Supported Control & DAQ Devices

Some devices may not be suitable for new designs. Please verify with a controls engineering team member.

## Supported Controls Components

- **Supported CamLink Camera Models**
- **Supported GigE Camera Models**
- **Motion**
  - IMS MDrive Plus MCode, Speed-control, Motion-Control, Step/Direction-Input, WebLink
  - Micronix Piezo Controller/Driver MMC-100 Datasheet, Manual, WebLink
  - PI Piezo controller E-665 Weblink to Manual, manual locally saved, Manual w. protocol (E-816, grabbed from BNL)
  - PI Piezo controller C-863: Manual w/ protocol (can be daisy chained w/ E-861 which we have, but could not find a manual for)
  - Attocube EC100: Manual and Related Software
- **Power Supplies**
- **Vacuum Devices**
- **PLC**
- **ADC - Digitizers**
- **Acromag IO**
- **Controllers**
- **Firewire fiber extender**
- **Lasers**
- **Optical Components**
  - Flippers
    - MFF102
  - Filter Wheel
    - ThorLabs
- **Beam Position Monitor**
  - SLAC IPIMB
- **Laser Power/Energy Meters**
  - LabMax-TOP
  - Scientech Laser Power/Energy Meter Model 365 (Wattmeter)
    - Scientech Model 365 Communications Manual Supplementary
    - Scientech Laser Power/Energy Meter Model 310 (Calorimeter)
- **Pressure Control**
  - Proportionair
- **Temperature Control**
  - Lakeshore (331, 335, 336, 340)
  - Eurotherm
  - Omega
  - Stanford Research Systems PTC 10
- **Calorimeters**
  - Scientech Calorimeter
- **Spectrometers**
  - Ocean Optics USB400
  - Ocean Optics Remora
  - von Hamos Spectrometer
- **Machine Timing Hardware**
  - Event Generator
  - Event Receiver
- **IOC Serial Access**
  - Digi Serial PortServer TS 16 MEI
    - Digi Quick Start Guide
    - CA-261-807-83-C00 IMS Serial Loopback.pdf
  - Moxa Datasheet, Manual, ConfigurationTool, Moxa_Pinout, WebLink
    - Moxa Quick Start Installation Guide
- **Remote Power Management**
- iBootBar Remote Power Management
- Leviton SH081-1B1 PDU

By Manufacturers
- Scientech
  - Calorimeters
  - Laser Power/Energy Meter

For special needs in control devices contact paier.

Supported DAQ Components

- Cameras
  - Adimec Opal 1600, 2000, 4000, 8000
  - Adimec Quartz 4A150: Manual
  - Pulnix TM-6740CL: Datasheet, CCD spec, Pulnix Website
  - 2D Detector for XPP
  - 2D Detector for CXI (“CSPAD”)
  - CSPAD 2x2
  - pnCCD
  - Princeton PI-MTE2048 Camera, USB interface preferred (use discouraged because of slow readout and other poor behaviour)
  - Princeton PIXIS Camera, USB interface preferred (use discouraged because of slow readout and other poor behaviour)
  - Timepix Quad: QTPX-262k spec, ASI Website
  - FCCD
  - Phasics wavefront sensor
  - OceanOptics
  - Fli camera
  - Andor camera
  - Hamamatsu ORCA Flash 4.0
  - Rayonix MX 170 HS Specs, Legacy remote mode manual, Rayonix Website, Rayonix Manual
  - Goldeye CL-008 TEC1 Datasheet, Manual, Features-References, Framegrabber_AppNote, WebLink

- SLAC IPIMB 4-channel Charge Amplifier/Peak-Digitizer

- Agilent U1065A 8GHz 10-bit cPCI ADC and U1051A 6-channel cPCI TDC

- Motor position encoder: SXR SLE Info (Laser Mirror Position Encoder)

- Encoder readout: US Digital USB4 Website

- GSC 16A32SSC beam rate 16-bit 16-channel PCIe ADC: Spec Sheet, Reference Manual, GSC Website

Needs for other DAQ components should be discussed with the PCDS group.