

Digital X-ray Signal Processor

We design X-ray digital signal processor which is customized for each client's needs and provide information for production and/or further development.

There are benefits producing Digital X-ray processor by yourself in the following cases.

1) Using Analog signal processor and MCA

Digital filtering realizes better throughput based on the same energy resolution than Analog one. Since Digital processor consists of one FPGA, one A/D converter and some additional parts, the cost for production is less than analog processor and MCA.

2) Buying Digital processor

In addition to reduced cost, you can optimize the interface to your system.

3) Having performance with your current processor

High performance can be achieved.

We provide various designs that meet your requirements.

1) High speed system that provides sufficient pile-up rejection performance with short peaking time required for SDD type detector.

2) Multi-level pile-up rejection that provides the highest pile-up rejection performance in wide range of X-ray energy.

3) Simple system for the cases that the cost is essential for.

System interface can be customized. The examples are following.

1) Raw parallel interface as FPGA I/O pins that will be directly connected to the circuits in a client's PCB.

2) PCI standard system bus interface.

3) 100Base-T Ethernet interface.

A design can be provided in following forms.

1) Reference circuit diagram and a binary code file for FPGA programming.

2) 1) + Verilog HDL source code

If a client needs to perform further development, integration of X-ray processor with other functions in one FPGA and/or changing FPGA device by him- or herself, the source code is necessary.

For further information, write to X-bridge Technologies.

X-Bridge technologies Co., Ltd.

51 Higashi-Jouke Mukaijima Kyoto, 6128155, JAPAN

TEL: +81-75-605-5228 FAX:+81-75-605-5229 E-mail:st@xbirt.net URL:http://xbirt.net