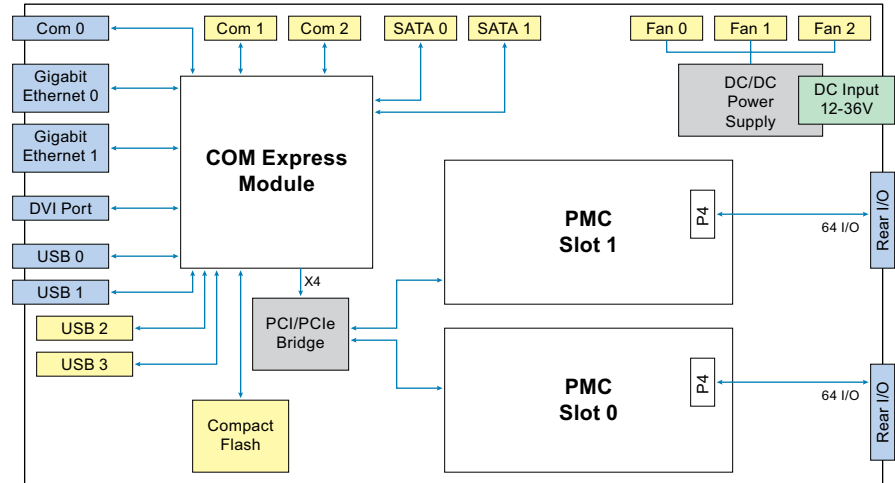
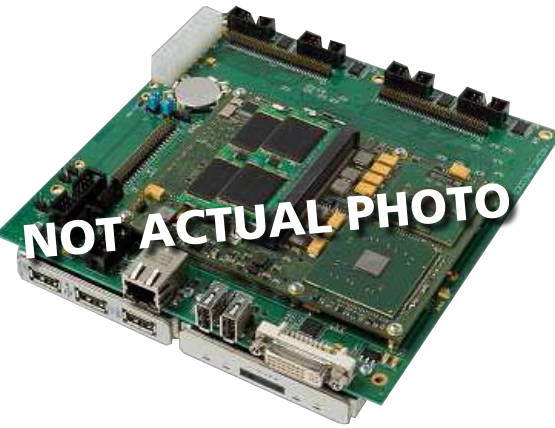


COM Express Carrier Cards

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24
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STOCK ITEM

ACEX4420 COM Express Carrier Card for PMC Modules



Com Express Carrier Card ♦ Two PMC slots ♦ PCI interface ♦ Rear I/O ♦ Mini-ITX form factor

Description

The ACEX4420 is an intelligent COM Express Carrier Card with two mezzanine slots to interface PMC modules. When combined with a user-supplied Computer-on-Module (COM), the ACEX4420 can act as a stand-alone computer system. This flexible solution provides users the freedom to select a CPU that best meets their application requirements and extend their signal processing capabilities with PMC modules.

The carrier card follows a Mini-ITX motherboard form factor and includes Ethernet, USB, serial (UART and SATA), and video ports. Two PMC module sites are located on the top side of the board. A COM Express Type 2 slot is on the bottom side.

An enclosure (Model AM350-1) is optionally available for applications that require a closed package. For customers that need a faster mezzanine bus interface, Acromag offers the Model ACEX4425 which is very similar except that it has two XMC module slots.

Key Features & Benefits

- COM Express Type 2 connector for user-supplied COM module
- Two PMC mezzanine module sites with a PCI 32/64 bit 33-66MHz interface
- Two Gigabit LAN ports
- Four USB 2.0 ports
- One DVI-I (integrated digital and analog) port
- Four serial COM ports with support for RS232/422/485 standards
- Two SATA ports
- LVDS
- Temperature sensor
- Fan control/power line for connection of up to three fans
- PMC 5V or 3.3V signaling compatibility

Acromag 
 THE LEADER IN INDUSTRIAL I/O

Tel 248-295-0310 ■ Fax 248-624-9234 ■ solutions@acromag.com ■ www.acromag.com ■ 30765 Wixom Rd, Wixom, MI 48393 USA

COM Express Carrier Cards

ACEX4420 COM Express Carrier Card for PMC Modules

Performance Specifications

COM Express

COM Express Module
Supports Type 2 basic (95 x 125mm) or compact module formats (95 x 95mm).

COM Express I/O

Ethernet

Two Gigabit LAN ports with RJ45 connectors.

USB

Four USB 2.0 ports. Two ports available on panel and two ports available on headers.

Video

One DVI-I (integrated digital and analog) port. HDMI connector on panel.

Serial Communication

Four serial COM ports with support for RS232/422/485 standards (jumper-configurable).

COM #0 is accessible from the panel RJ11 connector.

COM #1, #2, #3 available on headers.

SATA

Two SATA ports.

LVDS

On board connector available through headers (20 pairs/40pin)

Temperature sensor

Available on COM Express module.

Cooling Fans

Control/power line for connection of up to three fans.

PMC

PMC Interface

Two PMC slots (PCI-32/64 bit 33-66MHz) with 5V or 3.3V signaling compatibility.

PMC I/O

PMC P4 I/O supported via 68-pin VHDCI (very high density cable interconnect).

Power Requirements

Power Input

12-36V DC (on-board DC/DC converter).

On-Board DC/DC Power Supply

+3.3V DC: 5A.

+5V DC: 8A.

+12V DC: 8.5A.

-12V DC: 2A..

Environmental

Operating Temperature Range

0 to 70°C (air flow requirement as measured to be greater than 200 LFM).

Operating Temperature Range with Enclosure

-40 to 85°C (with cooling fans).

Storage Temperature Range

-55 to 100°C.

Relative Humidity

5 to 95% non-condensing.

Physical

Carrier Card Dimensions

170 x 170mm.

Carrier Card Weight

?? kg.

MTBF

Contact factory.

Ordering Information

Carrier Cards

ACEX4420

COM Express carrier card, two PMC slots

NOTE: Refer to Model ACEX4425 for XMC slots.

Accessories

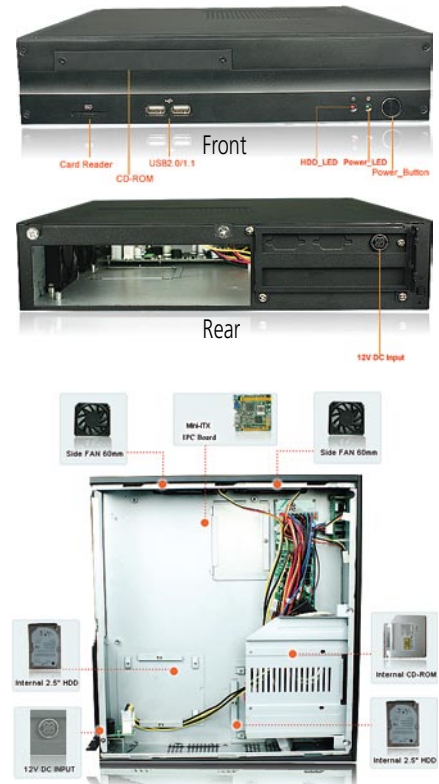
See www.acromag.com for more information.

AM350-1

Enclosure

Software Development Tools

See www.acromag.com for more information.



Optional AM350-1 Enclosure

ISO9001
AS9100
MADE IN USA

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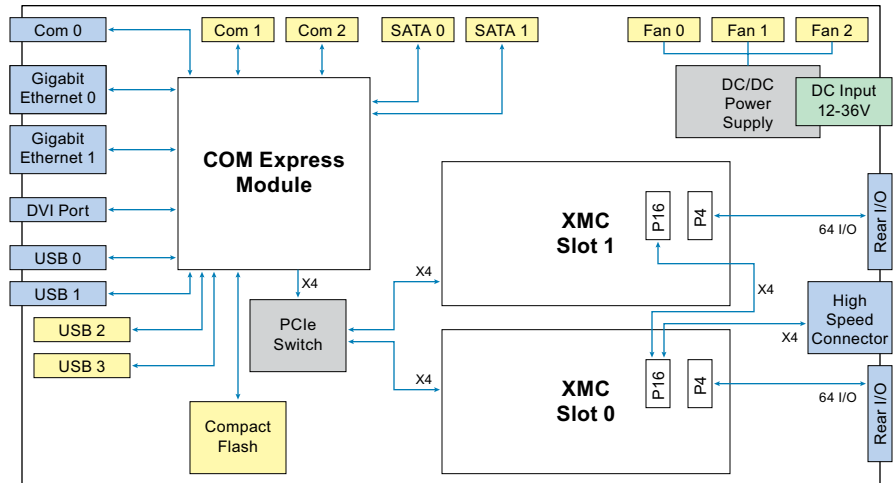
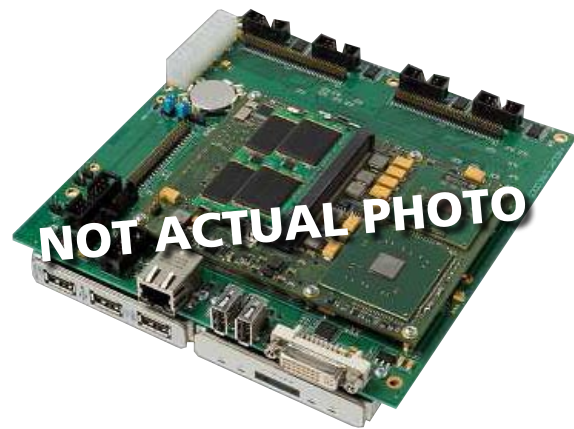
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ACEX4425 COM Express Carrier Card for XMC Modules



Com Express Carrier Card ♦ Two XMC slots ♦ PCIe interface ♦ Rear I/O ♦ Mini-ITX form factor

Description

The ACEX4425 is an intelligent COM Express Carrier Card with two mezzanine slots to interface XMC modules. When combined with a user-supplied Computer-on-Module (COM), the ACEX4425 can act as a stand-alone computer system. This flexible solution provides users the freedom to select a CPU that best meets their application requirements and extend their signal processing capabilities with XMC modules.

The carrier card follows a Mini-ITX motherboard form factor and includes Ethernet, USB, serial (UART and SATA), and video ports. Two XMC module sites are located on the top side of the board. A COM Express Type 2 slot is on the bottom side.

An enclosure (Model AM350-1) is optionally available for applications that require a closed package. For customers that don't require the peak performance of XMC modules, Acromag offers the Model ACEX4420 which is very similar except that it provides two PMC mezzanine slots.

Key Features & Benefits

- COM Express Type 2 connector for user-supplied COM module
- Two XMC mezzanine module sites with a PCI Express x4 switched GEN 1 interface
- Two Gigabit LAN ports
- Four USB 2.0 ports
- One DVI-I (integrated digital and analog) port
- Four serial COM ports with support for RS232/422/485 standards
- Two SATA ports
- LVDS
- Temperature sensor
- Fan control/power line for connection of up to three fans
- XMC 5V or 3.3V signaling compatibility

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COM Express Carrier Cards

ACEX4425 COM Express Carrier Card for XMC Modules

Performance Specifications

COM Express

COM Express Module
Supports Type 2 basic (95 x 125mm) or compact module formats (95 x 95mm).

COM Express

Form Factor
Carrier: Mini-ITX motherboard (170 x 170mm).
Has 1mm x 50mm protrusion for RJ45 connectors.
COM Express Module: Supports basic or compact formats (95mm x 125mm).

COM Express I/O

Ethernet
Two Gigabit LAN ports with RJ45 connectors.

USB
Four USB 2.0 ports. Two ports available on panel and two ports available on headers.

Video
One DVI-I (integrated digital and analog) port. HDMI connector on panel.

Serial Communication
Four serial COM ports with support for RS232/422/485 standards (jumper-configurable).

COM #0 is accessible from the panel RJ11 connector.
COM #1, #2, #3 available on headers.

SATA
Two SATA ports.

LVDS
On board connector available through headers (20 pairs/40pin)

Temperature sensor
Available on COM Express module.

Cooling Fans
Control/power line for connection of up to three fans.

XMC

XMC Interface
Two XMC slots (PCIe x4 switched GEN 1) with 5V or 3.3V signaling compatibility.

XMC I/O

XMC P4 I/O supported via 68-pin VHDCI (very high density cable interconnect).
One XMC P16 x4 supported connection via SAS (Serial Attached SCSI).
Direct communication connection from XMC slot 0 to XMC slot 1 via XMC P16 connector for high-speed x4 serial connections.

Power Requirements

Power Input
12-36V DC (on-board DC/DC converter).

On-Board DC/DC Power Supply
+3.3V DC: 5A.
+5V DC: 8A.
+12V DC: 8.5A.
-12V DC: 2A..

Environmental

Operating Temperature Range
0 to 70°C (air flow requirement as measured to be greater than 200 LFM).

Operating Temperature Range with Enclosure
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Storage Temperature Range
-55 to 100°C.

Relative Humidity
5 to 95% non-condensing.

Physical

Carrier Card Dimensions
170 x 170mm.

Carrier Card Weight
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MTBF
Contact factory.

Ordering Information

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ACEX4425
COM Express carrier card, two XMC slots
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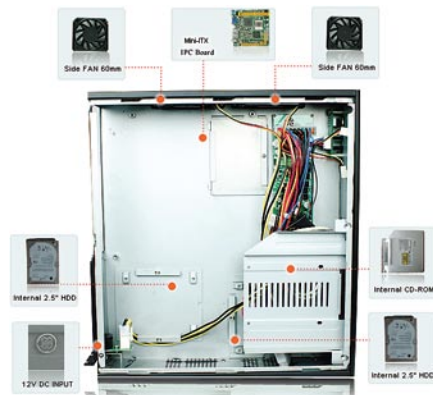
Accessories

See www.acromag.com for more information.

AM350-1
Enclosure

Software Development Tools

See www.acromag.com for more information.



Optional AM350-1 Enclosure

ISO9001
AS9100
MADE IN USA

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