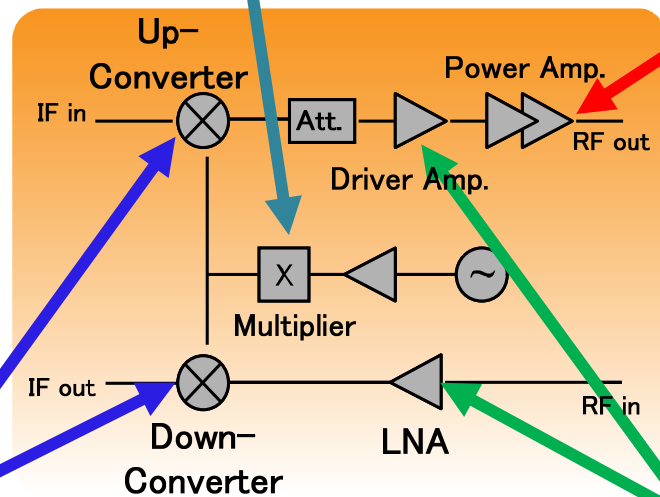


79GHz Band Device Selection

Function	X3 Multiplier
Parts Number	CHX1191-98F
Process	pHEMT 0.15um gate length
Low-High Freq. Input (GHz)	11.0-14.5
Low-High Freq. Output (GHz)	33.0-43.5
Input Power (dBm)	-1.0
Output Power (dBm)	6.0
Bias (mA)@(V)	80@5.0
Case	Die (with BCB)

Function	Medium Power Amplifier
Parts Number	CHA3090-98F
Process	pHEMT 0.1um gate length
RF Low-High Freq. (GHz)	81.0-86 (76.0-86.0)
Gain(dB)	13.0
Gain Flatness (+/- dB)	-
P-1dB OUT (dBm)	17.0
sat. Output Power (dBm)	19.0
Bias (mA)@(V)	280@3.5
Case	Die (with BCB)
	20dB power detector dynamic range



Function	Mixer
Parts Number	CHM1080-98F
Process	pHEMT 0.1um gate length
RF Low-High Freq. (GHz)	71.0-86.0
Lo Low-High Freq. (GHz)	34.5-44.0
IF Low-High Freq. (GHz)	DC-12.0
Conv. Gain (dB)	-11.0
P-1dB IN (dBm)	10.0
Lo Input Power (dBm)	2.0
Bias (mA)@(V)	90@3.5
Case	Die (with BCB)
	I-Q Mixer (Sub-Harmonics Mixer)

Function	Low noise amplifier
Parts Number	CHA2080-98F
Process	pHEMT 0.1um gate length
RF Low-High Freq. (GHz)	71.0-86.0
Gain(dB)	22.0
Gain Flatness (+/- dB)	0.2
Noise Figure (dB)	3.5
P-1dB OUT (dBm)	10.0
Bias (mA)@(V)	75@3.5
Case	Die (with BCB)
	Dynamic Gain control : 12dB (Gate voltage control)