FEATURES：
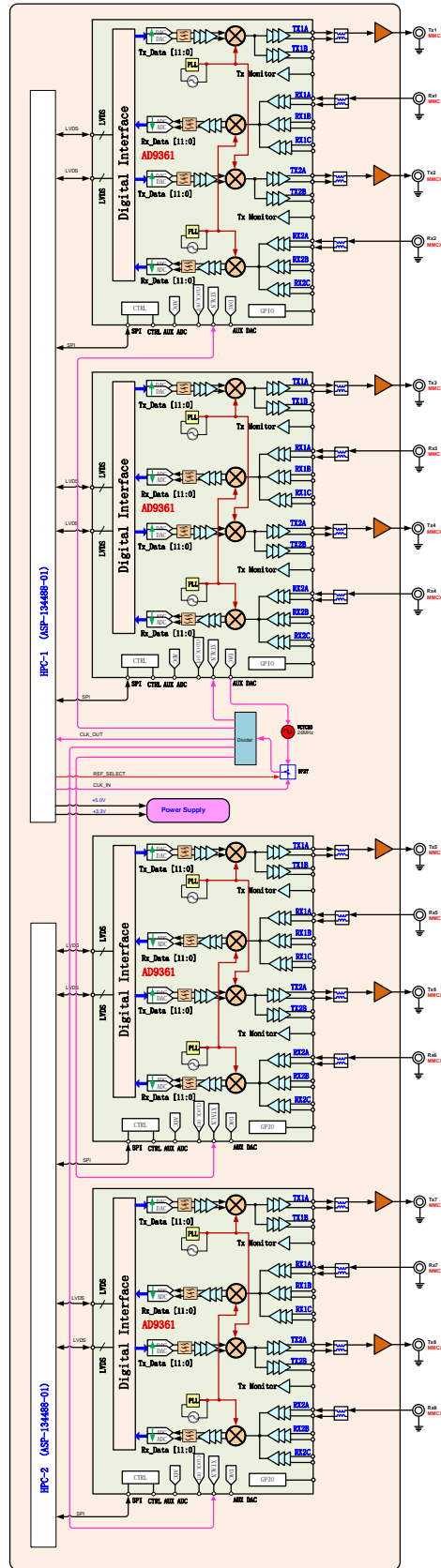
◆ Coverage from 70MHz ~ 6GHz RF

◆ Flexible rate 12 bit ADC/DAC

◆ Fully-coherent 8x8 MIMO capability, TDD

◆ RF ports: 50Ω Matched

◆ support both internal reference and external reference input

◆ 56 MHz for 8x8 of real-time bandwidth

◆ Includes DC power supply

◆ Dimensions: Standard Dual-FMC daughter Board

APPLICATIONS：

◆ SDR

◆ Cellular, e.g.: Femto-cells, Pico-cells, Small-cells, Micro-cell & etc.

◆ WiFi

◆ WiMAX

◆ ISM

◆ Proprietary & General Purpose Radios

GENERAL DESCRIPTIONS：

The HT7608 is an easy-to-use RF module covering 70MHz ~ 3GHz with integrated RFIC technology and FMC interface. The RF module features two receive and two transmit channels by using 4 Analog Devices RFIC, AD9361 to deliver a cost-effective experimentation platform with up to   56 MHz (for 8x8) of instantaneous bandwidth, higher sensitivity, dynamic range, and IP3 performance, which is suitable for wide range of applications including SDR, cellular, WiFi, ISM, proprietary or general purpose radios and so on. With the HT7608, designers can prototype with the AD9361 quickly and easily.

BLOCK DIAGRAM：

CHARACTERISTICS：

	No.	Items	Specifications	Remark
Tx	1	Frequency	70~3000MHz	
	2	Bandwidth	32MHz 8x8 or 56MHz 4x4	real-time bandwidth, tunable
	3	Transmission	>10dBm	CW
	4	EVM	<1.5%	Typical:5dBm @20MHz bandwidth
	5	Gain Control Range	>80dB	
	6	Gain Step	0.25 dB	
	7	ACLR	< -45dBc	@ 0dBm LTE output
	8	Spurious	TBD	
	9	SSB Suppression	35dBc	
	10	LO Suppression	50dBc	
	11	DAC Sample Rate (max)	245.76 MS/s	
	12	DAC Resolution	12bits	
Rx	1	Frequency	70~3000MHz	
	2	Bandwidth	32MHz 8x8 or 56MHz 4x4	real-time bandwidth, tunable
	3	Sensitivity:	-100dBm@5MHz	Noise Figure < 5dB
	5	Gain Control Range	>60dB	
	6	Gain Step	1dB	
	7	Noise Figure	<5dB	Maximum RX gain
	8	ADC Sample Rate (max)	122.88MS/s	
	9	ADC Resolution	12bits	
	10	ADC Wideband SFDR	78dBc	
	1	Voltage	3.3V & 5V	
	2	Duplexing Model	TDD/FDD	

Truth Table：

◆ Reference Selection switch

Reference Source	REF_SELECT
External Reference	1
Internal Reference	0

◆ **OUTLINE DIMENSIONS：**

Standard FMC Double Width Module