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)
- 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 paiser.

Supported DAQ Components

• Cameras
  • Adimec Opal 1000: Manual, Old Manual, Leaflet, CCD spec, Adimec Website
  • 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-252k 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 16A132SSC 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.