

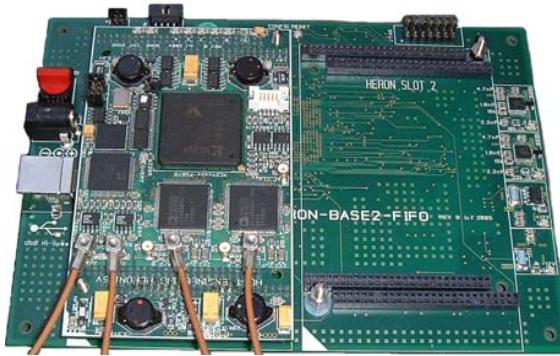
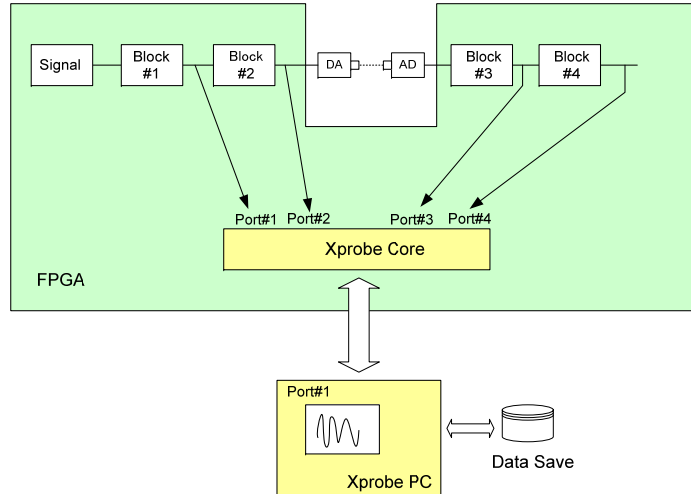
# Xprobe

## FPGA Analysis Software for Digital Signal Processing

Xprobe can be probing a digital signal branch in your designed FPGA and can analyze a pair of signals which is selected by Port No, on PC.

### USE

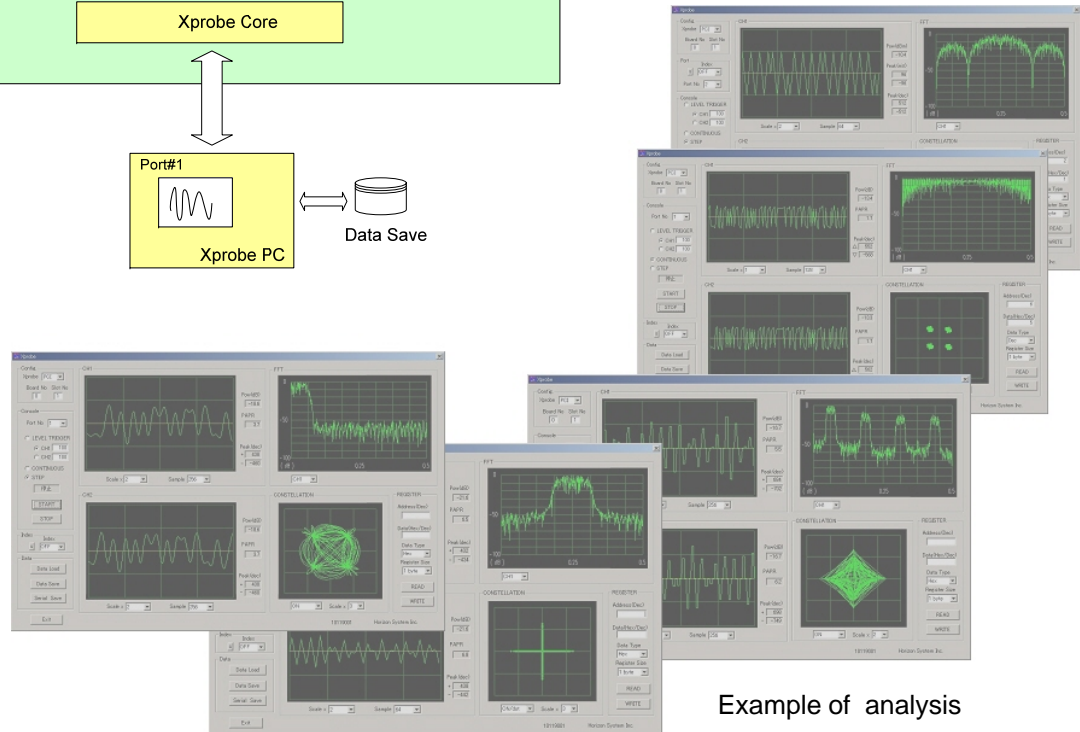
- FPGA Digital Signal Processing
- Evaluation of IP Core
- FPGA SDR system



FPGA Board(RTG001 )

### Specification

FPGA Virtex II 1.5M/3Mgate 365MHz  
ADC AD94302ch 210MSPS /12bit  
DAC AD9772ch 160MSPS /16bit



Example of analysis

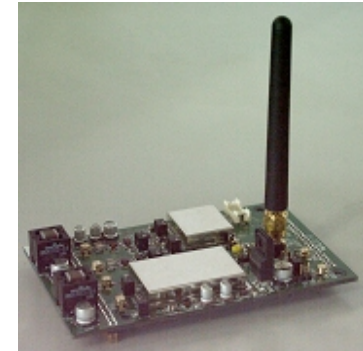
# Xprobe feature

No	Function	Specification
1	Specifications of signal analysis	Number of channel 2 channels Maximum frequency 100MHz Size of Data 1024 samples Signal range 12bit Type of signal 2's complement
2	Trigger function ( Search a peak of wave )	Level Trigger
3	Analysis of Time domain	Time domain wave Eye Pattern Measurement <ul style="list-style-type: none"> <li>- Wave Peak value</li> <li>- Average Power Ratio(1024samples)</li> <li>- PAPR( Peak Average Power ratio )(1024samples)</li> </ul>
4	Analysis of Frequency domain	FFT(1024samples)
5	Analysis of 2 channel signals	Constellation - Dot / Figure
6	Data save	Saves 1024samples with 2 channels ( File type : CSV )
7	Continuous data save	Maximum data numbers limits on PC's memory size. Maximum data rate limits on PC's speed.
8	Hsb register read / write	Size of Data : 1Byte(8bit)~4Byte(32bit)

## Environment

- Xprobe/USB.....RTG-001 ( HERON IO5v + HERON BASE2)
- Xprobe/PCI.....HERON IO5v + HEPC9(PCI HERON module carrier)
- Windows XP / Windows2000 \* The HERON module is a module defined by HUNT ENGINEERING, UK.

## Xprobe Application for SDR



HERON RF board

