

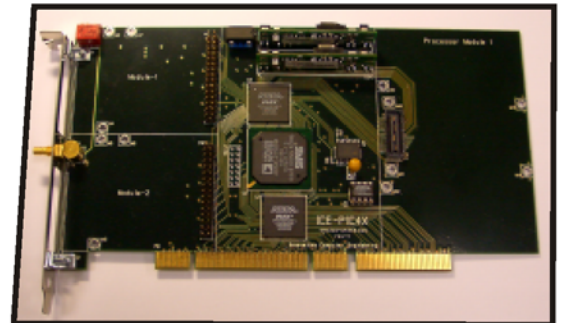
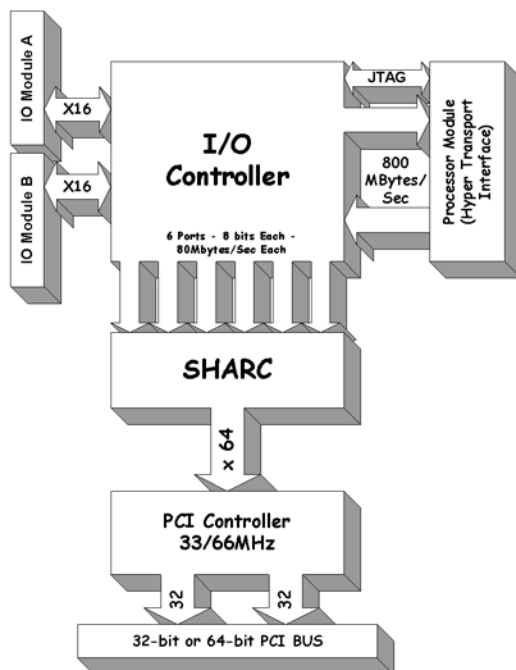
The 4th Generation



ICE PIC 4X ICE PIC 4T

Announcing the ICE PIC4X - The innovative PCI based DSP processing solution with changeable "Processor Modules" designed specifically to answer the most demanding signal processing needs.

All of this... on One PCI Card



The world is complicated. Digitize and process your world with the new **ICE PIC4X** and available Digital Tuner Demodulator Module (DTDM) processor. Load your algorithms into the Virtex-II PRO and make things easier.

Let the ICE PIC4X w/DTDM be Your Solution.

The 4th Generation



ICE PIC 4X ICE PIC 4T

Specifications and Options

The ICEPIC 4T/4X input/output options Input/Output Combinations

Dual 16-bit I/O modules sites allowing any combination of digital and analog input and output.

- ⇨ Dual Analog Inputs
- ⇨ Dual Analog Outputs
- ⇨ Dual Digital Inputs
- ⇨ Dual Digital Outputs
- ⇨ Digital Input - Analog Output
- ⇨ Analog Input - Digital Output
- ⇨ Daisy Chaining of Digital inputs using Dual Digital Input and Digital Output

Input/Output Modules

Analog Input Modules

ICE-A2D	12-bit	65	MSamples/Sec Maximum
ICE-A2D-r4	14-bit	65	MSamples/Sec Maximum
ICE-A2D-r5	12-bit	105	MSamples/Sec Maximum
ICE-A2D-r6	8-bit	200	MSamples/Sec Maximum
ICE-A2D-r7	14-bit	105	MSamples/Sec Maximum

Analog Output Modules

ICE-D2A	14-bit	125	MSamples/Sec Maximum
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Digital Modules

ICE-E2D	ECL to Digital
ICE-D2E	Digital to ECL
ICE-UDP	Gigabit Connection with UDP/IP encapsulation
ICE-LV2D	16-bit LVDS Digital input
ICE-D2LV2	16-bit LVDS Digital Output
ICE-FPPD	32-bit 25MHz FPPD Module

Digital Modules - Bi-directional

ICE-CXD	CEPT E3,E2,E1 Mux and Demux with AMI, HDB3, B3Z5 or B8Z5 soft-uploads
ICE-UXD	Design Your Own Module PCB
ICE-GXD	Gigabit Ethernet with real time 8b/10b encoding and decoding support
ICE-SONET	STM-1, STM-4, OC3, OC12 Bi-directional Module
ICE-SONET-r2	STM 1, STM-4, STM-8, STM-16 OC3, OC12, OC24, OC48 155.52, 622.08, 1244.16, 2488.32 Line Rates
ICE-LVXD	16-bit LVDS Bi-directional module

Please Visit WWW.ICE-ONLINE.COM for further information on each module. Specifications subject to change without notice. Availability subject to market conditions.

General Specifications

Dimensions and Weight

ICE-PIC4T	6.50 in. / 165 mm Length 4.25 in. / 108 mm Height	ICE-PIC4X	9.00 in. / 228 mm Length 4.25 in. / 108 mm Height
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Weight Approximately 1 pound with modules onboard

Power Consumption on PCI slot (3.3 and 5volt inputs combined)

ICE-PIC4T	7 watts operating at 100Mbytes/sec	ICE-PIC4X	7 watts operating at 100Mbytes/sec plus modules site consumption
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Environment Conditions

Storage Temperature	-10 to +60 degrees Celsius
Operating Temperature	0 - +40 degrees Celsius
Storage Humidity	20%-95% (non-condensing)
Operating Humidity	20%-80% (non-condensing)
Cooling	Fan and Convection cooling typical of desktop computer operating environments

Connections Based on Module

Optical Modules	Fiber connection
Digital Modules	40pin high density AMF Ribbon to transition panel
Analog Modules	SMB on Module to BNC for external clock MMCX on module to BNC for analog

ICE PIC-4X Processor Modules

ICE-DTDM

ICE-DTDM - Digital Tuner Demodulator
1 - Virtex-II Pro - I/O routing, Filtering Demodulator Look-up Tables Bit Processing(22 GOPS)
32 - Channels of digital tuning
8 - 100MHz Digital tuners each with 4 Channels
Digital resampling preTuner at 200MSPS/28tap, or postTuner on each channel
Greater than 2000 channel realtime Frequency Division de-Multiplexing

ICE-PLDM

ICE-PLDM - Programmable Logic Device
1 - Virtex-II Pro - I/O and SDRAM controller
4 - Virtex-II Pros for software programmable algorithms (22GOPS each)
128 Mbytes DDR400 NDRAM
3.2GBytes/sec access

ICE-FPPM

ICE-FPPM - Floating Point Processor
1 - Virtex-II Pro - I/O routing, Filtering Demodulator Look-up Tables Bit Processing(22 GOPS)
4 - 250MHz floating point processors
6Mbits
40usec 1K Complex FFT
50MHz 2K Real FFTs
15MHz 1Mpoint Real FFTs
1.5 GFLOPS or 6 GOPS each
128 Mbytes DDR400 NDRAM
3.2GBytes/sec
Shared by PowerPC and Sharcs

ICE-DDSM

ICE-DDSM - Data Distribution/Storage
1 - Virtex-II Pro - I/O bit pack/unpack
DDR SDRAM controller
1 Gbyte of DDR400 NDRAM configured for 6.4 GBytes/s RAM access
8 1.5/2.5/3.0 Gbit/sec bidirectional serial ports
programmable algorithms (22GOPS each)
128 Mbytes DDR400 NDRAM
3.2GBytes/sec access