

PC-104 Use at JLAB

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May 22-24, 2002
EPICS Collaboration

Controls Group

Why PC-104?

- **Desire to control hardware not requiring VME**
 - * **Serial (RS232/RS485)**
 - * **ARCnet**
 - * **GPIB**
- **Small form-factor...put it inside a magnet**
- **Large variety of cards and features**



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Why LINUX?

- **No licensing issues**
- **Familiar UNIX-like OS**
- **Not real-time, but moving in that direction
(kernel 2.5.15)**



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Current configuration

- **PC104 card: 32MB RAM; 64MB Flash; Ethernet port and 2 serial ports**
- **Using EPICS R3.14.0beta1 compiled under RedHat7.2**
- **Used to host soft-only records (~1000 calc/ai)**



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Current status

- **EPICS database processing works well**
- **SNL code crashes**
 - * **Probably because it's compiled against RH7.2, but the kernel is RH6.2 (factory compiled)**
- **Working on building our own kernel**
- **Looking for insight and experience from other labs**
 - * **Contact freyberg@jlab.org**



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