



Embedded Solutions for the Next 25 Years

## Acromag Redefines SWaP-C With Our New AcroPack® I/O Platform Industrial / Military Ready mPCIe-based Mezzanine Modules

The AcroPack® product line updates our popular Industry Pack I/O modules by using the mPCIe interface format. We added 19mm and a 100 pin connector to provide up to 50 isolated rear I/O signals, giving you a tremendous amount of capability on an **Extremely Small Footprint - Without Cabling!**

Designed for COTS applications, these general purpose I/O modules deliver high-speed and high-resolution A/D and D/A, digital I/O, counter/timers, communication (Ethernet, serial, MIL-STD-1553) and reconfigurable FPGA functions.

Whether it's server-based lab activities or ship-based test systems, contact Acromag to discuss how AcroPacks can help you with tomorrow's applications, today.

### Key Features Include:

- A/D, D/A, digital I/O, counter/timers, communication (Ethernet, Serial, MIL-STD-1553), and reconfigurable FPGA options
- Low-power consumption
- Solid-state electronics
- -40 to 70°C standard operating temperature
- Conduction-cooled option available
- Mix and match I/O combinations in a single slot by using our CompactPCI® Serial, Mini-ITX Com Express Type 10, PCIe, XMC or VPX carriers

**S**ize = 70mm x 30mm

**W**eight = .05 oz. avg

**a**nd

**P**ower = <5 watts per module

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**C**ost = Starting at \$395

AcroPack modules **snap** onto AcroPack carriers, **eliminating** messy ribbon cables.



These modules are just **70mm** long.

ISO9001  
AS9100 

Visit [Acromag.com/AcroPacks](http://Acromag.com/AcroPacks)  
**TO LEARN MORE**

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# AcroPack® Series Selection Guide

Series Number	Inputs	Outputs	Comments
<b>Analog Modules</b>			
<a href="#">AP220 / AP231</a>		16 channels	12-bit / 16-bit DAC; -40 to +85°C
<a href="#">AP225 / AP235</a>		16 channels	12-bit / 16-bit DAC with waveform memory; -40 to +75°C
<a href="#">AP226 / AP236</a>		8 isolated channels	12-bit / 16-bit DAC; -40 to +85°C
<a href="#">AP323</a>	High-density; 20 differential or 40 single-ended channels		16-bit ADC; -40 to +85°C
<a href="#">AP341</a>	Eight simultaneous sample-and-hold channels		14-bit ADC; -40 to +85°C
<a href="#">AP342</a>	Six simultaneous isolated channels		14-bit ADC; -40 to +85°C
<b>Digital Modules</b>			
<a href="#">AP408</a>	32 bidirectional high-voltage channels		TTL, 0 to 60V DC; -40 to +85°C
<a href="#">AP418</a>	16 channels		Source/sink; -40 to +85°C
<a href="#">AP441</a>	32 isolated channels		-40 to +85°C
<a href="#">AP445</a>		32 isolated bipolar solid-state relays	0 to ±60V voltage range; -40 to +85°C
<a href="#">AP471</a>	48 bidirectional channels, TTL	48 bidirectional channels, CMOS	0 to 5V DC; -40 to +85°C
<b>Counter/Timer Modules</b>			
<a href="#">AP482 / AP483 / AP484</a>	Ten TTL channels / Five TTL and three RS422 channels / Six RS422 channels		32-bit; -40 to +85°C
<b>Communication Modules</b>			
<a href="#">AP500 / AP520</a>	Four / eight RS232 ports		256-byte FIFOs; -40 to +85°C
<a href="#">AP512 / AP513</a>	Four isolated asynchronous, full duplex RS232 / RS422B serial ports (supports RS485)		256-byte FIFOs; -40 to +85°C
<a href="#">AP522</a>	Eight RS422/485 asynchronous serial ports		256-byte FIFOs; -40 to +85°C
<a href="#">AP560A</a>	Four isolated CAN channels		-40 to +71°C
<a href="#">AP570</a>	One dual redundant MIL-STD-1553 communication channel		Single or multi-function options; -40 to +85°C
<a href="#">AP580</a>	Single Ethernet port		1Gb Ethernet with optional PoE; -40 to +70°C
<b>Reconfigurable Xilinx® FPGA Modules</b>			
<a href="#">APA7-501 / 502 / 503 / 504</a>	48 TTL / 24 RS485/422 / 24 TTL & 12 RS485/422 / 24 LVDS channels. 52k logic cells.		Artix-7®, -40 to +85°C
<a href="#">AP7U-301 / 303 / 304</a>	28 TTL / 20 TTL and three RS485/422 / 14 LVDS channels. Up to 154k logic cells.		Zynq® Ultrascale + MPSoC. Dual-core ARM Cortex A53-based application processor unit (APU).
<b>Multi-function Modules</b>			
<a href="#">AP730 / AP731</a>	16 or 12-bit bidirectional digital I/O, one multi-function 32-bit counter/timer. Eight analog differential inputs, four analog outputs.		
<b>Carrier Cards</b>			
<a href="#">ACEX4041</a>	COM Express Type 10 Mini ITX, holds four AP modules. Front panel I/O		Development Lab System option, -40 to +85°C
<a href="#">APCe7012 / 22 / 40 / 43</a>	PCI Express carrier; holds up to four AP modules	Front panel I/O	APCe7043 is 3/4-length; -40 to +85°C
<a href="#">ACPS3310 / 20</a>	3U CompactPCI Serial carrier; holds two AP modules	Front or rear panel I/O	Isolated, -40 to 85°C
<a href="#">VPX4500</a>	3U VPX Bus carrier; holds three AP modules	Front or rear panel I/O	Air or conduction-cooled options; -40 to +85°C
<a href="#">VPX4520 / 21</a>	6U VPX Bus carrier; holds four AP modules and one XMC module	Front or rear panel I/O	Air or conduction-cooled options; -40 to +85°C
<a href="#">XMCAP2020 / 21 / 22</a>	XMC carrier; holds two AP modules	Front or rear panel I/O	Air cooled; -40 to +70°C
<b>Software Support</b>			
<a href="#">APSW-API-VXW / WIN / LNX</a>	VxWorks™ software support package / Windows® DDL driver software support package / Linux® support (website download only)		