



We assist  
**MANUFACTURERS**

**Digital X-ray Pulse Signal Processors**

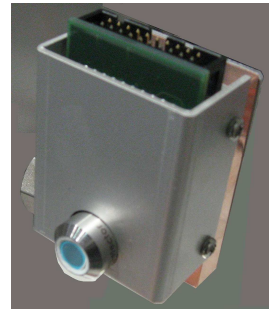
**Radiation Detector related Electronics**

**Spectrometer Control Electronics**

**Design Consulting in Analytical X-ray  
Instrumentation**

## **Radiation Detector related Electronics**

- Preamplifiers and Bias Supplies for Proportional Counters (PC)
- Preamplifiers, Bias Supplies and Temperature Controllers for PNDetector SDD modules
  - Vacuum type preamplifiers are in operation with open modules on goniometers in a SR facility
  - Detector Housing Design also available



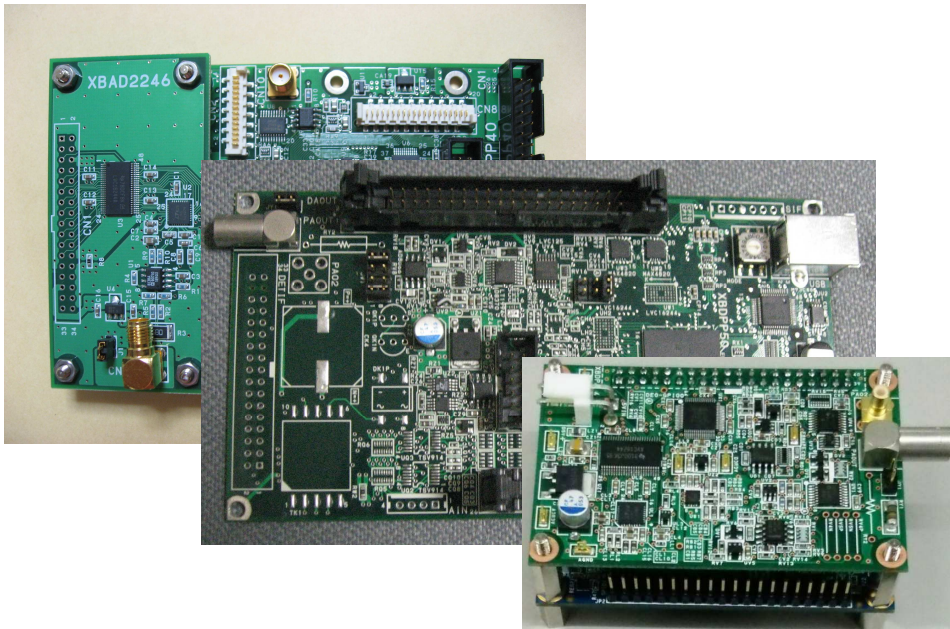
- Bias Supplies and Temperature Controllers for OEM type SDD / Si-PIN detectors

# Digital X-ray Pulse Signal Processors (DPP)

X-bridge Technologies has been supplying Digital X-ray Pulse Signal Processor products to analytical X-ray instrument manufacturers worldwide.

Applications:

XRF, SEM-EDX, XRD, etc.



DPP (Cont.)

FEATURES:

- Fully FPGA based (Fast & Flexible)
- Multiple Pile-up rejecters for the best performance in wide energy range
- New cost-saving design (XBDPP6x Series)
- Choices of Auxiliary functions
  - Digital I/O, Analog I/O
  - Pulse Height + Timing (for Imaging)
  - Real-time event timing signal in multiple ROIs (for low-cost Imaging)
  - Quasi real-time pulse signal with dead-time correction in multiple ROIs (for XRD)
  - Rise-time discrimination (for particle type separation)
  - Synchronous acquisition with stage position (planned, for XRD & XRF Imaging)
- Custom Designs available

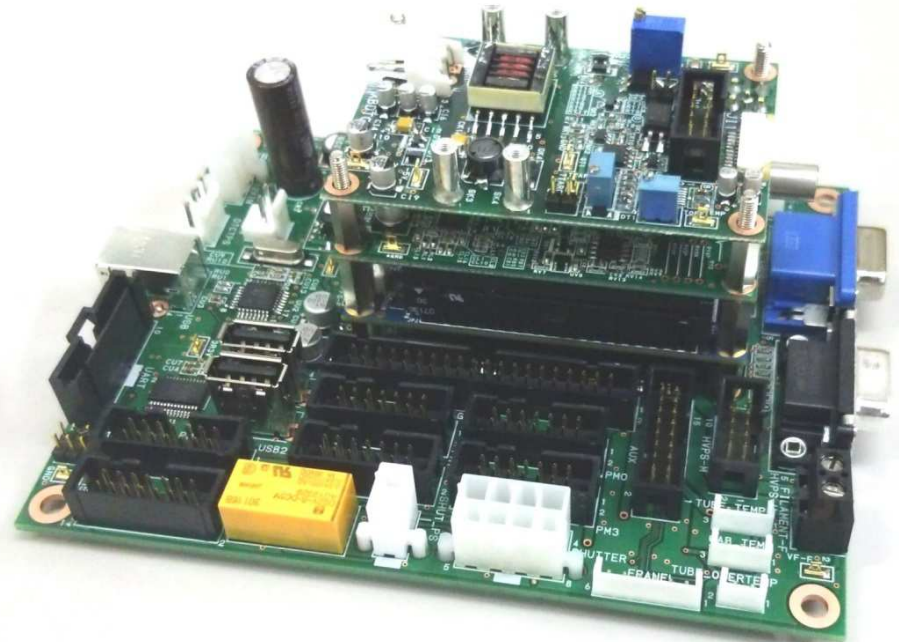
# Spectrometer Controller

Our new business idea is production of 'Complete board set' for small scale analytical X-ray instrument such as XRF / XRD. A set consists of following parts.

- FPGA Board with all control logics
- DPP Analog Board
- Mother Board
  - Power Supplies
  - X-ray tube HVPS controller
  - X-ray tube filament controller
  - X-ray Shutter Driver
  - X-ray safety Interlock circuits
  - Pulse motor controller
- Detector Controller
  - Bias Supply
  - Temperature Controller

## Spectrometer Controller (Cont.)

Everything is controlled through single command interface from PC (or any) and no firmware design is needed at user (spectrometer manufacturer) side.



Custom designs available

# Design Consulting in Analytical X-ray Instrumentation

X-bridge Technologies has been providing broad range of consulting services to analytical instrument manufacturers worldwide. The services are based on 27 year of R&D experiences in analytical X-ray instrument industry. Our customers are ranging from starting-up companies to world leading manufacturers.

- Hourly service
- Exclusive long-term contract for specific application field

## Design Consulting in Analytical X-ray Instrumentation (Cont.)

- XRF
  - General Purpose
  - Total Reflection (Surface)
  - Micro (Thickness Gauging, Imaging)
  - Monochromatic (Trace Elements)
  - Micro-Monochromatic
  - On-line / On-stream
- XRD
  - XRR (Thin-film)
  - SAXS (Particle / Pore Size)
- XAFS

X-Bridge Technologies is small but

Truly INDEPENDENT

FLEXIBLE

Developing NEW Business IDEAS

Broadly NETWORKED

Feel free to ask us about any subject on analytical X-ray instrumentation and you might get a solution.



Located in Kyoto



Serving Worldwide

X-Bridge Technologies is going to exhibit at Pittcon 2015

We see you in New Orleans



March 8 - 12, 2015

Ernest N. Morial Convention Center  
New Orleans, LA USA

Booth 224