**Description**

**Models:**
- XMCAP2020-LF: Front I/O
- XMCAP2021-LF: Rear I/O

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
**AcroPack® Module Carriers**

### XMCAP2000 Series  
**XMC Carrier Cards for AcroPack® Modules**

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<td><strong>PCI Express Bus Compliance</strong></td>
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| 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-PCle). The host port consists of four PCIe lanes, each of the mini-PCle sites have one lane each. | XMCAP2020-LF  
AcroPack carrier card for AcroPack or mPCIe modules, front I/O, air-cooled, two AcroPack slots |
| **Environmental** | **Accessories** |
| Operating temperature  
-40 to +70°C  
Storage temperature  
-55 to +125°C  
Relative humidity  
5 to 95% non-condensing. | S028-420  
Round cable, shielded, SCSI-3 to CHAMP .0.8mm, 2 meters long.  
S025-288  
Termination panel, SCSI-3 connector, 68 screw terminals |
| **Ease of Use** | **AcroPack® Modules** |
| 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. | See [www.Acromag.com/AcroPacks](http://www.Acromag.com/AcroPacks) for more information. |
| **Physical** | **Software Development Tools** |
| Physical Configuration  
PCle x4 lane  
Length: 5.866 inches (149 mm)  
Height: 2.9134 inches (74 mm)  
Conforms to VITA 42 air-cooled XMC specification. | APSW-API-VXW  
VxWorks® software support package  
APSW-API-WIN  
Windows® DLL driver software support package  
APSW-API-LNX  
Linux® support (website download only) |

**AcroPack® modules snap onto XMCAP2000 carriers eliminating messy ribbon connectors.**

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**ISO9001  
AS9100  
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