

NCSX Candidate Process Control I/O Form Factor

P. Sichta

Rev 0: 19DEC00 REV 1:30JAN02

<i>Availability & EPICS Support</i>	Compact PCI	VME	PCI	Ethernet device	Fieldbus (ControlNET, CANbus, CANopen, etc...)
High-speed Digitizer (5 MHz)	✓	✓✓	✓		
Med-speed Digitizer (100 KHz)	✓	✓✓	✓		
Low-speed Digitizer (10 KHz)	✓	✓✓	✓		
Scanning Analog Input	✓	✓✓	✓	✓	✓✓
Analog Output	✓	✓✓	✓	✓	✓✓
Digital Input Digital Output	✓	✓✓	✓	✓	✓✓
Prog. Timed Gate	✓	✓✓	✓	✓	✓

✓ = Product currently available

✓✓ = EPICS support currently available

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Cost	CompactPCI	VME	PCI	Ethernet (Sixnet)	Fieldbus (G3/ControlNET)
4 SSH chans High-speed Digitizer (>5 MHz)	2,800(b)	4,400	1,300		
16 SSH chans Med-speed Digitizer(100 KHz)	3,000 (a)	6,000			
16 SSH chans Low-speed Digitizer(10 KHz)		4,000	450		
16 chans Scanning A/D	450	500	400	800	1,600
8 chans Analog Output	900	1,000	900	1,600	700
16 bits Digital Input	600	750	90	450	500
8 bits Digital Output	300	500	400	250	100
8 chans Prog. Timed Gate	800	1,600	500	600	500

Notes:

1) Costs are in \$US and only a representative figure. The cost excludes the supporting equipment, such as comm link interface, local processor, chassis, and power supply (supporting equipment listed separately).

2) Cost of communication cabling is excluded.

3) Cost of operating system and software and licenses are excluded.

a) \$2,995:Alphi Technology CPCI-AD8 opt-8:Dec2000,
\$3,295:General Stds CPCI-ADADIO:Dec2000.

b) ~\$2,800:Chase Scientific AD410-14-256K-CPCI:Dec2000.

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<i>System Overhead</i>	CompactPCI	VME	PCI	Ethernet	Fieldbus (G3/ControlNET)
Local CPU	1,000	1,000	1,000		1,060
Chassis	1,500 (8 slots)	2,000 (12 slots)			130 (4 slots)
Power Supply	300	400		100	180
Other					Loop Driver = \$1,000/10 Loop i/f =\$220
Total Overhead	2,300	3,400	1,000	100	1,700

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- 3) Cost of operating system and software and licenses are excluded.