

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

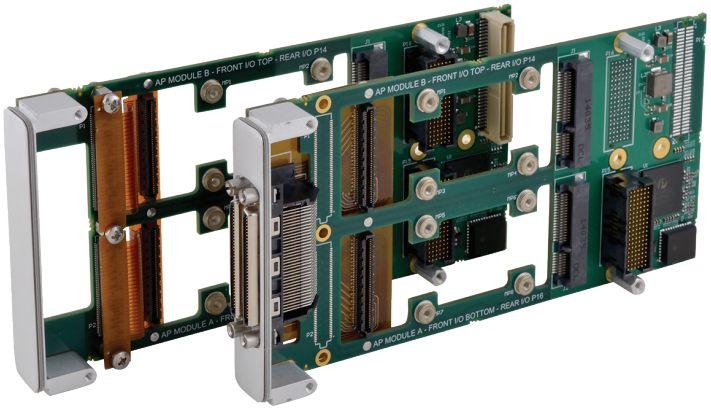
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

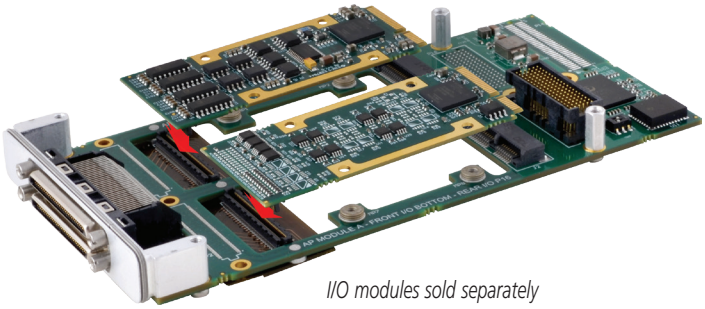
Find the *Acromag / Xembedded / Xycom XMCAP2000* at our website: *Click HERE*

AcroPack® Carriers

XMCAP2000 Series XMC Carrier Cards for AcroPack® Modules

CE 2 YEAR WARRANTY RoHS Compliant





I/O modules sold separately

Two AcroPack or mini-PCIe mezzanine module slots ◆ Non-Intelligent carrier card ◆ PCIe x4 interface

Description

Models:
XMCAP2020-LF: Front I/O
XMCAP2021-LF: Rear I/O
XMCAP2022-LF: For use with ARCX-4000 rugged computers

The AcroPack® product line updates our popular Industry Pack I/O modules with a PCIe interface format. This tech-refresh design offers a compact size, low-cost I/O, the same functionality and memory map of the existing Industry Pack modules.

This board interfaces two AcroPack mezzanine modules to a PCI Express bus on an air-cooled XMC carrier.

Two AcroPack module slots give you the freedom to mix a variety of I/O functions (A/D, D/A, digital in, digital out, serial I/O, etc.) on a single board. Or, combine modules of the same type for almost one hundred channels on a single card. Either way, the XMCAP2020/2021 saves your precious card slots and reduces your costs.

Select I/O modules from Acromag's offering or use most third-party mPCIe compliant modules.

Key Features & Benefits

- Two AcroPack or mini-PCIe module slots support any combination of I/O functions
- PCI Express compliant
- Plug-and-play carrier configuration and interrupt support
- Front panel 68-pin CHAMP 0.8mm connectors for field I/O
- Rear P14 and P16 connectors for field I/O
- DIP switch and/or geographical addressing for card identification
- VITA 42.0, 42.3 complaint
- JTAG programming through XMC P15 connector or through onboard micro connector
- Software development tools for VxWorks®, Linux®, and Windows® environments.

Acromag® THE LEADER IN INDUSTRIAL I/O

Tel: 844-878-2352 ■ solutions@acromag.com ■ www.acromag.com ■ 30765 Wixom Rd, Wixom, MI 48393 USA

AcroPack® Carriers

ISO9001
AS9100
MADE IN USA

Performance Specifications

PCI Express Bus Compliance

This device meets or exceeds all written PCI Express specifications per revision 2.1.

Includes a PCIe Gen 2 switch to expand the single host PCIe port to two ports, one to each device (AcroPack or mini-PCIe).

The host port consists of four PCIe lanes, each of the mini-PCIe sites have one lane each.

Field I/O Connectors

Front I/O

XMCAP2020-LF: Two 68-pin 0.8mm Champ cable connection.Pin assignments are defined by the installed AcroPack or mini-PCIe module.

Rear I/O

XMCAP2021-LF: One AcroPack routed to rear P14 connector and one AcroPack routed to rear P16 connection.

XMCAP2022-LF: One AcroPack routed to P16 and the second to P14. Intended for ARCX-4000 applications only.

Ease of Use

A unique carrier and site number can be set for each AcroPack site by a DIP switch or geographical addressing. This provides the capability to distinguish a particular AcroPack module from others when multiple instances of the same module are used in a system.

JTAG signal are provided for programming and debugging the FPGA on some AcroPack modules. The JTAG ports of the two AcroPack modules are daisy-chained.

Physical

Physical Configuration
PCIe x4 lane
Length: 5.866 inches (149 mm)
Height: 2.9134 inches (74 mm)

Conforms to VITA 42 air-cooled XMC specification.

Environmental

Operating temperature
-40 to +70°C

Storage temperature
-55 to +125°C.

Relative humidity
5 to 95% non-condensing.

Power
+3.3 Volts (±5%): 140mA typical
VPWR: +5 Volts (± 5%): 200mA typical
VPWR: +12 Volts (± 8%): <100 mA typical

The XMCAP2020/2021 has four DC/DC converters to provide the power supply voltages to the AcroPack modules that are not present at the host interface. The +1.5 Volt supply is sourced from the VPWR host power. The +5 Volt and ±12 Volt supplies are sourced from +3.3 Volt host power.

Ordering Information

Carrier Card

XMCAP2020-LF: AcroPack carrier card for AcroPack or mPCIe modules, front I/O, air-cooled, two AcroPack slots.

XMCAP2021-LF: AcroPack carrier card for AcroPack or mPCIe modules, rear I/O, air-cooled, two AcroPack slots.

XMCAP2022-LF: AcroPack carrier card, rear I/O, two AcroPack slots, for ARCX-4000 applications (consult factory).

See Acromag.com/AcroPacks for a full list of I/O modules.

Accessories

5025-288: Termination panel, SCSI-3 connector, 68 screw terminals.

5028-420: VHDCI 68-pin, round cable, shielded, SCSI-3 to CHAMP. 0.8mm, 2 meters long.

5028-615: Cable, 68-pin CHAMP to pigtail, 36 inches long

5028-616: Cable, 68-pin CHAMP to pigtail, 70 inches long

Heatsinks for ARCX-4000 *(consult factory)*

AP-CC-02: Heat sink for two generic AP modules (left rail or single wide ARCX)

AP-CC-03: Heat sink for AP57x and generic AP modules (left rail or single wide ARCX)

AP-CC-05: Heat sink for two generic AP modules (right rail)

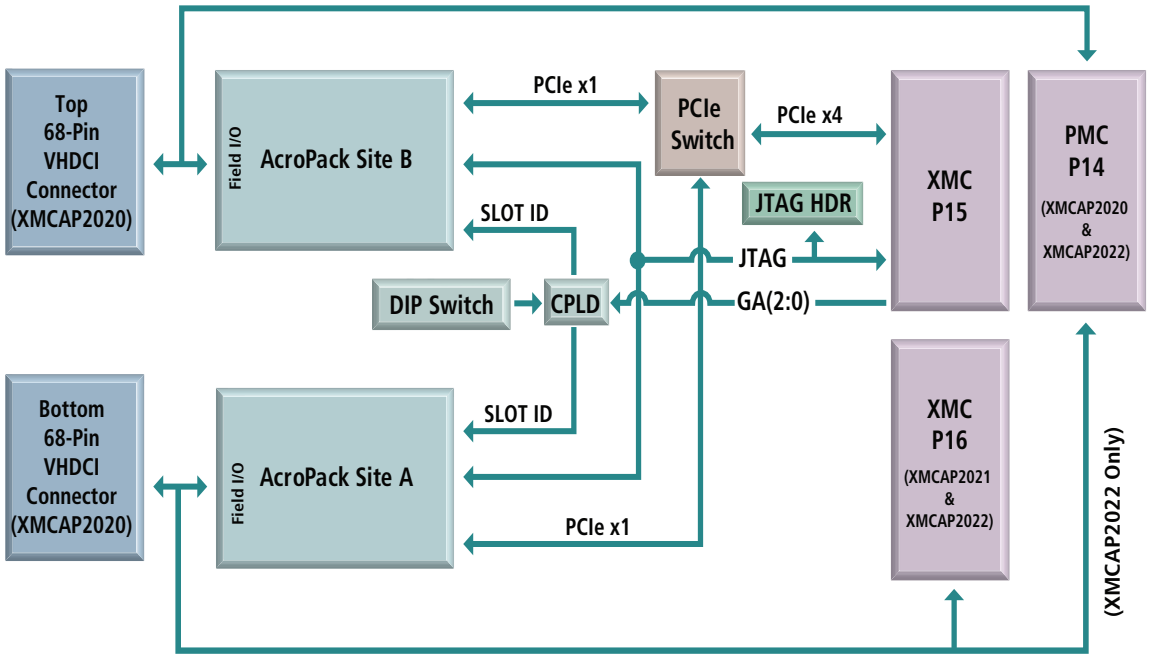
See User Manual for compatible AP modules.

Software *(see software documentation for details)*

APSW-API-VXW: VxWorks® software support package

APSW-API-WIN: Windows® DLL driver software support pkg

APSW-API-LNX: Linux® support (website download only)



Tel: 844-878-2352 ■ 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