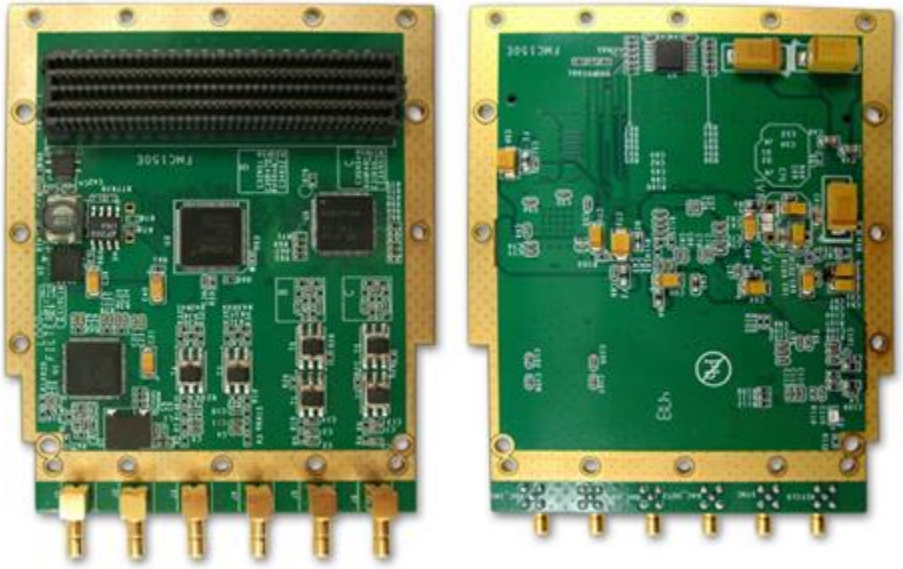
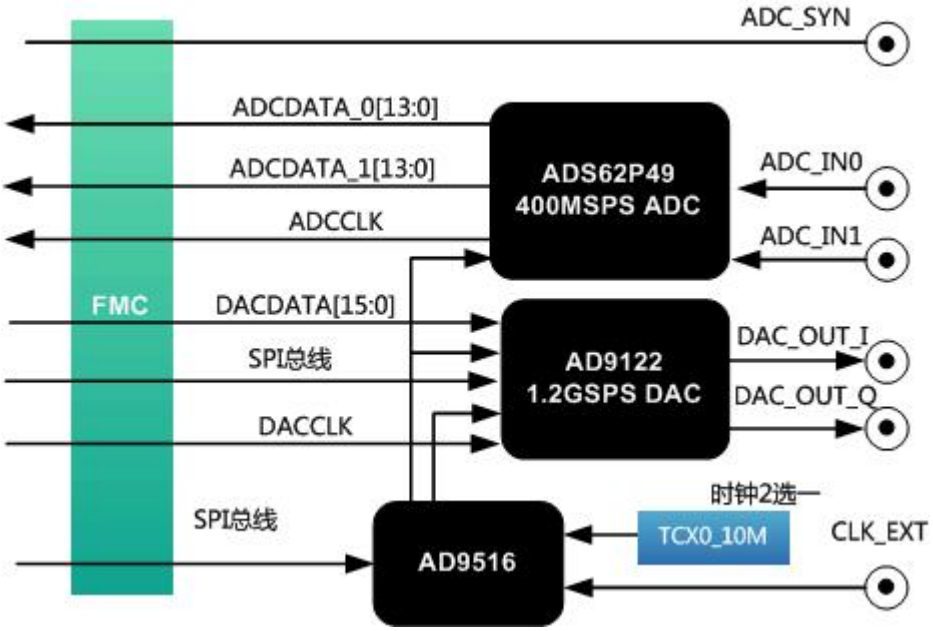
Two channel 250Msps AD and two channel 600Msps DA FMC sub-card



1. Introduction

The board card is a standard FMC interface sub-card, which ADC adopt TI ADS62P49, has two channel 250 m, 14 bits, a total of 1 piece;DAC using ADI AD9122, has two channel, 16 bit, which can reach 1.2 G, a total of one piece;Clock USES the AD9516, support board on the clock and external clock;Six SSMB interface in total, a FMC/LPC interface

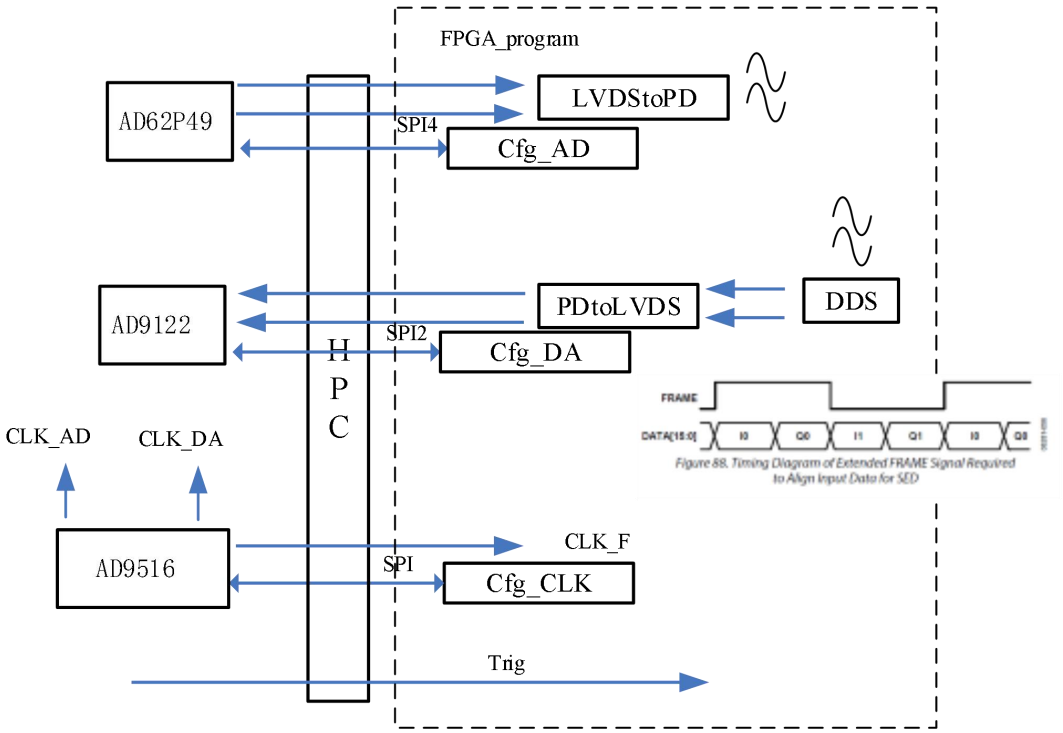


2 Performance

ADC Parameters	**Content**
Chip type	ADS62P49
Channel amount	Two channel ADC，
Sampling rate	250Msps
Data bits	14bit
Digital interface	DDR LVDS
Analog interface	AC coupling
Analog input	±1V
Input impedance	50Ω
DAC Parameters	**Content**
Chip type	AD9122
Channel	Two channel DAC，
Conversion rate	600Msps，interpolation 1.2Gsps
Data bits	16bit
Digital interface	DDR LVDS
Analog interface	AC coupling
Analog input	±1V
output impedance	50Ω
Clock Parameters	**Content**
PLL chip	AD5616-1
The on-board crystal	10MHz temperature-compensation crystal oscillator(TCXO) VCXO
External input clock	Default 10MHz ， 3.3V LVTTL electrical level
External Trigger	One channel input
External Synchronization	3.3V LVTTL electrical level
FMC-LPC	ASP_134604_01
Front panel	Six channel SSMB
Standard	FMC ANSI/VITA 57.1 - 2008
Size	69X76.5mm
Weight	Within heat sink
Power Supply	+12V@1A
Power Consumption	8W
Working Temperature	Industrial -20℃ to +70℃
Xilinx board	V6、V7、KU、VU、 ZYNQ、ZU development board
Orihard board	136、270、367、288、330、274、3、9

3.Software

Provide ISE or Vivado version of FMC interface AD input or DA output,clock configuration, external trigger access reference test program, supported FPGA model or board card see the instruction table.



4. Application

The board card is configured with FPGA motherboard for acquisition scenes of analog signal, radio, photoelectric and radar.