Providing a Cohesive Approach to Embedded Solutions

TreXpress-4

PICMG 1.3 Rackmount System

DTI's TreXpress-4 low profile (4U) chassis is designed for use with high performance PCI Express single board computers and high I/O bandwidth add-in cards. Part of DTI's industrial rackmount chassis product family, the system provides exceptional capacity and expandability in a rack-efficient 4U, compact package ideal for applied computing applications. The modular design supports reliability and serviceability.

Product Features

Form Factor
4U PICMG 1.3 Rackmount System

Markets
• Surveillance and Security
• Electric Utility Monitoring
• Network Management and Billing
• Industrial Automation
• Command and Control System

CPU Options
LHE8912: Intel® Core 2 Duo™ based SBC
LHE8921: Quad-Core Intel® Xeon® based SBC

Backplane
PBPE-07 (Graphics)
• Compatible with the LHE8912 and LHE8921
• Passive PICMG 1.3 Backplane
• PCI-E x 4 (1); PCI-E x 16 (1)
• Four (4) PCI slots (32 bit/33 MHz)
• Four (4) USB Ports
• Two (2) SATA Ports

PBPE-08 (DATA/Server)
• Compatible with the LHE8921
• Passive PICMG 1.3 Backplane
• Server Grade Backplane
• PCI-E x 4 (1); PCI-E x 8 (2)
• Four (4) PCI slots (32 bit/33 MHz)
• Four (4) USB Ports

Chassis Construction
Heavy duty steel

Power
Single 460W AC or Redundant 450W Power Supplies (PFC AC or -48VDC)

Physical Dimensions
6.88" H x 16.9" W x 18.75" D

Operating System Support
Windows XP SP2, SP3,
Ubuntu 9, Linux 2.6, QNX

Warranty
Parts and labor covered for 2 years

www.dtims.com/pci • sales@dtims.com • 1.800.443.2667

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CPU Options
LHE8912: Intel® Core 2 Duo™ based SBC
LHE8921: Quad-Core Intel® Xeon® based SBC
* see board data sheets for more information on CPUs

Dimensions
• 6.88" H x 16.9" W x 18.75" D
  (175mm x 430mm x 476mm)
  behind front panel
• 18.98" D overall (482mm)

Weight
• 50.7lbs (23kg) w/1PSU, 57.3lbs (26kg)
  with redundant PSUs

Construction/Finish
• Heavy duty steel
• Removable mounting brackets
• Black (standard)

Backplane
PBPE-07
• Compatible with the LHE8912 and LHE8921
• PCI-E x 4 (1); PCI-E x 16 (1)
• Four (4) PCI slots (32 bit/33 MHz)
• Four (4) USB Ports
• Two (2) SATA Ports

PBPE-08
• Server Grade Backplane
• Compatible with the LHE8921
• PCI-E x 4 (1); PCI-E x 8 (2)
• Four (4) PCI slots (32 bit/33 MHz)
• Four (4) USB Ports

* *Contact DTI for additional backplane options*

Peripherals/Other
• External: Three 5.25" drive bays
           One 3.5" floppy bay
• Internal: One 3.5" x 1" drive bay
(available only with single power supply)

Controls/Indicators
• Front power on/off (recessed)
• Front reset switch (recessed)
• System power on LED
• HD activity LED

I/O
• One front panel USB port
• Two serial ports and one parallel port on
  rear panel (optional)
• Rear panel AC or DC power inlet
• All other I/O is based on installed boards

Thermal Management
• Two 120mm (90cfm) ball-bearing fans
• Front to rear cooling
• Replaceable air filter on front

Power Supply
Single
• Max output: 460W PFC   +5V/40A,
+12V/27A, +3.3V/30A, -5V/0.8A, -12V/1.0A,
+5VSB/2.0A
• Input Voltage: 100 - 240VAC
• Input Frequency: 47Hz - 63Hz
• Input Current: 8A max/115V, 4A max/230V
• Efficiency: 71% typical
• MTBF: >98,300 at 75% max. output at
  25°C (70°F) ambient temperature

Redundant AC or DC
• Max output: 450W
  +5V/45A, +12V/25A ,+3.3V/25A, -5V/1A,
  -12V/2A, +5VSB/2.5A
  (combined 5 & 3.3 not to exceed 250W)
• Input Voltage: 115/230VAC: -36 to 60VDC
• Input Frequency: 60Hz/50Hz
• Input Current: 9 max/115V, 5A max/230V,
  20A max DC
• Efficiency: 75% min.
• MTBF: >167,000 at 75% max. output at
  25°C (70°F) ambient temperature

Environmental
Operating
• Temperature: -5° to 40°C
• Humidity (RNC):
  10% to 90% non-condensing
• Altitude: 3,000m / 10,000 ft @40°C
• Shock: 10g 11ms half-sine
• Vibration: 5-100Hz @ ½g sine sweep
   Random 5-20Hz @ 0.01g2/Hz;
  20-500 -3dB slope
• Acoustic:
  2184: 70dBA @ 24" or
          <60dBa with speed control
  4194: <60dBA @ 24"

Storage and Transit
• Temperature: -20° to 70°C
• Humidity (RNC):
  10% to 90% non-condensing
• Altitude: 12,192m / 40,000 ft
• Shock: 20g 6ms half-sine, 500/axis
• Vibration: Random 5-20Hz @ 0.01g2/Hz;
  20-500 -3dB slope

Regulatory Compliance (pending)
• CE Certification with national deviations
• Safety: UL/cUL 60950-1:2007;
  EN/IEC 60950-1:2006
• EMI/EMC: FCC 47 CFR Part 15 Class A;
  EN 55022:2006; EN 50024:1998

Ordering Information
TreXpress-4C2
4U system packaged with LHE8912
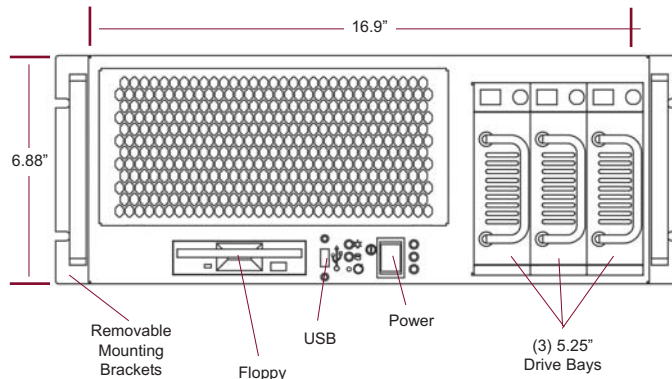SBC based on Intel Core 2 Duo
Processor

TreXpress-4QC
4U system packaged with LHE8921
SBC based on Quad-Core Intel Xeon
Processor

Standard Configuration Includes
- 4U Chassis
- Processor Board
- 1GB SDRAM
- Gigabit Ethernet Port(s)
- Available PCI Slots
- CDROM
- 460W Power Supply
- 250GB SATA Drive

Front

Removable Mounting Brackets — Floppy — USB — Power — (3) 5.25" Drive Bays

16.9"
6.88"

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PICMG

BSI
ISO 9001:2000
FM 65275