

# PRODUCT BRIEF

Embedded System for xPC Target™

## CHEETAH



### CHEETAH xPC Target™ SYSTEM

#### Key Features

- Latest Core i5/i7 processors available
- Support for Pentium4, Core2Duo, and Core2Quad processors is available
- Fully compatible with xPC Target™
- AC mains input
- Multiple communication protocol support<sup>1</sup> (CAN, RS232, TCP/IP)
- Hard disk for embedded OS and data logging
- Floppy, CD-ROM
- Upto 4 GB DDR3 RAM
- Fully customizable I/O
- Temperature range of 0°C to +55°C

#### Optional components

- Add-on COTS PCI Analog and Digital I/O boards
- Custom add-on boards based on customer requirements for a combination of power and signal conditioning
- Breakout boards and cables
- Fault insertion units for simulation of electrical faults for HIL applications
- Interface box for addition of loads for HIL application

#### Applications

- Rapid control prototyping
- Data Acquisition
- Hardware-in-the-loop (HIL) simulation and testing

#### Online Resources

- [www.pathwaytechnologies.net](http://www.pathwaytechnologies.net)

#### Technical Details

##### Processor

- Core i5 @ 3.6 GHz/Core i7 @ 3.4 GHz
- Integrated 10/100 dual-speed Ethernet
- Compact Flash disk and HDD support
- Flat panel display, 2COM, 8 USB integrated

##### Interfaces

- 2 CAN channels using CAN card/s
- Two RS232 channels
- One TCP/IP interface
- One floppy drive, one CDROM interface
- Internal PCI interface (5 slots) for additional I/O cards

##### Memory

- Up to 4 GB DDR3 RAM available
- Optional 160/250/320 GB hard disk available

##### Analog I/O (Fully Customizable)

- Upto 16-bit, 64 single ended or 32 double ended analog inputs
- Upto 16-bit, 8 channel analog outputs
- Programmable full scale range on inputs and outputs
- External A/D triggering and gating inputs
- Refer to Pathway catalog for available options

##### Digital I/O (Fully Customizable)

- Upto 96 bi-directional lines
- Buffered I/O
- Upto 32-bit timer counters
- User configurable pull-up/pull-down resistors
- Refer to Pathway catalog for available options

##### Physical Interface

- 19" rack mounted unit
- Multiple rear panel connectors for signals and communications
- Rear panel power
- Front panel indicators for fan failure and temperature
- 4U tall steel enclosure for the CPU and I/O cards
- Top is removable for interior access and add-on I/O card and signal conditioning card installation

##### Operating Conditions

- Temperature range of 0°C to +55°C
- RH 10-85% non-condensing
- AC mains power input

##### Optional Power Components

- Programmable power supply which is controlled via an Analog Out channel

<sup>1</sup> Support for CAN protocol via add-on card.