Connect Tech Inc.
Embedded Computing Experts

Product Guide
www.connecttech.com

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NOTE: Specifications found in this guide are subject to change without notice.

New Connect Tech Products

COM Express & Qseven Carrier Boards

COM Express® Type 6 Rugged Ultra Lite Carrier

CCG011 / CCG012

COM Express® Type 6 Rugged Ultra Lite Carrier is a small carrier board, offering the ultimate durability with locking, rugged pin headers.

Features

- 95mm x 125mm
- Mini-PCIe Expansion
- -40°C to +85°C
- Supports most current processors including 4th Generation Intel® Core™ i7

COM Express® Type 10 Mini Carrier
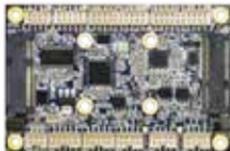
CCG010

COM Express® Type 10 Mini Carrier is an extremely small carrier board featuring rugged, locking connectors and offers the ultimate durability.

Features

- Small size, 84mm x 55mm
- Ruggedized latching connectors
- 2 x mini PCIe, mSATA, SATA, 2 x GBE, 6 x USB, LVDS, DisplayPort/HDMI/DVI/VGA, HD Audio, 2 x RS-232/422/485

Qseven Gen 2.0 Carrier

QCG201

Qseven Gen 2.0 Carrier Board is a compact ruggedized carrier that integrates with any industry standard Qseven Gen 2 module.

Features

- 170mm x 170mm, NanoITX
- Rugged locking pin header connectors
- MiniPCIe expansion
- -40 to +85 degrees C

COM® Express + GPU Carrier

CCG014

COM Express® + GPU Carrier is a small form factor, flexible Type-6 COM Express carrier with on board GPU. Supports 4th Generation Intel® Core™ i7 Processors.

Features

- 200mm x 125mm
- Choose from AMD Radeon E6760 or NVIDIA GeForce GT-745
- 6 total outputs can be used for HDMI, DVI or VGA

COM Express® Type 6 PMC/XMC Ultra Lite Carrier

CCG013

COM Express Type 6 PMC/XMC Ultra Lite Carrier offers dual PMC/XMC and Mini-PCIe expansion.

Features

- Ruggedized, locking pin header connectors
- Small form factor (170mm x 170mm)
- Supports latest processor sets, including 4th Generation Intel® Core i7™ (Haswell)

CONNECT TECH INC.

GPU Solutions

CompactPCI® Serial GPU

CGG001

Xtreme/GPU

XGG001, XGG002, XGG003

Connect Tech's GPU solutions bring exceptional desktop-level graphics, outstanding multimedia features, and GPU processing power to the PCIe/104 and CPCI-Serial form factors. Choose from AMD Radeon E6760 or NVIDIA GeForce GT 745M. Ideal for driving multiple displays or with access to the NVIDIA CUDA™ Cores, the GPU can become a parallel computational CPU for non-graphical applications.

Features

- CPCI-Serial
- 6x Dual-Mode Mini DisplayPort
- PCIe x4 Gen 2.1 Compatible
- 3U 8HP Compact PCI Serial

Features

- PCIe/104
- 4x Dual-Mode Mini DisplayPort
- PCIe x1 Up/Down stack compatible
- PCIe x16 Down stack compatible

Gigabit Ethernet Solutions

Xtreme/GbE Managed Carrier Ethernet Switch

XDG004, XDG005, XDG006

XDG007, XDG008, XDG009

Xtreme/GbE Managed Carrier Ethernet Switch provides Carrier Grade Ethernet switching capabilities in an extremely small embedded form factor. **Available in models with RJ-45 or Rugged Positive Locking Headers.**

Features

- 8 x 10/100/1000 Mbps Port Switch
- Latest Generation 32-bit Switch Engine
- Web GUI or CLI Management
- Carrier Grade Ethernet Switching
- Available with RJ-45 or Rugged Locking connectors
- Extremely Small Form Factor for 8-port switch
- Single Wide Range Input Voltage +9V to 36V
- Extended Temperature Range -40°C to +85°C

New Connect Tech Products

Power Supplies		Solid State Drivers	Ruggedized Embedded Systems

Power Supplies

Xtreme/PSU-UC

PSG013

Xtreme/PSU-UC is a high efficiency, high powered PC/104 form factor power supply featuring Ultracapacitor backup for uninterrupted power supply.

Features
- Wide input range, +8 to 36V DC
- Total power output 115W
- +5V, +12V and +5V Standby
- PC/104 component height requirements

SMART Battery Adapter

ADG061

SMART Battery Adapter allows for easy integration of a SMART battery into an existing PC/104 system. Used in combination with the Xtreme/PSU-UPS power supply it provides a complete Power Supply solution with uninterrupted power supply and battery backup functionality.

Features
- Easily integrates SMART battery into a PC/104 Stack

Solid State Drivers

**SSD/104 SATA 2.5"
Drive Carrier**

SDG006

SSD/104 SATA 2.5" Drive Carrier is a complete rugged stackable storage solution that allows any 2.5" SATA hard drive to be installed into any Type II PCIe/104 stack or embedded system.

Features
- Use any 2.5" Hard Drive
- Up to 1 TB of Storage
- Supports all SATA III

Ruggedized Embedded Systems

ESG Series

Connect Tech's Engineered Solutions provide rugged systems for the most challenging environments. Designed to MIL-STD-810G ratings for Vibration, Shock, Immersion, Sand & Dust and Acceleration and an operating temperature of -40 to +85 degree C.
Processor Options: -High Performance Intel Core i3/i5/i7 Series (Including Haswell) -Low Power Intel Atom Series (Including Baytrail)
Features
- 2 x Gigabit Ethernet (10/100/1000 Ports)
- 4 x USB 2.0 Ports
- 8-Bit GPIO and Analog Audio Input/Output
- Dual miniPCIe/mSATA Expansion (Up to Terabyte SSD storage)
Optional: -Wide range MIL-STD Input Power +16V to 50V DC -Transient Protection to MIL-STD-704 -EMI Filtering to MIL-STD-461

COM Express® + GPU Carrier

Connect Tech's combination COM Express + GPU carrier brings high performance desktop-level graphics, outstanding multimedia features, and GPU processing power into a small embedded footprint.

CTI's Unified Thermal Heat Plate

COM Express CPU Module + Thermal

GPU + Thermal

COM Express Carrier Board

Choose from AMD Radeon E6760 or NVIDIA GeForce GT-745 for parallel computing along side an Intel® Core™ i7 processor.

Connect Tech Inc.
Embedded Computing Experts

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COM Express

COM® Express + GPU Carrier

NEW

CCG014

COM Express® + GPU Carrier is a small form factor, flexible Type-6 COM Express carrier with on board GPU. Supports 4th Generation Intel® Core™ i7 Processors.

Features

- 200mm x 125mm
- Choose from AMD Radeon E6760 or NVIDIA GeForce GT-745
- 6 total outputs can be used for HDMI, DVI or VGA

COM Express® Type 6 Rugged Ultra Lite Carrier

NEW

CCG011 / CCG012

COM Express® Type 6 Rugged Ultra Lite Carrier is a small carrier board, offering the ultimate durability with locking, rugged pin headers.

Features

- 95mm x 125mm
- Mini-PCIe Expansion
- -40°C to +85°C
- Supports most current processors including 4th Generation Intel® Core™ i7

COM Express® Type 6 Ultra Lite Carrier

CCG008

COM Express® Type 6 Ultra Lite Carrier is ideal for space constrained applications. Supports multiple processor options.

Features

- COM Express type 6 compatibility
- Mini-PCIe Expansion
- Supports most current processors including 4th Generation Intel® Core™ i7
- Extended Temperature Range

COM Express® Type 10 Mini Carrier

NEW

CCG010

COM Express® Type 10 Mini Carrier is an extremely small carrier board featuring rugged, locking connectors and offers the ultimate durability.

Features

- Small size, 84mm x 55mm
- Ruggedized latching connectors
- 2 x mini PCIe, mSATA, SATA, 2 x GBE, 6 x USB, LVDS, DisplayPort/HDMI/DVI/VGA, HD Audio, 2 x RS-232/422/485

COM Express® Type 6 PMC/XMC Ultra Lite Carrier

NEW

CCG013

COM Express Type 6 PMC/XMC Ultra Lite Carrier offers dual PMC/XMC and Mini-PCIe expansion.

Features

- Ruggedized, locking pin header connectors
- Small form factor (170mm x 170mm)
- Supports most current processors, including 4th Generation Intel® Core i7™ (Haswell)

COM Express

COM Express® Type 6 PMC/XMC Carrier

COM Express® Carrier

CCG007

CCG001

COM Express® Type 6 PMC/XMC Carrier is a highly advanced, feature-rich carrier which offers PMC/XMC and Mini-PCIe expansion.
Features
- PMC/XMC & Mini-PCIe Expansion
- Supports most current processors including 4th Generation Intel® Core™ i7
- Extended Temperature Range
- Designed for installation in Rack Mount Chassis

COM Express® Carrier is a full-featured, compact carrier board that is compatible with COM Express® Type 2 Basic and Compact modules.
Features
- PCI-104 and PCIe/104 expansion capabilities
- COM Express® Type 2 Basic and Compact module compatible
- COM Express® Carrier supports modules from major manufacturers
- Small size

Custom Design Solutions
When close DOESN'T count...

Understanding that every application has it's own unique requirements, Connect Tech offers design services to provide an exact fit solution. Use one of our many off-the-shelf carriers for proof of concept and development while we design your custom hardware. Quick turn design, prototypes and manufacturing will ensure you get to market on time and on budget. **www.connecttech.com/custom**

	COM Express® Carrier Type 2	COM Express® Ultra Lite Carrier Type 6	COM Express® Type 6 Rugged Ultra Lite Carrier	COM Express® Carrier Type 10 Mini Carrier	COM Express® PMC/XMC Carrier Type 6	COM Express® Type 6 PMC/XMC Ultra Lite Carrier	COM Express® + GPU Carrier
Part #	CCG001	CCG008	CCG011 / CCG012	CCG010 **NEW**	CCG007 **NEW**	CCG013 **NEW**	CCG014 **NEW**
Mini PCI Express	–	2 slots	2 slots	2 slots	4 slots	2 slots	2 slots
PMC/XMC	–	–	–	–	2 slots	2 slots	–
HDMI	✓	✓	–	–	✓	–	–
DisplayPort++ (*)	–	–	2	✓	✓	2	6
DVI	–	–	–	–	✓	–	–
LVDS	✓	✓	✓	✓	✓	✓	✓
VGA	✓	✓	✓	–	✓	✓	✓
Gigabit Ethernet	1	2	2	2	2	2	2
USB 2.0/3.0	4/0	6/4	6/4	6/0	8/4	6/4	6/4
USB Client Port	–	1	1	1	1	1	1
Serial RS-232 / RS-485	2/2	3/2	3/2	2/2	3/2	1/0	3/2
HD Audio	✓	–	✓	✓	✓	✓	✓
GPIO	8 bits	8 bits	8 bits	8 bits	8 bits	8 bits	8 bits
SATA	2	2	2	1	2	2	2
mSATA	1	2	2	1	2	2	2
Compact Flash	1	–	–	–	–	–	–
SD Card	–	✓	✓	✓	–	✓	✓
Input Power Options	+12V or ATX	+12V only	+12V only	+6V to +14V	+9V to +36V	+12V to +48V	+12V to +48V
PCI-104 / PCIe/104	✓	–	–	–	–	–	✓
Dimensions	175 x 115mm	125 x 95mm	125 x 95mm	55 x 84mm	428 x 190mm	170 x 165mm	125 x 200mm
Temperature	–30℃ to 80℃ –22℉ –176℉	–40℃ to +85℃ –40℉ to 185℉	–40℃ to +85℃ –40℉ to 185℉	–40℃ to +85℃ –40℉ to 185℉	–40℃ to +85℃ –40℉ to 185℉	–40℃ to +85℃ –40℉ to 185℉	–40℃ to +85℃ –40℉ to 185℉
Rugged Locking Connectors	–	–	✓	✓	–	✓	✓
External GPU	–	–	–	–	–	–	✓

*can be used as HDMI, DVI or VGA via dongle

COM Express® Carrier Boards
Type 10, Type 6 and Type 2

GPU Solutions

Off-the-Shelf and Modified COM Express® Solutions

Use Connect Tech's COM Express ® Carrier Boards for instant proof of concept, field deployment, or benefit from our custom design services to create a perfect fit carrier for your application.

Developing a custom carrier board protects your investment of design level IP by separating it from the standard CPU and memory found on the COM Express® module.

As next generation processors become available, your custom carrier stays intact — only your COM Express® module needs to change.

COM Express®
Type 6 Rugged
Ultra Lite Carrier

COM Express®

GPU Solutions

NEW

NEW

CompactPCI® Serial GPU

Xtreme/GPU

CGG001

XGG001, XGG002, XGG003

Connect Tech's GPU solutions bring exceptional desktop-level graphics, outstanding multimedia features, and GPU processing power to the PCIe/104 and CPCI-Serial form factors. Choose from AMD Radeon E6760 or NVIDIA GeForce GT 745M. Ideal for driving multiple displays or with access to the NVIDIA CUDA™ Cores, the GPU can become a parallel computational CPU for non-graphical applications.

Features
- CPCI-Serial
- 6x Dual-Mode Mini DisplayPort
- PCIe x4 Gen 2.1 Compatible
- 3U 8HP Compact PCI Serial

Features
- PCIe/104
- 4x Dual-Mode Mini DisplayPort
- PCIe x1 Up/Down stack compatible
- PCIe x16 Down stack compatible

Qseven Carrier Boards

Qseven Carrier Gen 2.0	PCI-104 Qseven Carrier	PCIe/104 Qseven Carrier	Lite Qseven Carrier	Ultra Lite Qseven Carrier

NEW

Qseven Gen 2.0

QCG201

PCI-104

QCG002

PCIe/104

QCG001

Lite Qseven

QCG006

Pico-ITX

QCG005, QCG011, QCG015

Qseven Gen 2.0 Carrier Board is a compact ruggedized carrier that integrates with any industry standard Qseven Gen 2 module.

Features
- 170mm x 170mm, NanoITX
- Rugged locking pin header connectors
- MiniPCIe expansion
- -40 to +85 degrees C

PCI-104 Qseven Carrier Board is a small embedded carrier board that allows complete integration with any industry standard Qseven module.

Features
- PCI-104 Qseven Carrier Board utilizes the PC/104 form factor and the PCI-104 bus, and allows installation of up to 4 PCI-104 boards
- Add your choice of x86 Qseven module

PCIe/104 Qseven Carrier Board is a small embedded carrier board that allows complete integration with any industry standard Qseven module.

Features
- The PCIe/104 Qseven Carrier Board utilizes the PC/104 form factor with 4 x1 PCIe lanes and the PCIe/104 bus
- Add your choice of x86 Qseven module

The low cost, feature-rich **Lite Qseven Carrier Board** integrates with any industry standard Qseven module.

Features
- Choose from AMD, Intel Atom, Freescale i.MX6
- MiniPCIe and SIM card expansion
- Custom Solutions

The **Ultra Lite Qseven Carrier Board** in Pico-ITX form factor, integrates with any industry standard Qseven module.

Features
- Choose from AMD, Intel Atom, Freescale i.MX6
- MiniPCIe and SIM card expansion
- Custom Solutions

Specifications	Gen 2.0 NEW QCG201	Ultra Lite QCG005	Ultra Lite QCG011	Ultra Lite QCG015	Lite QCG006
Size	NanoITX, 120 x 120mm	PicoITX, 72x100mm	PicoITX, 72x100mm	PicoITX, 72x100mm	128x100mm
Mini-PCIe Connector	2 (MiniPCIe/mSATA)	1	1	-	2
mSATA	2 (MiniPCIe/mSATA)	-	-	1	-
SIM Card Connector	2	1	1	-	2
LVDS Video & Back Light Controls	-	✓	-	-	-
HDMI Video/Audio	With Adapter	-	-	-	-
Power Connectors: • Molex Power • 2 PC Screw Term Connector	Optional* ✓	✓ Optional*	✓ Optional*	Optional* ✓	✓ Optional*
USB 2.0 Ports	2	4	4	4	8
USB 3.0 Ports	2	-	-	-	-
USB Client Port	-	-	1	1	1
Gigabit Ethernet	2	-	1	1	1
RS-232/RS-485	1RS232	-	-	1/0	1/0
CAN	✓	-	-	-	-
SATA Ports	Up to 2x SATA	1	1	1	2
microSD Card	1	-	-	✓	✓
RTC Battery	✓	✓	✓	✓	✓
Operating Temperature	-40ºC to 85ºC (-40 ºF to 185 ºF)	-40ºC to 85ºC (-40 ºF to 185 ºF)	-40ºC to 85ºC (-40 ºF to 185 ºF)	-40ºC to 85ºC (-40 ºF to 185 ºF)	-40ºC to 85ºC (-40 ºF to 185 ºF)
Power Requirements	+5V Input	+5V 6A, +12V 200ma	+5V 6A, +12V 200ma	+5V 6A, +12V 200ma	+5V 6A, +12V 200ma
Accessories	Optional Cable Kit*	Optional Cable Kit*	Optional Cable Kit*	Optional Cable Kit*	Optional Cable Kit*

AMD

intel

freescale semiconductor

FPGAs

FreeForm/Express S6	Xtreme I/O Opto	FreeForm/PCI-104	FreeForm/104	FreeForm/104 Daughter Board

As shown with Epiq Solutions' Bitshark FMC-1RX RF receiver

FBG001   DAG001   FCG001   FBG006   DBG002

FreeForm/Express S6 is a reconfigurable **Xilinx Spartan-6 LX45T FPGA**.

Features
- FPGA Mezzanine Card
- Integrated PCI Express® blocks
- 3.125 Gbps low-power transceivers, 128MB DDR3 RAM, 2x 10/100/1000 Ethernet, and 1x RS-232 port

Xtreme I/O Opto is a 48-bit PCI-104 isolated digital I/O board.

Features
- 24 optically isolated inputs
- 24 optically isolated outputs
- 3kV of Isolation on all I/O
- +0 to +40V DC voltage range

FreeForm/PCI-104 is a reconfigurable FPGA development board.

Features
- Based on the Xilinx Virtex-5 FPGA (LX30T, LX50T & FX30T)
- 32-Bit/33MHz PCI-104 interface
- 8MB Flash, 128MB DDR2-400 memory, 2x 10/100 Ethernet, 2x RS-485, 4x Rocket I/O

FreeForm/104 is a PC/104 based card that features a reconfigurable FPGA through JTAG or SPI flash (4Mb).

Features
- Based on the Xilinx Spartan-3E
- External 5V power connection
- Four user configurable LEDs
- Eight position rotary switch

FreeForm/104 Daughter Board is an adapter for Connect Tech's **FreeForm/104** board.

Features
- Enables users to capture and process synchronous and asynchronous RS-232 or RS-422/485 serial data with customizable FPGA implementations

XILINX VIRTEX 6

VIRTEX V5

XILINX SPARTAN 6

SPARTAN-3E

FPGAs

Custom FPGA Design

Specifications	FreeForm/ Express S6	Xtreme I/O Opto	FreeForm /PCI-104	FreeForm/104	FreeForm/104 Daughter Board
Form Factor	PCIe	PCI-104 or PC/104-*Plus*	PCI-104	PC/104	PC/104
Ports	-	-	-	-	2
FPGA	Xilinx Spartan-6 LX45T	Actel ProASIC3 (PCI IP Core)	Xilinx Virtex-5 LX30T, LX50T & FX30T	Xilinx Spartan-3E	-
Bus Interface	Spartan-6 PCIe Gen 1 Endpoint	-	-	-	-
Interface	-	-	-	-	RS-232,RS-422,RS-449
Mezzanine Card	1x low pin count LPC FMC	-	-	-	-
Connectors	-	2 x 25 (50 position) 0.1" (DIL) pin headers	-	-	PC/104 pass-through 2 x 50 pin connector 2 x 26 pin header connectors
Control Signals	-	-	-	-	TxD, RxD, DTR, RTS, CTS, DCD, TxClk, RxClk
Power	+3.3V DC and +12V DC	+5V DC	+5V DC	+5V DC (± 5%)	-
Temperature	-40°C to 85°C -40°F to 185°F	-40°C to 85°C -40°F to 185°F	-40°C to 85°C -40°F to 185°F	-40°C to 85°C -40°F to 185°F	-40°C to 85°C -40°F to 185°F
Dimensions	16.76 x 11.11cm	9.5885 x 9.017cm	9.5885 x 9.0805cm	9.5885 x 9.017cm	9.5885 x 9.017cm
	6.6" x 4.375"	3.775" x 3.550"	3.775" x 3.575"	3.775" x 3.55"	3.775" x 3.55"

Need assistance with a custom FPGA design?

We can help at any stage of a project!

Connect Tech's Engineering Team would be happy to discuss your unique requirements. Our team of highly skilled engineers are dedicated, knowledgeable and experienced. They offer several years of experience in custom FPGA designs and will work with you to implement a solution that will meet your needs.

CAN

CAN Controller Cards		RoadWarrior	Xtreme/Multi-I/O
		Ideal for rugged mobile, mission-critical and industrial strength applications	*Ideal for a broad range of applications*

CANpro/104 Opto   **CANpro/104-*Plus* Opto**

1 Mbps Operation

Fail-Safe Transceivers

Optical Isolation

CNG001

CRG001

RDG001

XMG001

Industrial Temperature

CANpro/104 Opto includes two powerful NXP SJA1000 CAN controllers, along with 3kV optical isolation.

Features
- Fail-safe power-up/power-down
- On-board high input impendence transceivers to maximize nodes on the bus
- Jumper selectable slew rate limiting reduces radiated emissions

CANpro/104-*Plus* is based on the PC/104-*Plus* bus and includes two powerful NXP SJA000 CAN controllers, along with 3kV optical isolation.

Features
- Frees up valuable I/O space offering you greater flexibility within your embedded system
- Includes an 8-bit GPIO header

RoadWarrior enables remote monitoring, controlling and collecting of data from multiple I/O interfaces through a wireless cellular data link or Low Earth Orbit (LEO) satellite.

Features
- Wide range of interfaces including CAN, RS-232, RS-485, GPS, Bi-directional GPIO, High Voltage Isolated GPIO and ADCs

Xtreme/Multi-I/O is a high density, all-in-one PC/104 communication board for CANbus, serial port, wired and wireless communication.

Features
- 2500V isolation protection
- 2x SJA1000 controllers, 1Mbp/s
- 4x RS-232/1x RS-485/J1708
- 2x MultiTech compatible sockets
- 5x isolated LEDs, 1x USB
- Extended operating temperature

Specifications	CANpro/104 Opto	CANpro/104-Plus Opto	RoadWarrior	Xtreme/Multi-I/O
Part #	CNG001	CRG001	RDG001	SMG001
Form Factor	PC/104	PCI-104	Wireless Device	PC/104
CAN Controller (CAN 2.0B Compliant)	x2 NXP SJA1000	x2 NXP SJA1000	PIC32	x2 NXP SJA1000 J1708
BasicCAN & PeliCAN Modes (SJA1000)	✓	✓	N/A	✓
SJA1000 Input Clock	16MHz	16MHz	–	16 or 24MHz
Isolated CAN Interface	3kV TI ISO1050	3kV TI SN65HVD251	TI ISO1050 Dominant State Timeout	ADM3053
Memory Mapped Addressing	–	✓	N/A	✓ Jumperless
General Purpose I/O	–	8-bit 3.3V I/O Header	16 bits 3.3V or 5V bi-directional	–
Supports 1Mbps Operation	✓	✓	✓	✓
Operating Temperature	-40°C to 85°C -40°F to 185°F	-40°C to 85°C -40°F to 185°F	-40°C to 85°C -40°F to 185°F	-40°C to 85°C -40°F to 185°F
I/O & Memory Space Selectable	✓	–	N/A	✓
Single or Dual Interrupts	✓	–	N/A	✓
Free Technical Support	✓	✓	✓	✓

Driver Support

Connect Tech's in-house software development team ensures our products support the most current operating systems.

Visit our support section on-line to view the most current drivers for all Connect Tech products.

Don't see what you need?

Contact our technical support team at support@connecttech.com

PC/104

Xtreme/104

Xtreme/104 offers four or eight asynchronous RS-232 and/or RS-422/485 serial ports.

Ports	4/8
Interface	RS-232/422/485
Control Signals	RS-232: Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD RS-422/485: TxD±,RxD±,CTS±,RTS±
Baud	RS-232: 50 bps to 230 Kbps/Custom RS-422/485: 50 bps to 460.8 Kbps/Custom
Temperature	0°C to 70°C/32°F to 158°F Optional -40°C to +85°C
Dimensions	9.60 x 10.41 x 1.12cm/3.77" x 4.09" x 0.44"

Xtreme/104 Opto

Xtreme/104 Opto offers two or four asynchronous serial ports with 3kV optical isolation on all signals and ports.

Ports	2/4
Interface	RS-232/422/485
Control Signals	RS-232: Tx,Rx,RTS,CTS RS-422/485: TxD±,RxD±,CTS±,RTS±
Temperature	0°C to 70°C/32°F to 158°F Optional -40°C to +85°C
Dimensions	9.60 x 10.41 x 1.12cm/3.77" x 4.09" x 0.44"

Xtreme/104 RS-232

Xtreme/104 RS-232 offers four or eight asynchronous RS-232 serial ports.

Ports	4/8
Interface	RS-232
Control Signals	Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD
Baud	50 bps to 230 Kbps/Custom
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	9.60 x 10.41 x 1.12cm/3.77" x 4.09" x 0.44"

ComSync/104

ComSync/104 offers two synchronous/asynchronous RS-232, RS-422, RS-449, EIA-530, EIA-530/A, V.35 and X.21 serial channels.

Ports	2 Synchronous/Asynchronous Serial Channels
Interface	RS-232,RS-422,RS-449, EIA-530,EIA-530/A,V.35 & X.21
Control Signals	Tx±,Rx±,DCD±,RTS±,CTS±,DSR±,DTR±,SYNC±,TRxC±,RTxC±
Temperature	0°C to 70°C/32°F to 158°F

FreeForm/104 Daughter Board

FreeForm/104 Daughter Board is a FreeForm/104 adapter board that enables users to capture and process synchronous and asynchronous RS-232 or RS-422/485 serial data with customizable FPGA implementations.

Ports	2
Interface	RS-232, RS-422, RS-449
Control Signals	TxD, RxD, DTR, RTS, CTS, DCD, TxClk, RxClk
Connectors	PC/104 pass-through 2x50 pin connector to connect to FreeForm 2x26 pin header connectors
Temperature	-40°C to 85°C/-40°F to 185°F

Xtreme/104 Isolated 12 Port

Xtreme/104 Isolated 12 Port is a high density adapter which offers 12 asynchronous serial ports and complies with PC/104 form factor standards. It features eight jumper selectable RS-232/422/485 ports with support for all three RS-485 modes, and includes four dedicated RS-232 ports.

Ports	12
Control Signals	RS-232: TxD, RxD, RTS, CTS, ISOGND RS-422/485: (TxD, RxD, CTS, RTS) ±, ISOGND
Connectors	10-pin connectors: RS-232/422/485 ports 6-pin connectors: RS-232 ports
Temperature	-40°C to 85°C/-40°F to 185°F
Power	+5V DC 500mA (typical), 1A (maximum)

FreeForm/104

Power Supplies

Connect Tech's **Power Supplies** power all of the **PC/104** family expansion buses including **PC/104**, **PC/104-*Plus***, **PCI-104**, **PCI/104-Express** and **PCIe/104**.

FreeForm/104 is a PC/104 based FPGA development board for digital I/O and control applications.

FPGA	Xilinx Spartan-3E FPGA, 500,000 gates
Connector	2 x 50 pin headers, 1 x 26 pin header
Frequency	66 MHz, internally scalable
Temperature	-40°C to 85°C/-40°F to 185°F
Power	+5V DC (± 5%)

Xtreme/PSU-UC **NEW**
- Wide input range, +8 to 36V DC , Total power output 115W (+12V and +5V Standby) Ultracaps for uninterrupted power supply

Xtreme/PSU-UPS
- SMART battery charging for uninterrupted power supply
- 125W+ output power (+5V, +12V, -12V, +3.3V, +5V standby)

Xtreme/PSU-XP
- 160W total output power (+5V @ 10A, +3.3V @10A, +12V @ 5A, -12V @ 1A and +5V standby @ 1A), and +6V to +36V DC input voltage

Xtreme/PSU Isolated
- 195W total output power (+5V @ up to 15A, +3.3V @ up to 20A and +12V @ up to 10A), +9V to +36V DC input voltage, and up to 2.25kV of isolation

Xtreme/PSU **Low Cost!**
- 115W total output power (+5V @ 10A, +12V @ 5A, and +5V standby @ 1A), and +6V to +36V DC input voltage

PC/104-*Plus* & PCI-104 Serial

Xtreme/104-*Plus*

Xtreme/104-*Plus* offers 4 or 8 high speed asynchronous RS-232/422/485 ports, 8 selectable RS-232/422/485/TTL ports, or 2/4 dedicated RS-423 ports.

Form Factor	PC/104-*Plus*
Ports	2/4/8
Control Signals	RS-232: TxD, RxD, RTS, CTS, RI, DTR, DSR, DCD and SG RS-422/485: (TxD, RxD, RTS, CTS)± and SR RS-423: TxD-, TxDRef, RxD±, RTS-, RTSRef, CTS±
Temperature	-40°C to 85°C/-40°F to 185°F
Power	+5V DC 500mA (maximum) VI/O of +5V or 3.3V DC

Xtreme/104-*Plus* 16 Port

Xtreme/104-*Plus* 16 Port offers 16 ports of switchable RS-232/422/485 on a single PC/104-*Plus* card. This provides the highest port density and most flexible PC/104-*Plus* serial port solution available.

Form Factor	PC/104-*Plus*
Ports	16
Interfaces	RS-232/422/485
Power	5V bus power required. On-board regulator makes its own 3.3V +5 V 400mA maximum
Temperature	-40°C to 85°C/-40°F to 185°F

Xtreme/104-*Plus* Opto

Xtreme/104-*Plus* Opto provides the added protection of 3kV optical isolation on a rugged and compact form factor for critical embedded applications.

Form Factor	PC/104-*Plus*
Ports	2/4
Control Signals	RS-232: TxD, RxD, RTS, CTS and SG RS-422/485: (TxD , RxD , RTS , CTS)± and SR
Temperature	-40°C to 85°C/-40°F to 185°F
Power	+5V DC (±5%) @ 500mA (maximum)

Xtreme I/O Opto

Xtreme I/O Opto is a 48-bit isolated digital input/output board with 24 optically isolated inputs and 24 optically isolated outputs.

Form Factor	PCI-104 or PC/104-*Plus*
Connectors	2 x 25 (50 position) 0.1" (DIL) pin headers
Isolation	3kV isolation on all channels
Inputs/Outputs	24 optically isolated I/O (24-bits) I/O voltage range: +0 up to +40V DC
Temperature	-40°C to 85°C/-40°F to 185°F

ALL PCI-104 and PC/104-*Plus* boards are now available with a 22mm Connector to extend the stack height of your application!

PCI/104-Express & PCIe/104

Xtreme/104-Express

Xtreme/104-Express is a PCI/104-Express multi-port serial board which provides a PCI-104 pass-through connector. Fully PCI/104-Express compliant.

Form Factor	PCI/104-Express
Ports	8
Line Interface	RS-232/422/485, RS-232 or RS-422/485
Control Signals	RS-232: Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,SG RS-422/485: TxD±,RxD±,CTS±,RTS±,SR
Baud	RS-232: 50 bps to 921.6 Kbps RS-422/485: up to 15.625 Mbps
UART	Octal PCI Express, 128 Byte FIFO
Temperature	-40°C to 85°C/-40°F to 185°F

Xtreme/104-Express Opto

Xtreme/104-Express Opto is a PCIe/104 serial card with 3 kV optical isolation for rapid data transfer and high reliability.

Form Factor	PCIe/104
Ports	4/8
Line Interface	RS-232/422/485, RS-232 or RS-422/485
Control Signals	RS-232: Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,SG RS-422/485: TxD±,RxD±,CTS±,RTS±,SR
Baud	RS-232: 50 bps to 1 Mbps RS-422/485: up to 7.8125 Mbps
UART	Quad/Octal PCI Express, 256 Byte FIFO
Temperature	-40°C to 85°C/-40°F to 185°F

Xtreme/SBC PCIe/104 Single Board Computer

Xtreme/SBC PCIe/104 Single Board Computer utilizes the PCIe/104 form factor with 4 x1 PCIe lanes. Instantly access a variety of features using the SBCs on-board connectors. Embedded processor options include AMD Fusion/G-Series, Intel® Atom™ Z500 & E600, Freescale i.MX51 & i.MX6, Texas Instruments OMAP, NVIDIA Tegra and VIA Nano E-Series.

Form Factor	PCIe/104, 4x PCIe Lanes
Interfaces	2x SATA, 4x USB 2.0, 1x Gigabit Ethernet, LVDS & VGA Video, 2x RS-232, 2x RS-422/485
Power	ATX Supply Input or +5V/+12V only
Temperature	-20°C to 70°C/-4°F to 158°F

PCIe/104 Qseven Carrier Board

PCIe/104 Qseven Carrier Board is a small embedded carrier board that allows complete integration with any industry standard Qseven module. This carrier board utilizes the PC/104 form factor with 4 x1 PCIe lanes and the PCIe/104 bus.

Form Factor	PCIe/104, 4x1 PCIe lanes
Interfaces	2x SATA, 4x USB 2.0, 1x Gigabit Ethernet, LVDS & VGA Video, 2x RS-232, 2x RS-422/485
Power	ATX or +5V/+12V only
Temperature	-20°C to 70°C/-4°F to 158°F

PCI-104

Xtreme I/O Opto

Xtreme I/O Opto is a 48-bit isolated digital input/output board with 24 optically isolated inputs and 24 optically isolated outputs.

Form Factor	PCI-104 or PC/104-*Plus*
Connectors	2 x 25 (50 position) 0.1" (DIL) pin headers
Isolation	3kV isolation on all channels
Inputs/Outputs	24 optically isolated I/O (24-bits) I/O voltage range: +0 up to +40V DC
Temperature	-40°C to 85°C/-40°F to 185°F

ComSync/PCI-104

ComSync/PCI-104 which is based on the PCI bus, is a two-channel, multi-protocol serial adapter which offers high performance, reliable, synchronous or asynchronous serial communications.

Form Factor	PCI-104
Interface	RS-232, RS-422, RS-449, EIA-530, EIA-530/A, V.35 & X.21
Modes	NRXI: NRZI, NRZIB, NRZI-Mark, NRZI-Space Biphase: BiPhase-Space, BiPhase Level, Differential BiPhase
Temperature	-40°C to 85°C/-40°F to 185°F
Power	5V DC @ 1 Amp (maximum)

Xtreme/PCI-104 Opto 12 Port

Power Supplies

Connect Tech's **Power Supplies** power all of the **PC/104** family expansion buses including **PC/104**, **PC/104-*Plus***, **PCI-104**, **PCI/104-Express** and **PCIe/104**.

Xtreme/PCI-104 Opto 12 Port offers 12 ports on a PCI-104 card, with the added protection of 1kV optical isolation on a rugged and compact form factor.

Form Factor	PCI-104
Interfaces	RS-232/422/485
Temperature	-40°C to 85°C/-40°F to 185°F
Power	+5V DC 750mA to 950mA
Dimensions	9.5885 x 9.017 cm/3.775" x 3.550"

Xtreme/PSU-UC NEW
- Wide input range, +8 to 36V DC , Total power output 115W (+12V and +5V Standby) Ultracaps for uninterrupted power supply

Xtreme/PSU-UPS
- SMART battery charging for uninterrupted power supply
- 125W+ output power (+5V, +12V, -12V, +3.3V, +5V standby)

Xtreme/PSU-XP
- 160W total output power (+5V @ 10A, +3.3V @10A, +12V @ 5A, -12V @ 1A and +5V standby @ 1A), and +6V to +36V DC input voltage

Xtreme/PSU Isolated
- 195W total output power (+5V @ up to 15A, +3.3V @ up to 20A and +12V @ up to 10A), +9V to +36V DC input voltage, and up to 2.25kV of isolation

Xtreme/PSU Low Cost!
- 115W total output power (+5V @ 10A, +12V @ 5A, and +5V standby @ 1A), and +6V to +36V DC input voltage

Xtreme I/O ADC-DAC

Xtreme I/O ADC-DAC is an analog data acquisition board for the small form factor embedded market place.

Form Factor	PCI-104
Analog Inputs	32 Single Ended/16 Differential Channels, 12/14/16 bit 100kps, Software-Programmable Input Ranges
Analog Outputs	4 Channels, 12/14/16 bit resolution, 6 programmable output ranges
Digital I/O	16 bit Bi-directional I/O
Temperature	-40°C to 85°C/-40°F to 185°F

PCI-104 Qseven Carrier Board

PCI-104 Qseven Carrier Board is a small embedded carrier board that allows complete integration with any industry standard Qseven module. This carrier board utilizes the PC/104 form factor and the PCI-104 bus, and allows installation of up to 4 PCI-104 boards.

Form Factor	PCI-104
Interfaces	2x SATA, 4x USB 2.0, 1x Gigabit Ethernet, LVDS & VGA Video, 2x RS-232, 2x RS-422/485
Power	ATX or +5V/+12V only
Temperature	-20°C to 70°C/-4°F to 158°F

FreeForm/PCI-104

FreeForm/PCI-104 is a reconfigurable FPGA development board with high speed digital I/O that combines a user programmable FPGA with a 32-Bit, 33MHz PCI-104 interface.

Form Factor	PCI-104
FPGA	Virtex-5 FPGA options include LX30T, LX50T and FX30T
Power	5 V DC (+/- 5%). May vary by application.
Temperature	-40°C to 85°C/-40°F to 185°F
Dimensions	PCI-104 1.0 Compliant

Xtreme/SBC PCI-104

Xtreme/SBC PCI-104 Single Board Computer utilizes the PCI-104 form factor, supporting four peripheral boards. Instantly access a variety of features using the SBCs on-board connectors. Embedded processor options include AMD Fusion/G-Series, Intel® Atom™ Z500 & E600, Freescale i.MX51 & i.MX6, Texas Instruments OMAP, NVIDIA Tegra and VIA Nano E-Series.

|	
Form Factor	PCI-104
Interfaces	2x SATA, 4x USB 2.0, 1x Gigabit Ethernet, LVDS & VGA Video, 2x RS-232, 2x RS-422/485
Power	ATX Supply Input or +5V/+12V only
Temperature	-20°C to 70°C/-4°F to 158°F

PCI/104-Express & PCIe/104

PCI Express to PCIe/104 Adapter

PCI Express to PCIe/104 Adapter allows a PCIe/104 or PCI/104-Express card to be installed into a standard PCI Express system slot.

Bus	PCIe/104 and PCI/104-Express compatible
Features	x1 lane PCI Express card edge for installation in any slot width
Connector	PCIe/104 156-pin / PCI-104 120-pin
Dimensions	11.11 x 10.29 cm/4.375" x 4.050"

PCIe/104 to PCI Express Adapter - Bottom Stacking
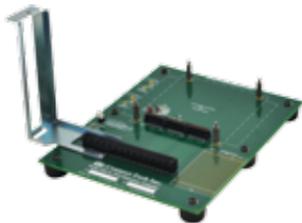
PCIe/104 to PCI Express Adapter - Bottom Stacking model allows a PCI Express card to be installed into a PCIe/104 or PCI/104-Express single board computer system in a stack down configuration.

Bus	PCIe/104 and PCI/104-Express compatible
Features	x16 lane vertical PCI Express card edge (supports x1, x4, x8 or x16)
Connector	156 pin PCIe/104 top connector; footprint for 2x USB Type B connector
Dimensions	19.3 x 15.2cm/7.6" x 6"

PCIe/104 to PCI Express Adapter - Top Stacking

Power Supplies

Connect Tech's **Power Supplies** power all of the **PC/104** family expansion buses including **PC/104**, **PC/104-*Plus***, **PCI-104**, **PCI/104-Express** and **PCIe/104**.

PCIe/104 to PCI Express Adapter - Top Stacking

model allows a PCI Express card to be installed into a PCIe/104 or PCI/104-Express single board computer system in a stack up configuration.

Bus	PCIe/104 and PCI/104-Express compatible
Features	x16 lane vertical PCI Express card edge (supports x1, x4, x8 or x16)
Connector	156 pin PCIe/104 bottom connector
Dimensions	9.5885 x 9.017cm/3.775" x 3.550"

Xtreme/PSU-UC NEW
• Wide input range, +8 to 36V DC , Total power output 115W (+12V and +5V Standby) Ultracaps for uninterrupted power supply

Xtreme/PSU-UPS
• SMART battery charging for uninterrupted power supply
• 125W+ output power (+5V, +12V, -12V, +3.3V, +5V standby)

Xtreme/PSU-XP
• 160W total output power (+5V @ 10A, +3.3V @10A, +12V @ 5A, -12V @ 1A and +5V standby @ 1A), and +6V to +36V DC input voltage

Xtreme/PSU Isolated
• 195W total output power (+5V @ up to 15A, +3.3V @ up to 20A and +12V @ up to 10A), +9V to +36V DC input voltage, and up to 2.25kV of isolation

Xtreme/PSU Low Cost!
• 115W total output power (+5V @ 10A, +12V @ 5A, and

Xtreme/SBC PCIe/104	Xtreme/SBC PCI-104

Xtreme/SBC PCIe/104 Single Board Computer:
Xtreme/SBC PCIe/104 Single Board Computer utilizes the PCIe/104 form factor with 4 x1 PCIe lanes.

Xtreme/SBC PCI-104 Single Board Computer:
Xtreme/SBC PCI-104 Single Board Computer utilizes the PCI-104 form factor, supporting four peripheral boards.

Features
- 2x SATA, 1x Gigabit Ethernet, 4x USB 2.0, LVDS and VGA Video, 2x RS-232 and 2x RS-422/485 serial ports
- Choose from a variety of processors including AMD, Intel® Atom™, Freescale i.MX6
- Requires Qseven module

Off-the-Shelf and Modified Solutions

Multiple Processor Options!

Xtreme/SBC products are ideal off-the-shelf solutions for a broad range of applications. Achieve rapid proof of concept and deploy systems for field trials with off-the-shelf hardware.

Through our engineering services, customers will benefit from our modified designs. The Connect Tech engineering team is skilled at creating customer-specific products that ensure both time to market and price targets are met.

Gigabit Ethernet Solutions

Xtreme/GbE Managed Carrier Ethernet Switch

Xtreme/GbE Managed Carrier Ethernet Switch provides Carrier Grade Ethernet switching capabilities in an extremely small embedded form factor. **Available in models with RJ-45 or Rugged Positive Locking Headers.**

Features

- 8 x 10/100/1000 Mbps Port Switch
- Latest Generation 32-bit Switch Engine
- Web GUI or CLI Management
- Carrier Grade Ethernet Switching

- Available with RJ-45 or Rugged Locking connectors
- Extremely Small Form Factor for 8-port switch
- Single Wide Range Input Voltage +9V to 36V
- Extended Temperature Range -40°C to +85°C

Blue Heat/Net Sync

Blue Heat/Net Sync offers a synchronous Ethernet-to-serial solution for data communications.

Ports	4 Synchronous/Asynchronous Serial Ports
Control Signals	Single ended: TxD, RxD, RTS, CTS, RI, DTR, DSR, DCD, RxClock, TxClock Differential: (TxD, RxD, CTS, RTS, DTR, DCD, DSR)±, RxClock, TxClock
LAN Interface	Auto sensing 10Base-T, 100Base-TX
Line Interface	V.28, V.10, V.11, V.35, EIA-530, V.36
Protocols	SDLC, HDLC, MonoSync, BiSync, Transparent BiSync, Async Ethernet Protocols: IP, TCP, UDP, ARP, RARP, TFTP, DHCP, BootP, HTTP, Telnet, ICMP, PPP
Temperature	0°C to 60°C/32°F to 140°F
Dimensions	11.56 x 11.68 x 3.43cm/4.55"x 4.50"x 1.35"
Power	5V DC (2.5A) - 28V DC (450 mA)

BMG006-01

Blue Heat/Net 2

Blue Heat/Net 2 is a compact Ethernet-to-serial device which offers 2 software selectable RS-232/422/485 serial ports, and allows connection of any RS-232 or RS-422/485 serial device to an Ethernet LAN.

Ports	2
Control Signals	RS-232: TxD, RxD, CTS, RTS, DTR, DCD, DSR, RI, GND RS-422/485: (TxD, RxD, CTS, RTS)±, SR
Baud	50 bps to 460.8 Kbps/Custom
Dimensions	11.56 x 11.68 x 3.43cm/4.55 x 4.50 x 1.35"
Power	Multi-mode power adapter, 5V -30V DC, 500 mA PoE model: 30 mA@ 48V DC Screw Terminal Connector model: 36V-56V DC
Temperature	-40°C to 85°C/-40°F to 185°F PoE: -40°C to 74°C/-40°C to 165°F

BNG009-01/BNG010-01

Ethernet to Serial

Blue Heat/Net 4 or 8 RJ-45

Blue Heat/Net 4 or **8 RJ-45** is an Ethernet-to-serial device which offers 4 or 8 RS-232 serial ports.

Ports	4/8
Control Signals	Tx,Rx,RTS,CTS,DTR,DSR,DCD,GND
LAN Interface	Auto sensing 10Base-T, 100Base-TX
Line Interface	RS-232
Baud	50 bps to 230.4 Kbps/Custom
Dimensions	18.42 x 13.34 x 3.43cm/7.25" x 5.25" x 1.35"
Temperature	0°C to 70°C/32°F to 158°F

BN002-01/BNG004-01

Blue Heat/Net 4 or 8 DB-9

Blue Heat/Net 4 or **8 DB-9** is an Ethernet-to-serial device which offers 4 or 8 RS-232 or software selectable RS-232/422/485 serial ports over Ethernet LAN.

Ports	4/8
Control Signals	RS-232: TxD,RxD,CTS,RTS,DTR,DSR, DCD, RI, GND RS-422/485: (Tx,Rx,RTS,CTS)±,SR
LAN Interface	Auto sensing 10Base-T, 100Base-TX
Line Interface	RS-232/422/485
Baud	50 bps to 460.8 Kbps/Custom
Dimensions	24.41 x 13.34 x 4.29cm 9.61 x 5.25" x 1.69"
Temperature	0°C to 70°C/32°F to 158°F

BNG006-01/BNG008-01

Blue Heat/Net 16

Blue Heat/Net 16 is an Ethernet-to-serial device which allows serial devices to connect directly to an Ethernet LAN via 16 software selectable RS-232/422/485 ports.

Ports	16
Control Signals	RS-232: DTR,DSR,RTS,CTS,TxD, RxD,RI,DCD,GND RS-422/485: (TxD,RxD,RTS,CTS)±,SR
LAN Interface	Auto sensing 10Base-T, 100Base-TX
Line Interface	RS-232/422/485
Protocols	IP, TCP, UDP, ARP, RARP, TFTP, DHCP, BootP, HTTP, Telnet, ICMP, PPP
Temperature	-40°C to 60°C/-40°F to 140°F
Baud	50 bps to 460.8 Kbps/Custom
Dimensions	43.7 x 16 x 4.4cm/17.25" x 6.25" x 1.74"
Power	110/240V AC, 50/60 Hz, 24-56 V DC

BNG022-01

FREE! BlueHeat/Net Software Development Kit!

Connect Tech's Ethernet to Serial products are built on a Linux platform and are available in 2, 4, 8 or 16 serial ports.

Visit our web site at http://devel.connecttech.com for your FREE Blue Heat/Net Software Development Kit!

PCI Serial

BlueStorm/SP

BlueStorm/SP is a high-speed multi-port adapter which offers 8 ports of RS-232/422/485 connectivity.

Ports	8
Line Interface	RS-232/422/485
Control Signals	RS-232: Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,GND RS-422/485: (Tx,Rx,CTS,RTS)±,GND
Baud	RS-232: 50 bps to 921.6 Kbps RS-422/485: 50 bps to 1.8432 Mbps
UART	Octal, 64 Byte FIFO
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	14.702 x 10.605cm/5.788 x 4.175"

BTG001-01

BlueStorm/SP Opto
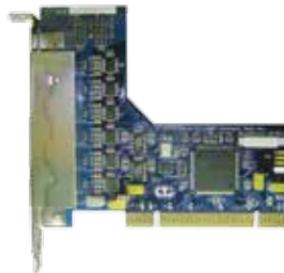
BlueStorm/SP Opto is a high-speed multi-port adapter which offers 4 ports of RS-232/422/485 connectivity, along with 3kV optical isolation.

Ports	4
Line Interface	RS-232/422/485, 3kV optical isolation
Control Signals	RS-232: Tx,Rx,RTS,CTS,GND RS-422/485:TxD±,RxD±,RTS±,CTS±,GND
Baud	RS-232: 50 bps to 921.6 Kbps RS-422/485: 50 bps to 1.8432 Mbps
UART	Dual, 64 Byte FIFO
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	14.702 x 10.605 cm/5.788" x 4.175"

BSG001-01

BlueStorm/SP RJ-11

BlueStorm/SP RJ-11 is a high-speed multi-port adapter which offers 8 independently configurable RS-232 ports, along with +5 VDC or +12 VDC power on 6 RJ-11 ports.

Ports	8
Line Interface	RS-232, 6 RJ-11 connectors/2x10 pin headers
Control Signals	Tx,Rx,RTS,DSR,GND,DC Power 10 Pin Header: Tx,Rx,RTS,CTS,DTR,DSR,DCD,RI,SG
Baud	50 bps to 921.6 Kbps
UART	Octal, 64 Byte FIFO
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	12.129 x 10.668cm/4.775" x 4.2"

BTG008-01

BlueStorm/LP
RS-232 & RS-422/485

BlueStorm/LP is a high-speed multi-port Universal PCI adapter designed for low profile and standard height PCI computers.
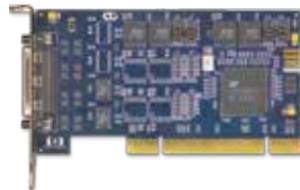
Features

- Available in 2, 4 and 8 port RS-232 serial interface models, and 1 plus 1, 2 plus 2, and 4 plus 4 RS-232 plus RS-422/485 serial interface models.

Ports	2/4/8
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	12.72 x 1.5 x 6.44 cm/5.01" x .59" x 2.54"

BlueStorm/LP
RS-232

BlueStorm/LP
RS-422/485

Ports	Line Interface	Control Signal	Baud	UART
BlueStorm/LP RS-232*				
2	RS-232	Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,GND	50 bps to 921.6 Kbps/Custom	Dual/Quad/Octal 64 Byte FIFO
4	RS-232	Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,GND 2+2 Ports RS-232+RS-422/485	50 bps to 921.6 Kbps/Custom	Dual/Quad/Octal 64 Byte FIFO
8	RS-232	Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,GND 4+4 Ports RS-232+RS-422/485	50 bps to 921.6 Kbps/Custom	Dual/Quad/Octal 64 Byte FIFO
BlueStorm/LP RS-422/485*				
2	RS-422/485	TxD±,RxD±,RTS±,CTS±,GND	50 bps to 1.8432 Mbps/Custom	Dual/Quad/Octal 64 Byte FIFO
4	RS-422/485 2+2 Ports RS-232+RS-422/485	TxD±,RxD±,RTS±,CTS±,GND	50 bps to 1.8432 Mbps/Custom	Dual/Quad/Octal 64 Byte FIFO
8	RS-422/485 4+4 Ports RS-232+RS-422/485	TxD±,RxD±,RTS±,CTS±,GND	50 bps to 1.8432 Mbps/Custom	Dual/Quad/Octal 64 Byte FIFO

Low profile models are available with standard height brackets.
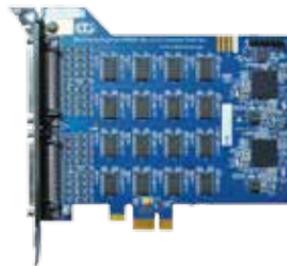
PCI Express Serial

BlueStorm/Express

BlueStorm/Express is a standard profile PCI Express serial card available in 2, 4, 8 or 16 ports of RS-232/422/485 connectivity.

Ports	2/4/8/16
Line Interface	RS-232/422/485
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	2/4 Port: 10.86 x 10.92cm/4.275" x 4.300" 8/16 Port: 14.699 x 11.1125cm/ 5.787" x 4.375"

Ports	Control Signal	Baud	UART
2	RS-232: Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,GND RS-422/485: (Tx,Rx,CTS,RTS)±,GND	RS-232: 1 Mbps RS-422/485: 7.8 Mbps	Dual PCIe 256 Byte TX and RX FIFOs
4	RS-232: Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,GND RS-422/485: (Tx,Rx,CTS,RTS)±,GND	RS-232: 1 Mbps RS-422/485: 7.8 Mbps	Quad PCIe 256 Byte TX and RX FIFOs
8	RS-232: Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,GND RS-422/485: (Tx,Rx,CTS,RTS)±,GND	RS-232: 921.6 Kbps RS-422/485: 1.843 Mbps	Octal PCI 64 Byte TX and RX FIFOs
16	RS-232: Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,GND RS-422/485: (Tx,Rx,CTS,RTS)±,GND	RS-232: 921.6 Kbps RS-422/485: 1.843 Mbps	2x Octal PCI 64 Byte TX and RX FIFOs

BlueStorm/Express 8/16 Port RS-232

BlueStorm/Express 8/16 Port RS-232 is a standard profile PCI Express serial card which offers 8 or 16 ports of RS-232 connectivity, and is compatible with any PCI Express slot.

Ports	8/16
Line Interface	RS-232
Control Signals	TxD, RxD, RTS, CTS, RI, DTR, DSR, DCD
Baud	50 bps to 1 Mbps
UART	Octal, 256 Byte FIFO
Temperature	-40°C to 85°C/-40°F to 185°F
Dimensions	14 x 10.7cm/5.5" x 4.2"

BlueStorm/Express Opto

BlueStorm/Express Opto is a standard profile PCI Express serial card which offers 4 ports of RS-232/422/485 connectivity, and 3kV optical isolation. These x1 lane cards are compatible with x1, x4, x8, x16 lane PCI Express slots.

Ports	4
Isolation	3kV
Line Interface	RS-232/422/485
Control Signals	RS-232: Tx,Rx,RTS,CTS,GND RS-422/485: (Tx,Rx,RTS,CTS)±,GND
Baud	RS-232: 921.6 Kbps RS-422/485: 1.843 Mbps
UART	2x Dual PCI, 64 Byte TX and RX FIFOs
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	14.699 x 11.049cm/5.787" x 4.350"

PCI EXPRESS

PCI Express Serial

BlueStorm/Express Opto (1kV)

BlueStorm/Express Opto (1kV) is a standard profile PCI Express serial card which offers 8 ports of RS-232/422/485 connectivity, and 1kV optical isolation on 4 of 8 ports.

Ports	8
Isolation	1kV (4 Ports)
Line Interface	RS-232/422/485
Control Signals	RS-232: Isolated: Tx,Rx,RTS,CTS,GND Non-Isolated: Tx,Rx,RTS,CTS,RI,DTR,DSR, DCD,GND
Baud	RS-232: 921.6 Kbps
UART	Octal PCI, 64 Byte TX and RX FIFOs
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	14.702 x 10.605cm/5.788" x 4.175"

BlueStorm/Express Isolated

BlueStorm/Express Isolated is a standard profile PCI Express serial card which offers 8 ports of RS-232 connectivity, and 2kV optical isolation on all 8 ports.

Ports	8
Isolation	2kV isolation, 3kV on board
Line Interface	RS-232
Control Signals	Tx,Rx,RTS,CTS,DCD,DTR
Baud	RS-232: 1 Mbps
UART	Octal, 256 Byte FIFO, 265 Byte TX and RX FIFOs
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	14.699 x 11.049cm/5.787" x 4.350"

BDG001-01

BlueStorm/Express LP

BlueStorm/Express LP is a low profile PCI Express serial card which offers 8 ports of RS-232/422/485 connectivity.

Ports	8
Line Interface	RS-232/422/485
Control Signals	RS-232: Tx,Rx,RTS,CTS,RI,DTR,DSR,DCD,GND RS-422/485: (Tx ±,Rx ±,CTS±,RTS)±,GND
Baud	RS-232: 1 Mbps, RS-422/485: 7.8 Mbps
UART	Octal PCI, 64 Byte TX and RX FIFOs
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	14.699 x 6.891cm/5.787" x 2.713"

BFG002-01

BlueStorm/Express LP Opto

BlueStorm/Express LP Opto is a low profile PCI Express serial card which offers 2 ports of RS-232/422/485 connectivity, along with 3kV optical isolation on both ports.

Ports	2
Line Interface	RS-232/422/485
Control Signals	RS-232: Tx,Rx,RTS,CTS,GND RS-422/485: (Tx,Rx,CTS,RTS)±,GND
Baud	RS-232: 1 Mbps RS-422/485: 7.8 Mbps
UART	Dual PCIe, 265 Byte TX and RX FIFOs
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	15.7 x 6.9cm/6.2" x 2.7"

BCG001-01

PC/104 & Ethernet to Synchronous Serial

ComSync/104

ComSync/104 offers two synchronous/asynchronous RS-232, RS-422, RS-449, EIA-530, EIA-530/A, V.35 and X.21 serial channels.

Ports	2 Synchronous/Asynchronous Serial Channels
Interface	RS-232,RS-422,RS-449, EIA-530,EIA-530/A,V.35 & X.21
Control Signals	Tx±,Rx±,DCD±,RTS±,CTS±,DSR±,DTR ±, SYNC±,TRxC±,RTxC±
Temperature	0°C to 70°C/32°F to 158°F
Dimensions	PC/104 v.2.3 Compliant

CSG001-01 / CSG005-01

ComSync/PCI-104

ComSync/PCI-104 is a two-channel, multi-protocol serial adapter which offers synchronous or asynchronous serial communications.

Form Factor	PCI-104
Interface	RS-232, RS-422, RS-449, EIA-530, EIA-530/A, V.35 & X.21
Modes	NRXI: NRZI, NRZIB, NRZI-Mark, NRZI-Space Biphase: BiPhase-Space, BiPhase Level, Differential BiPhase
Temperature	-40°C to 85°C/-40°F to 185°F
Power	5V DC @ 1 Amp (maximum)

CPG001-01 / CPG004

ComSync/PCI-104 Gen 3

NEW

ComSync/PCI-104 Gen 3 features the Zilog ESCC 85230 allowing for an extended temperature operating range of -40 to +85 degrees C. Support for multiple electrical interfaces.

Features
- DMA support
- Software selectable electrical interfaces including RS-232, RS-422, RS-449, EIA-530, EIA-530/A, V.35 and X.21

CPG004

Blue Heat/Net Sync

Blue Heat/Net Sync offers an Ethernet to synchronous serial solution for data communications.

BMG006-01

Ports	4 Synchronous/Asynchronous Serial Ports
Control Signals	Single ended: TxD, RxD, RTS, CTS, RI, DTR, DSR, DCD, RxClock, TxClock Differential: (TxD, RxD, CTS, RTS, DTR, DCD, DSR)±, RxClock, TxClock
LAN Interface	Auto sensing 10Base-T,100Base-TX Ethernet
Line Interface	V.28, V.10, V.11, V.35, EIA-530, V.36
Protocols	SDLC, HDLC, MonoSync, BiSync, Transparent BiSync, Async Ethernet Protocols: IP, TCP, UDP, ARP, RARP, TFTP, DHCP, BootP, HTTP, Telnet, ICMP, PPP
Temperature	0°C to 60°C/32°F to 140°F
Dimensions	11.56 x 11.68 x 3.43cm/4.55" x 4.50" x 1.35"
Power	5V DC (2.5A) - 28V DC (450 mA)

I/O

Xtreme I/O ADC-DAC

✓ **All-in-one PC/104 communication solution for CANbus, serial port, wired and wireless communication**

✓ **High voltage port isolation reduces noise and improves system protection**

✓ **Advanced CANbus functionality reduces development time, cost, and installation**

✓ **Jumperless configuration**

✓ **Extended operating temperature for outstanding performance and reliability in harsh environments**

Xtreme/Multi-I/O

XMG001-01

Xtreme/Multi-I/O is a high density, all-in-one PC/104 communication board for CANbus, serial port, wired and wireless communication.

Features

- 2500V isolation protection
- 2x SJA1000 controllers, 1Mbp/s
- 4x RS-232/1x RS-485/J1708
- 2x MultiTech compatible sockets
- 5x isolated LEDs, 1x USB
- Extended operating temperature

Analog Input & Output Model

DAG003 / DAG004

Analog Input Model

DAG005

Ideal for data acquisition, measurement and control applications

Xtreme I/O ADC-DAC is an analog and digital peripheral board for the **PCI-104**, **PCIe/104** and **PCI/104-Express** small form factor embedded market place.

Xtreme I/O ADC-DAC Analog Input & Output Model offers 32 single ended/16 differential channels of 16 bit analog input, 4 channels 16 bit analog output, 16 bit GPIO

Xtreme I/O ADC-DAC Analog Input Model offers 32 single ended/16 differential channels of 16/12 bit analog input, 16 bit GPIO

PCI-104, PCIe/104 & PCI/104-Express

Analog Inputs
- Channels: 32 SE/16 Differential
- Resolution: 16-bit/12-bit
- Sampling Rate: 100 ksps
- Input Ranges: 0-5V, 0-10V, ±5V,±10V

Analog Outputs
Analog Input & Output Model only
- Channels: 4
- Resolution: 16-bit
- Output Ranges:
  - Unipolar: 0V to 5V, 0V to 10V
  - Bipolar: ±5V, ±10V, ±2.5V, −2.5V to 7.5V

Digital I/O
- 16-bit bidirectional I/O
- Input/Output Ranges: +3.3V or +5V (TTL/CMOS)
- High Current: 24mA

Temperature
-40°C to 85°C/-40°F to 185°F

Digital I/O

Remote I/O

Xtreme I/O ADC-DAC

DAG003 / DAG004 / DAG005

PCI-104, PCIe/104 & PCI/104-Express

Xtreme I/O ADC-DAC is an analog and digital peripheral board.

Analog Inputs: 32 Single Ended/16 Differential Channels, 16/14/12 bit 100kps, Software-Programmable Input Ranges

Analog Outputs: 4 Channels, 16/14/12 bit resolution, 6 programmable output ranges

Digital I/O: 16 bit bi-directional I/O

Xtreme I/O Opto

DAG001

PCI-104 or PC/104-*Plus*

Xtreme I/O Opto is a 48-bit isolated digital input/output board.

Connectors: 2 x 25 (50 position) 0.1" (DIL) pin headers

Isolation: 3kV isolation

Inputs: 24 optically isolated inputs (24-bits), input voltage range +0 up to +40V DC

Outputs: 24 optically isolated outputs (24-bits), output voltage range +0 up to +40V DC

FreeForm/104

FBG006

PC/104

FreeForm/104 is a PC/104 card that features a reconfigurable FPGA for digital I/O and control applications.

FPGA: Xilinx Spartan-3E, 500,000 gates, 360K RAM
Standard: 96 digital I/O
Digital I/O Opto-22: 48 Opto-22

Programmable I/O: 96 high current TTL/CMOS (48 per 50 pin connector), 6 TTL (26 pin connector)

Fixed I/O: 12 TTL inputs (26 pin connector)

Cellular/Satellite M2M Communications

NEW

RDG001

RoadWarrior

ROADWARRIOR enables remote monitoring, controlling and collecting of data from multiple I/O interfaces through a wireless cellular data link or Low Earth Orbit (LEO) satellite.

Serial	2x RS-232, 2x RS-485
Cell Networks	HSPA/EV-DO/UMTS/EDGE/GPRS/CDMA
Satellite	LEO Satellite
Features	CAN, GPS, Bi-directional GPIO, Isolated GPIO and ADCs
Power	+9 to +30V DC with reverse polarity protection

Battery Adapter

ADG061

SMART Battery Adapter

Allows for easy integration of a SMART battery into an existing PC/104 system.

Size: 3.55" x 3.775"

Connector:
• SMART Battery connector (5787428-1)

Features:
• Easily integrates SMART battery into a PC/104 Stack
• Use with Xtreme/PSU-UPS (SCG001)

Adapters and Development Tools

PCIe/104 to PCI-104 Adapter	COM® Express Bus Extender	PCI/PCIe to PMC/XMC Adapter	Qseven to COM® Express Adapter	PCI-104 to PC/104 Adapter
ADG054	ADG053	ADG052	ADG042	ADG043

PCIe/104

This adapter enables users to add four PCI-104 compatible boards into either a stack up or stack down configuration.

Features:
• Use of PCI-104 Boards in PCIe/104 Stack
• Up/Down Stack Compatible
• PCIe/104 Compliant

COM Express

Allows full Type 2 or Type 6 COM Express functionality without compromising the testing process.

Size:
• 95mm x 125mm

Connectors:
• COM Express

Features:
• COM Express Type 2/Type 6 Compatible
• Supports Compact and Basic COM Express Modules
• Impedance Controlled Design

PCI/PCIe

Link a PCIe card to a XMC Carrier, or a PCI card to a PMC Carrier.

Size:
• 149mm x 74mm

Connectors:
• XMC, PMC, PCIe (x16 Card accepted, x8 Compatible), PCI (32-bit)

Features:
• XMC to PCIe Connection
• PMC to PCI Connection
• BUSMODE LEDs with Jumper Selection for Testing

Qseven

Install a Qseven module into any COM Express® Carrier Board.

Size:
• Compact: 95x95 mm
• Basic: 95x125 mm

Connectors:
• Single or double row COM Express Module Connectors
• Qseven connector

Features:
• Compatible with COM Express® Type 2 and Type 6

PCI-104

Enables testing and development of PC/104 (ISA) devices in a PCI-104 (PCI) only system.

Connector:
• PCI-104, PC/104

Features:
• PCI Memory and IO interface to operate, control, and monitor peripherals on the PC/104 (ISA) bus
• PCI driven interrupt controller monitors and relays triggered IRQ lines on the PC/104 bus

ACCESSORIES

Adapters and Development Tools

| PCI/104-Express to Single/Dual Mini-PCIe Adapter		PCI-104 to Mini-PCIe Adapter	SUMIT to PCIe/104 Adapter	PCIe/104 Bus Extender
ADG028 / ADG036	ADG044 / ADG051	ADG046	ADG039	ADG038

PCIe/104 (PCI/104-Express)

Integrate a Mini-PCIe (PCI Express Mini Card) into a PCIe/104 (PCI/104-Express) system.

Connector:
PCI/104-Express

Features:
- 3.3V (at 3A) and 1.5V (at 1A) DC power
- Half-Mini and Full-Mini PCIe card supported
- SIM card support, USB, and PCI bus pass-through (all optional

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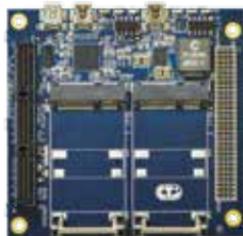
PCIe/104 (PCI/104-Express)

Integrate 2 Mini-PCIe (PCI Express Mini Cards) into a PCIe/104 (PCI/104-Express) system.

Connector:
PCI/104-Express

Features:
- 3.3V (at 3A) and 1.5V (at 1A) DC power
- Half-Mini and Full-Mini PCIe card supported
- SIM card support, USB, and PCI bus pass-through (all optional)

PCI-104

Enables integration of a Mini-PCIe (PCI Express Mini) card into a PCI-104 system.

Connector:
- PCI-104 x 1

Features:
- 3.3V and 1.5V DC power
- SIM card, Half-Mini and Full-Mini-PCIe cards supported
- 3 Mini-PCIe status LEDs
- Optional PCI Express Mini-Card Specification Revision 2.0 which adds a DisplayPort connection

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PCIe/104 & PCI/104-Express

Integrate a PCIe/104 or PCI/104-Express card into a SUMIT-104 system.

Connector:
- SUMIT A and B, PCIe/104 x1

Features:
- 2 x USB (from SUMIT) via Mini USB connectors

PCIe/104 & PCI/104-Express

Allows one additional card height spacing between peripherals in a PCIe/104 or PCI/104-Express stack.

Size:
9.02 x 1.4605cm/3.55" x .575"

Connector:
- 156 pin PCIe/104 bottom connector

Features:
- PCIe/104 x16 bus connector

34 CONNECT TECH INC.

Adapters and Development Tools

PCIe/104 to PCI Express Adapter - Bottom Stacking	PCIe/104 to PCI Express Adapter - Top Stacking	PCIe/104 to PCI Express Cable Adapter	PCI Express to PCI-104 Express Adapter	PCI TO PC/104-*PLUS* ADAPTER

ADG021 · ADG017 · ADG040 / ADG041 · ADG016 · ADG001

PCIe/104 & PCI/104-Express

Install a PCI Express card into a PCIe/104 or PCI/104-Express single board computer system in a stack down configuration.

Size:
19.3 x 15.2cm/6" x 7.6"

Connector:
• 156 pin PCIe/104 top connector; footprint for 2x USB Type B connector

Features:
• x16 lane vertical PCI Express card edge (supports x1,x4, x8 or x16)

PCIe/104 & PCI/104-Express

Install a PCI Express card into a PCIe/104 or PCI/104-Express single board computer system in a stack up configuration.

Size:
9.5885 x 9.017cm/3.775" x 3.550"

Connector:
• 156 pin PCIe/104 bottom connector

Features:
• x16 lane vertical PCI Express card edge (supports x1, x4, x8 or x16)

PCIe/104 & PCI/104-Express

Provides an interface from the PCIe/104 (PCI/104-Express) bus to a PCI Express cable connection.

Connector:
• PCIe cable connector, PCI-104/ Express 156 pin top and bottom connectors

Features:
• x1 PCIe/104 lanes connected via PCI Express cable

PCIe/104 & PCI/104-Express

Install a PCIe/104 or PCI/104-Express card into a standard PCI Express slot.

Size:
11.11 x 10.29cm/4.375" x 4.050"

Connector:
• PCIe/104 156-pin / PCI-104 120-pin

Features:
• x1 lane PCI Express card edge for installation in any slot width

PCI TO PC/104-*PLUS*

INSTALL A PCI-104 OR PC/104-*PLUS* SERIAL CARD INTO A STANDARD UNIVERSAL PCI SLOT.

SIZE:
10.69 X 12.48CM/4.2" X 4.913"

CONNECTOR:
• PCI-104, 120 PIN AND PC/104, 64 AND 40 PIN STACK–THROUGH CONNECTORS

FEATURES:
• COMPATIBLE WITH STANDARD UNIVERSAL 3.3V OR 5V SLOT

Adapters and Development Tools

ISA to PC/104 Adapter	PC/104-*Plus* to Mini PCI Adapter	PCI-104 to PMC Adapter	PCI to CompactPCI Adapter

ADG003

ADG006

ADG013

ADG004

ISA to PC/104 Bus

Install an 8 or 16-bit PC/104 card into a standard ISA system.

Size:
15.62 x 10.68cm/6.145" x 4.2"

Connector:
• PC/104, 64 and 40 pin passive stack-through connectors

Features:
• 16x11 (.100" grid) breadboarding area for assembly and testing

PCI/104-*Plus* to Mini PCI

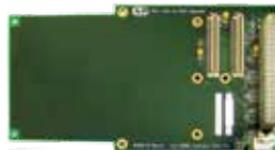Install a Mini PCI card into a standard PCI/104-*Plus* stack.

Connector:
• PC/104-*Plus*,120 pin and PC/104, 64 and 40 pin stack-through connectors

Features:
• 3.3V regulator delivers 2 watts of power to the Mini PCI card

PCI-104 & PC/104-*Plus*

Easily install a PMC card into a PCI-104 or PC/104-*Plus* stack.

Size:
9.02 x 16.58cm/3.550" x 6.526"

Connector:
• PCI-104 120 pin stack-through, 2x64 pin passive PMC connectors

Features:
• Operates multiple PMC cards in a PCI-104 stack with multiple adapters

PCI to CompactPCI Bus

Install a CompactPCI card into a standard Universal PCI system.

Size:
12.00 x 6.40cm/4.721" x 2.525"

Connector:
• CompactPCI 110 pin male A connector for connection to host system

Features:
• 16x11 (.100" grid) breadboarding area for assembly and testing

Simplify and Accelerate the Development Process

Incorporate various form factors into your PC/104 stack, including MiniPCI, MiniPCIe and mSATA

... or use PC/104 in a desktop ISA, PCI or PCI Express slot with an adapter board from our extensive line of development tools and adapters.

Storage Devices

PCI Dump Switch Card

ADG005

Universal PCI

Allows debugging during system hang-ups.

Size:
11.99 x 6.44cm/4.72" x 2.54"

Connector:
• Transparent PCI to PCI bridge

Features:
• Universal 32-bit PCI card (PCI 2.3 compliant)

PCI Express Dump Switch Card

ADG018

PCI-Express

Allows debugging during system hang-ups.

Size:
6.7 x 6.8cm/2.64" x 2.68"

Connector:
• Transparent PCIe to PCI bridge

Features:
• x1 lane PCIe (PCI Express 1.0 compliant)

PCI Express Burn-in Rack Adapter

ADG010

PCI-Express

Burns up to 10 (15W or 25W) PCI Express cards simultaneously with lane widths from x1 to x16 in any combination.

Size:
31.5 x 13.97cm/ 12.4" x 5.5"

Connector:
• ATX power supply connectors to power common components

Features:
• Quick verification of power conditions and lane widths via on board LEDs

SSD/104 SATA

SSD/104 SATA is a rugged stackable storage solution that allows installation of up to two mSATA SSD modules into any PC/104-*Plus*, PCI-104, PCI/104-Express and PCIe/104 stack or embedded system.

Capacity	4, 8, 16, 32, 64 or 128GB Up to 256GB with 2 mSATA modules
Connector	Standard right angle 7-pin SATA
Flash	MLC and SLC
Temperature	-40ºC to 85ºC (-40ºF to 185ºF)
Power	+3.3V ±5%

SDG001

SSD/104 SATA 2.5" Drive Carrier

NEW

SSD/104 SATA 2.5" Drive Carrier is a stackable storage solution that allows any 2.5" SATA hard drive to be installed into any Type II PCIe/104 stack or embedded system.

Features
• Use any 2.5" Hard Drive
• Up to 1 TB of Storage
• Supports all SATA III

SDG006

Power Supplies

Power Supplies				Battery Adapter

NEW

PSG013

NEW

ADG061

Xtreme/PSU & Xtreme/PSU-XP   Xtreme/PSU Isolated   Xtreme/PS-UPS

Connect Tech's **Power Supplies** power all of the **PC/104** family expansion buses including **PC/104**, **PC/104-*Plus***, **PCI-104**, **PCI/104-Express** and **PCIe/104**.

Xtreme/PSU: 115W total output power (+5V @ 10A, +12V @ 5A, and +5V standby @ 1A), and +6V to +36V DC input voltage

Xtreme/PSU-XP: 160W total output power (+5V @ 10A, +3.3V @10A, +12V @ 5A, -12V @ 1A and +5V standby @ 1A), and +6V to +36V DC input voltage

Xtreme/PSU Isolated: 195W total output power (+5V @ up to 15A, +3.3V @ up to 20A and 12V @ up to 10A), +9V to +36V DC input voltage, and up to 2.25kV isolation

Xtreme/PSU-UPS:
• SMART battery charging for uninterrupted power supply
• 125W+ output power (+5V, +12V, -12V, +3.3V, +5V standby)

Xtreme/PSU-UC

A high efficiency, high powered PC/104 form factor power supply featuring Ultracapacitor backup for uninterrupted power supply.

Size:
90mm x 96mm/3.55" x 3.775"

Connector:
• ATX power supply connectors to power common components

Features:
• Ultracapacitor backup for uninterrupted power supply

SMART Battery Adapter

Allows for easy integration of a SMART battery into an existing PC/104 system.

Size:
3.55" x 3.775"

Connector:
• SMART Battery connector (5787428-1)

Features:
• Easily integrates SMART battery into a PC/104 Stack

Connect Tech on the Road

Connect Tech is regularly on the road at industry events around the globe. Visit our website at www.connecttech.com to find out where you can see us next!

Connect Tech, Small Form Factor Experts!

Drop by to discuss your application; we'd be happy to share our small form factor experiences in order to assist you in planning your next design. Whether you have in an interest in PC/104, COM Express, Qseven, Pico-ITX, Nano-ITX or other our sales and engineering staff can explain the differences between form factors and help identify which will be best for your needs. Whether you can use one of our many off-the-shelf solutions or need custom design services, we're here to help.

Connect Tech Inc.
Embedded Computing Experts

Technical Support

Connect Tech upholds its reputation for providing exceptional customer service and support.

Our highly trained technical support team is dedicated, knowledgeable and experienced. They are up to date on the latest in hardware and software technologies.

We offer free technical support worldwide and are accessible Monday to Friday, 8:30 am to 5:00 pm EST by telephone, fax and email. Visit our web site for current product manuals, installation guides and software drivers.
support@connecttech.com

Connect Tech supports the most popular operating systems, including:

Conformal Coating

Connect Tech recognizes the harsh reality that many embedded systems find themselves operating in unusually hostile environments. When conformal coating is required to protect your application against substantial moisture, dust, chemicals or temperature extremes, we can help.

Standard Conformal Coating Options

Protect your circuitry when exposure to unique environmental circumstances is inevitable.

Humiseal 1B31: A fast air drying, single component, acrylic coating that provides excellent moisture and environmental protection for printed circuit assemblies.

Dymax 9-20557 LV: Multi-Cure 9-20557-LV is excellent for encapsulating, potting, sealing and bonding. Coating resists yellowing, vibration, impact and thermal shock. The coating exhibits excellent adhesion to most solder masks, and fluoresces for easy in-line quality control.

Dow Corning 1-2620: Protective coating for rigid and flexible circuit boards. These one-part, self-priming coatings cure to flexible, transparent elastoplastic coatings ideally suited for electronic printed wiring board (PWB) applications, particularly those requiring toughness and abrasion resistance.

Contact a sales representative for more information or to inquire about additional conformal coating options.

Connect Tech Satisfaction Guarantee

Connect Tech Inc.
Embedded Computing Experts

The key to our success:
We're driven by the belief that customer satisfaction is as important as quality products.
We build solid relationships with our customers by providing quality products around
the world, backed by exceptional customer support.

Quality Assurance

All Connect Tech products undergo critical testing and inspection processes
to ensure product quality, performance and reliability. Connect Tech's
commitment to quality is recognized globally through our ISO 9001:2008
certification. Visit our website to view our FCC, CE and UL approved products.

Lifetime Warranty

Connect Tech warrants each product to be in good
working order for the products life cycle, many
products being covered by our Lifetime Warranty.
Visit our website at **www.connecttech.com**
for more details.

Connect Tech Inc. - ISO 9001:2008 Certified

Connect Tech Inc.
Embedded Computing Experts

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