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

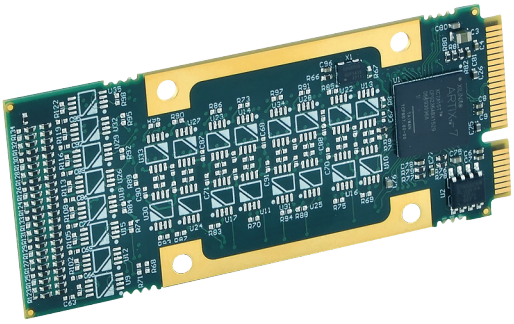
Expert team | Trust guarantee | 100% satisfaction

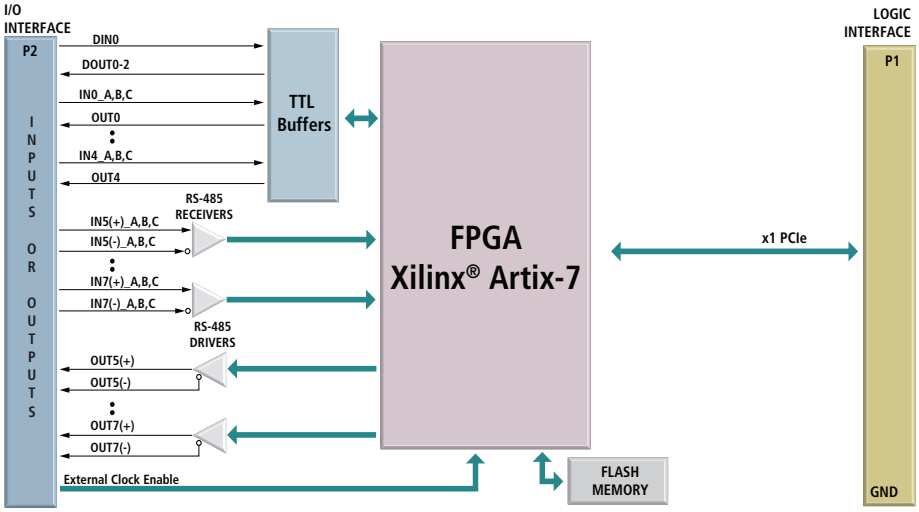
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Acromag / Xembedded / Xycom AP482* at our website: *Click HERE*

AcroPack® Modules

AP480 Series Counter/Timers





Eight 32-bit Counters ◆ TTL and RS422/RS485 I/O ◆ Wide Temperature Range ◆ PCIe Bus Interface

Description

Model: AP483E-LF

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 IP modules and a rugged form factor. Combine different AcroPack modules on one carrier for a simplified modular approach to system assembly.

Support for internal or external triggering simplifies the synchronization of operations to specific events.

Designed for COTS applications these RS422/ RS485 & TTL counter/timers deliver high-speed and high-performance.

AcroPack modules are RoHS compliant and ideal for military, defense, automation, aerospace, scientific, and development labs industries.

The AP483 module is 70mm long, this is 19.05mm longer than the full length mini PCIe card at 50.95mm. The board's width is the same as mPCIe board of 30mm and they use the same mPCIe standard board hold down standoff and screw keep out areas.

A down facing 100 pin Samtec connector will mate with the carrier card. Fifty of these signals are available as field I/O signals.

The AP483 maintains the same functionality and memory map of the existing Industry Pack modules providing a smooth transition to the AcroPack I/O modules.

Key Features & Benefits

- PCI Express Generation 1 interface
- Mix and match countless I/O combinations in a single slot.
- Sample software and diagnostics
- Available with both TTL and RS422/RS485 driver interface
- 62.5MHz clock time base
- Single counter/timer modes:
  - Event counting
  - Frequency measurement
  - Period/pulse-width measurement
  - Quadrature position measurement
  - Square wave/pulse train generation
  - Time/period interrupter
  - Pulse width generation
- Most configuration is handled by a single register which minimizes programming.
- Solid-down connector I/O interface
- Wide temperature range
- PCIe, VPX and XMC carriers
- Linux®, Windows®, and VxWorks® support

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® Modules

ISO9001
AS9100
MADE IN USA

Performance Specifications

Counter/timers

Counter/timer configuration:
AP483: Five 32-bit counters – TTL
Three 32-bit counters – RS422/RS485

Clock frequency
Selectable internal clock frequencies: 1.95MHz, 3.9MHz, 7.81MHz, 15.62MHz, or 62.5MHz.

Minimum input event
32nS.

Minimum pulse measurement
32nS.

Minimum period measurement
64nS.

Minimum gate/trigger pulse
32nS.

Interrupts
Supported for watchdog timer time-out, event count complete, pulse width or periodic rate measurement complete, pulse wave complete (one-shot mode), successive waveform generation (continuous).

Triggering/gate
Programmable via register write or external trigger. Minimum pulse width 32nS. Line may be used for gating of counter.

Counter trigger
Interface for triggering counter functions. Input level is TTL and RS422 differential digital.

Counter input
Interface for events and pulse/period measurements.Also triggers load of watchdog timer register. Level is TTL and RS422 differential digital.

TTL compatibility
VIH = 2.0V and VIL = 0.8V. inputs are buffered and include 4.7K pull-ups to +3.3V.

Counter output
Level is TTL and RS422 differential digital.

PCI Express Base Specification

Conforms to revision 2.1

Lanes
1 lane in each direction.

Bus Speed
2.5 Gbps (Generation 1).

Memory
4k space required.
1 base address register.

Environmental

Operating temperature
-40 to 70°C.

-40 to 85°C.
(requires an AcroPack heatsink conduction-cool kit)

Storage temperature
-55 to 150°C.

Relative humidity
5 to 95% non-condensing.

Power
3.3V DC ± 5%.

1.6A Typical, 2.0A Maxium.

Physical

Length
70mm.

Width
30mm.

Ordering Information

AcroPack® Modules

AP483E-LF
Five 32-bit TTL and three 32-bit RS422/RS485 counters

(Note: Acropack modules are compatible only with the carriers listed below)

Accessories

AP-CC-01
Conduction-cool kit

Carrier Cards

See Acromag.com/AcroPack-Carriers for a full list of AcroPack carrier cards.

Software *(see software documentation for details)*

APSW-API-VXW
VxWorks® software support package.

APSW-API-WIN
Windows® DLL driver software support package.

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



AP-CC-01 Conduction-Cool Kit

Acromag®
THE LEADER IN INDUSTRIAL I/O

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