ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

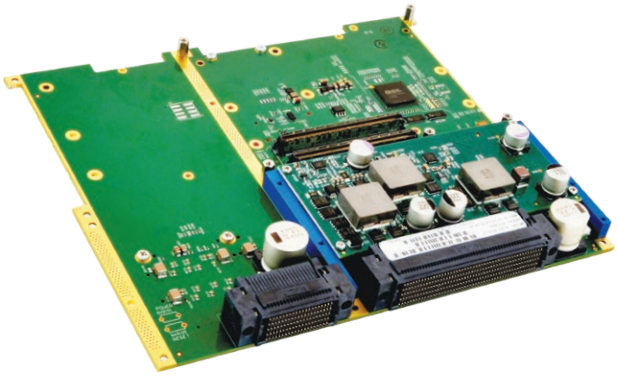
Find the *Acromag / Xembedded / Xycom ACEX-4610* at our website: *Click HERE*

COM Express

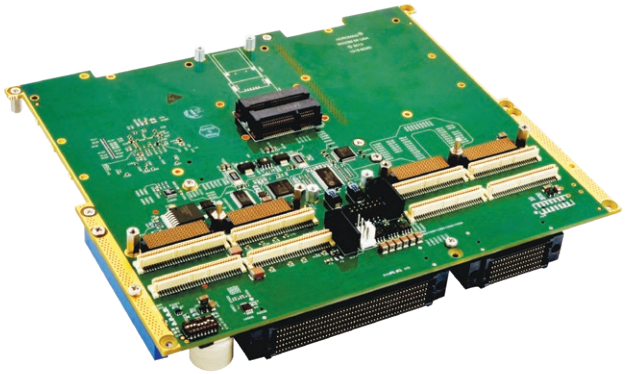
MADE IN USA

ACEX-4600 COM Express Module Type 6 Rugged Carrier Cards

TOP VIEW



BOTTOM VIEW



Supports Type 6 COM Express module ◆ Single/dual PMC/XMC sites ◆ High-density, high-speed connector

Description

Acromag's ACEX-4600 Type 6 COM Express carrier cards employ a number of key features that are critical for successful use in the rugged environments of defense/industrial applications.

High-density connectors (Samtec® SEARAY™) provide all field connections to standard I/O, CPU, and PMC/XMC module(s). This connector offers both a high-density (500 connections) and high-speed interface (10GHz) required to support Type 6 COM modules. The SEARAY connector supports both board-to-board and cable interfaces.

These carrier cards are ready for conduction cooling. Developers can install a CPU, carrier and expansion boards into a completely sealed enclosure. Acromag has developed a heat dissipation approach that meets the cooling needs of all three components.

Another vital feature is the on-board DC/DC power supply. The carrier card operates from a single external 10–32V DC power source. All internal supply voltages are derived from this single external DC power source and built onto the carrier card.

An engineering development system, Model ACEX-4600-DLS, simplifies development and testing. The system provides a connector break-out board that plugs into the carrier card.

Key Features & Benefits

Carrier Functions

- Type 6 COM Express module site for compact or basic size processor board
- Two Mini PCIe sites for I/O expansion
- Single or dual PMC/XMC sites
- High-density, high-speed connector for CPU, I/O, and PMC/XMC interface

CPU Supported Functions

- Two Gigabit Ethernet ports
- PCIe port x 4
- Four USB 3.0 ports
- Two USB 2.0 ports
- Three Digital Display Interfaces
- Two SATA III ports
- Audio Line in/out
- Two RS232/RS485 serial ports
- Eight GPIO
- System temperature sensor (on-board)
- Two fan control line (on-board)
- System battery (on-board)
- Power monitoring LED (on-board)

Form Factor

- One PMC/XMC – (125mm x 170.73mm)
- Two PMC/XMC – (200mm x 170.73mm)

Power

- Input Power 10–36VDC (on-board DC/DC, fused)
- Reset button

Environmental

- -40 to 85°C operation
  -50 to 100°C storage

Accessories

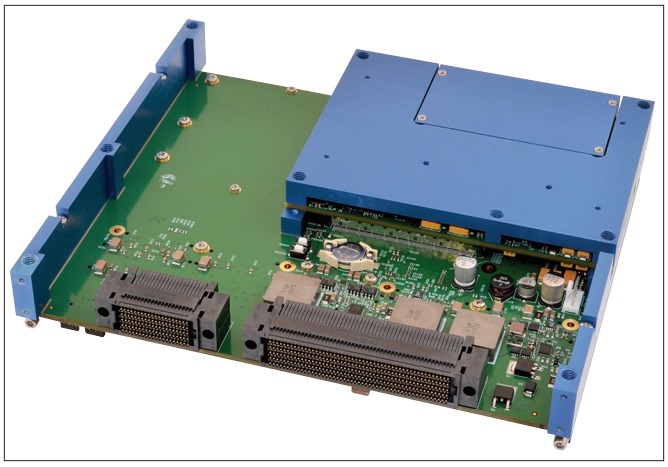
- Front panel with 38999-type cylindrical connectors
- Conduction cooling kit

Acromag® THE LEADER IN INDUSTRIAL I/O

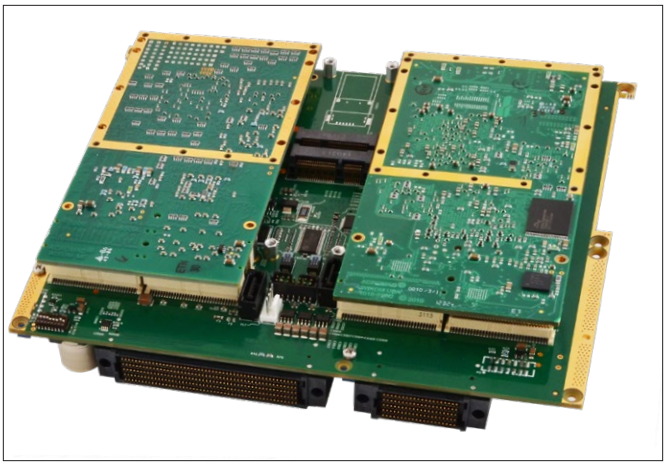
Tel 248-295-0310 ■ Fax 248-624-9234 ■ solutions@acromag.com ■ www.acromag.com ■ 30765 Wixom Rd, Wixom, MI 48393 USA

COM Express

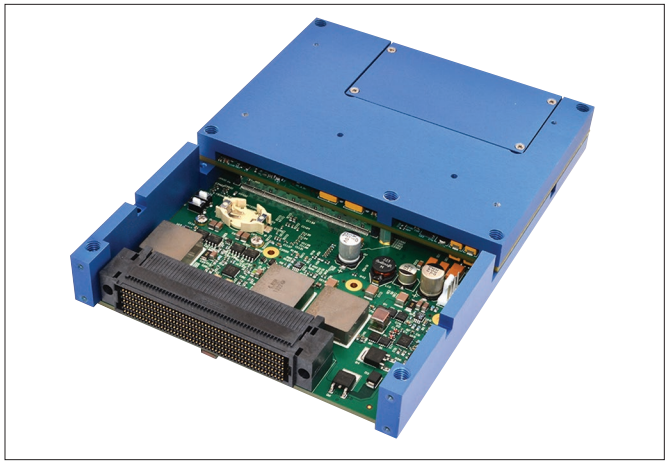
ACEX-4600 COM Express Module Type 6 Rugged Carrier Cards



ACEX-4620 double-width carrier card shown with optional ACEX-CC-01 conduction cooling kit rails and XCOM-6400 COM Express module



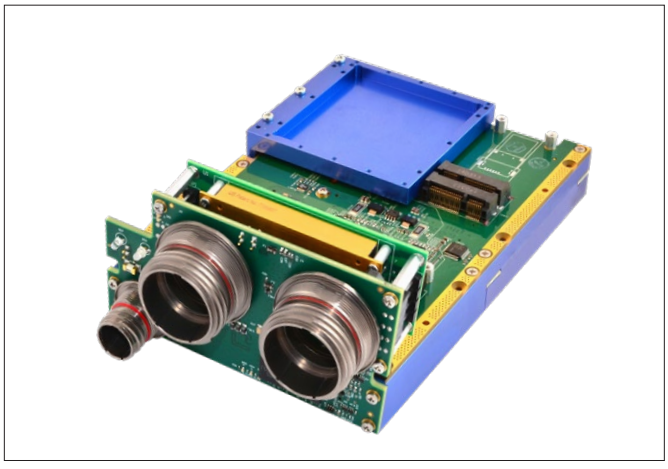
ACEX-4620 carrier card with one PMC and one XMC module installed



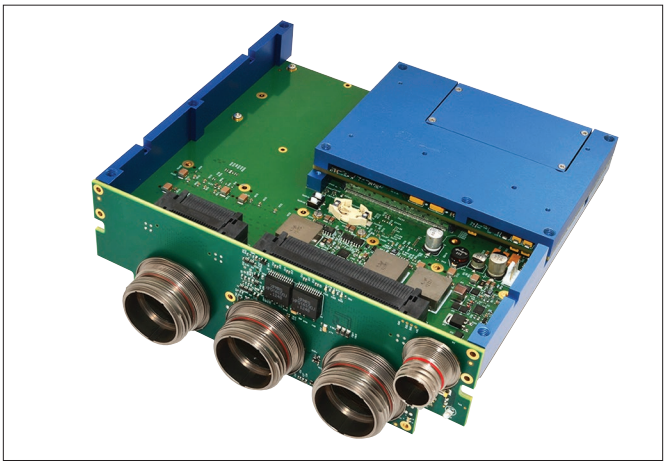
ACEX-4610 single-width carrier card shown with optional ACEX-CC-01 conduction cooling kit rails and XCOM-6400 COM Express module



ACEX-4610 carrier card bottom view showing PMC/XMC slot



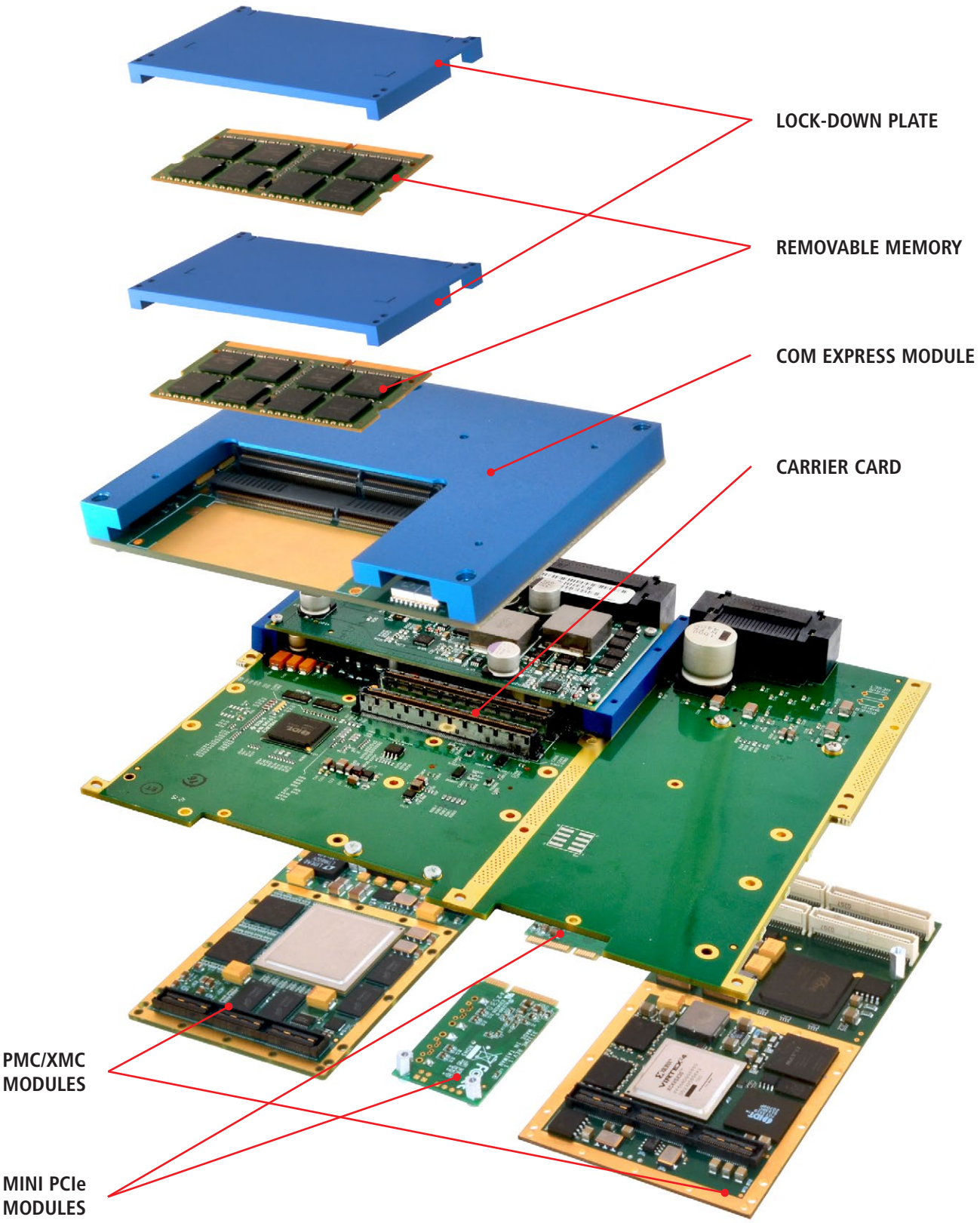
ACEX-FP-01 front panel with ACEX-FP-PF power filter/bridge board mounted on an ACEX-4610 single-width carrier card



ACEX-FP-02 front panel with ACEX-CC-01 conduction rails and XCOM-6400 CPU module mounted on an ACEX-4620 double-width carrier card

COM Express

ACEX-4600 COM Express Module Type 6 Rugged Carrier Cards



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

COM Express

ACEX-4600 COM Express Module Type 6 Rugged Carrier Cards

Performance Specifications

General

Form Factor
ACEX-4610: 125mm x 170.73mm.

ACEX-4620: 200mm x 170.73mm.

PICMG Compliance
Complies with PICMG COM.0.

Processor
Hosts basic or compact Type 6 COM Express module.

Software Support
See COM Express module.

I/O

Mini PCIe Expansion
Two Mini PCIe sockets, 30mm x 51mm.

PMC/XMC Expansion
Single or dual slots depending on model.

Connector Types
Ethernet: two RJ45 ports.

PCIe x 4

Four USB 3.0 ports.

Two USB 2.0 ports.

Video: three digital display interfaces.

Audio: input/output

SATA: two SATA III ports.

RS-232/485: two serial ports.

GPIO: 8 channels.

Environmental

Operating temperature
-40 to 85°C.

Storage temperature
-50 to 100°C.

Relative humidity
20 to 80% non-condensing.

Power
10–36VDC (on-board DC/DC, fused).

Shock
Operating:
30g peak acceleration, 11ms duration.

Non-operating:
50g peak acceleration, 11ms duration.

Vibration (5Hz-2kHz)
Operating:
0.015" (380µm) peak-to-peak displacement, 2.5g max acceleration.

Non-operating:
0.030" (760µm) peak-to-peak displacement, 5.0g max acceleration.

Ordering Information

Carrier Cards

ACEX-4610-LF
Single-width Type 6 COM Express carrier card with one PMC/XMC slot and two Mini PCIe slots

ACEX-4620-LF
Double-width Type 6 COM Express carrier card with two XMC/PMC slots and two Mini PCIe slots

NOTE: Contact factory for lead solder options.

Accessories

ACEX-CC-01
Conduction cooling kit for ACEX-4610/4620

ACEX-FP-01
ACEX-FP-02
Front panel with 38999-type cylindrical connectors for single-width (-01) or dual-width (-02) carrier card

ACEX-FP-IO-01-LF
ACEX-FP-IO-02-LF
Front panel with 38999-type cylindrical connectors for single-width (-01) or dual-width (-02) carrier card with IO mezzanine board support

ACEX-FP-PF
Power filter/bridge board

NOTE: For COM Express Development System see ACEX-4600-DLS.

ISO9001
AS9100
MADE IN USA

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

All trademarks are property of their respective owners. Copyright © Acromag, Inc. 2019. Data subject to change without notice. Printed in USA 9/2019.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP