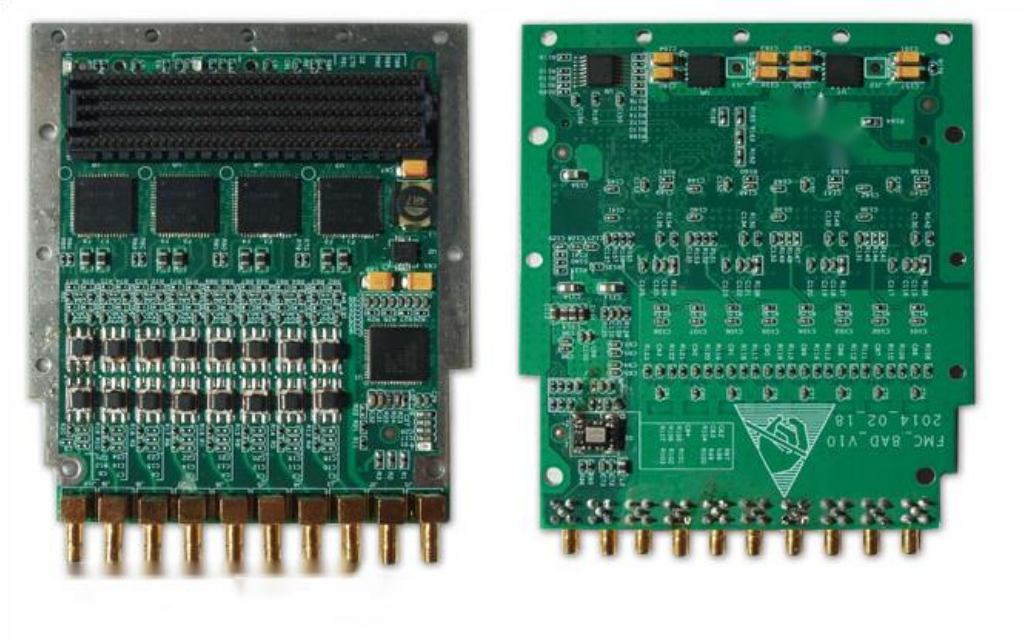
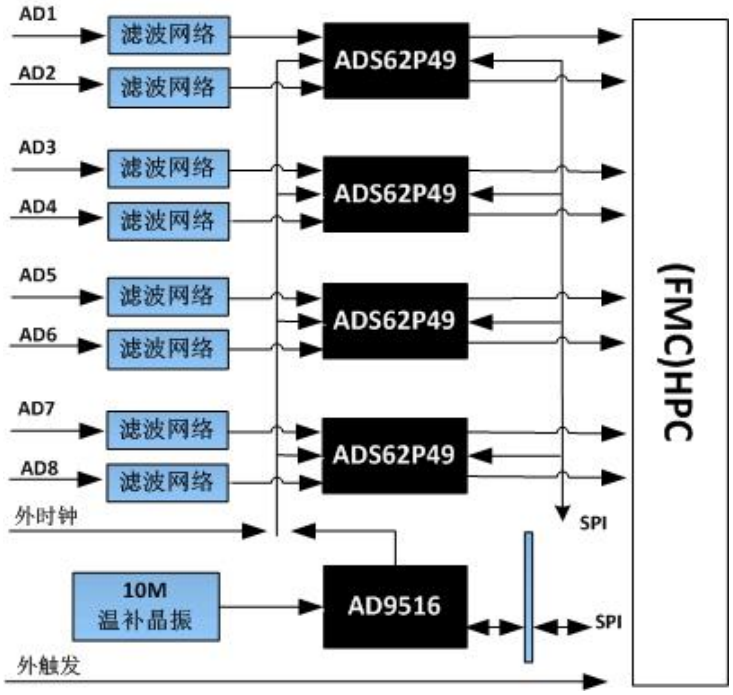
Eight channel 250MSPS 14BIT AD FMC sub-card



1. Introduction

This card with an eight-channel analog-to-digital converter (ADC). It has a 14bit resolution and a maximum sampling rate of 250Msps.The clock configuration chip is AD9516-1, which can be provided by either an on-board 10MHz clock or an external clock.It adopts HPC connector and the input signal is differential pair signal.Based on ADS62P49, it has low power consumption and high dynamic performance. It is suitable for multi-carrier wide-band communication applications, and also suitable for applications requiring high sampling rate and high precision analog-to-digital conversion applications, such as the design of acquisition CARDS in signal acquisition applications.



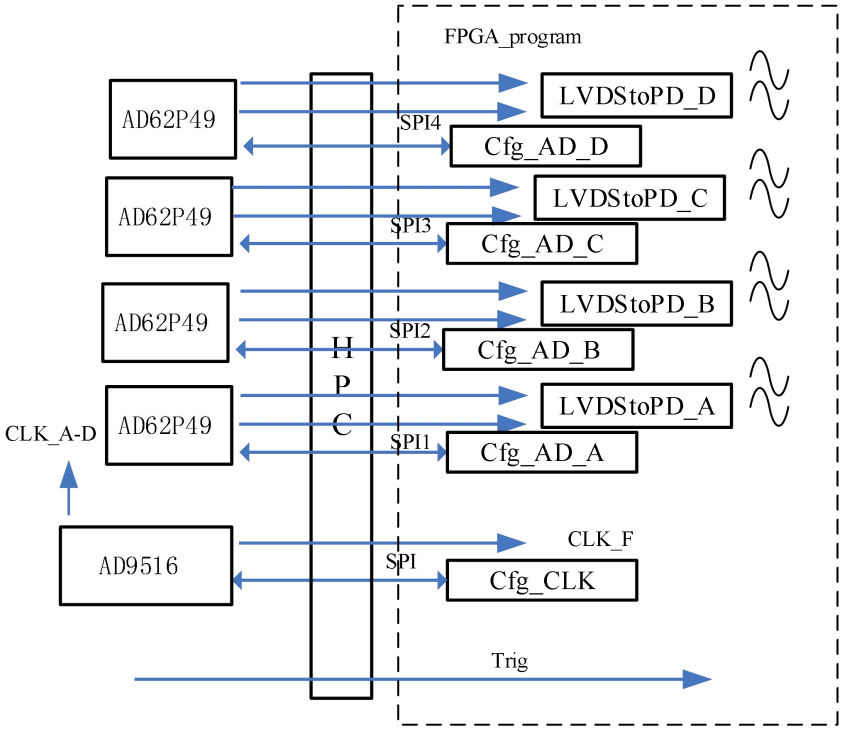
2.Performance

Parameters	Contents
Chip type	ADS62P49
Channel amount	Eight channel ADC，
Sampling rate	250Msps
Data bits	14bit
Digital interface	DDR LVDS
Analog interface	AC coupling
Analog input	±1V
Analog standard	50Ω
no	
PLL chip	
The on-board crystal	AD9516-1
External input clock	10MHz temperature-compensation crystal oscillator(TCXO) VCXO
Channel amount	Default 10MHz， 3.3V LVTTL electrical level
External trigger	One channel input
External synchronization	3.3V LVTTL electrical level
FMC-HPC	ASP-134488-01
Front panel	Ten 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 content

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 rad.