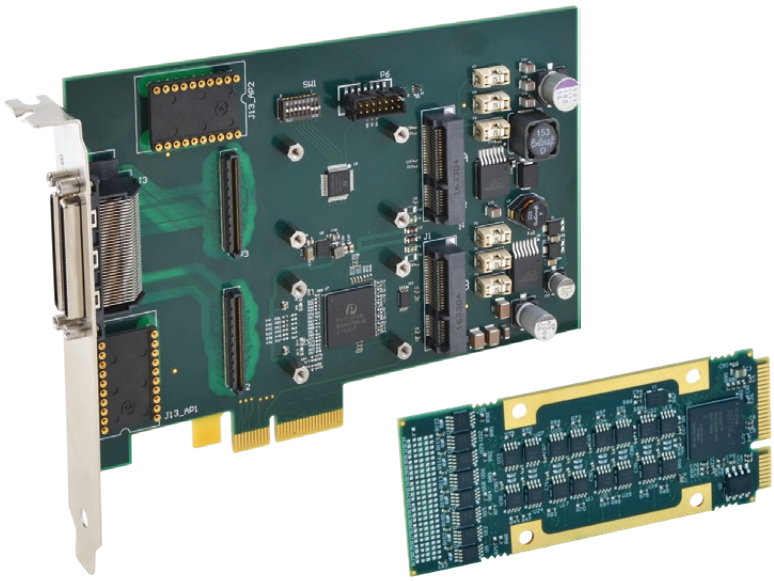
FPGAs Made Easy



XILINX

Above: APCe7022 PCIe carrier card shown with the APA7-500

Do you want to learn how to implement FPGAs? Think the only way is with a high start-up price tag and complicated setup? Think again.

Acromag offers you an easy, cost-effective package to start your FPGA development today.

Custom Embedded Computing with Re-Configurable FPGAs on Off-the-Shelf Mezzanine Modules

Acromag's line of user-configurable FPGA I/O modules offer the ability to create custom I/O boards. Just download your own instruction sets into the I/O module's FPGA. You can use your own application program to control the module's analog or digital I/O channels for simulation, communication, diagnostics, image processing and other applications.

Faster and Easier Development

To help you develop custom programs, Acromag offers an Engineering Design Kit. This kit provides utilities to help you load VHDL into the FPGA and to establish DMA transfers between the FPGA and the CPU. Kits include a compiled FPGA file and example VHDL code for the local bus interface, read/writes, and change-of-state interrupts to the bus.

What You Will Need:

1 Choose your FPGA module

XMC-SLX Series Spartan®-6 FGPA Modules

XMC-7A Series Artix®-7 FGPA Modules

XMC-7K Series Kintex®-7 FGPA Modules

APA7 Series Artix®-7 FGPA Modules

APZU Series Zync® UltraScale+™ MPSoC FGPA Modules

2 Select your carrier card

APCe8675 PCI Express Carrier Card

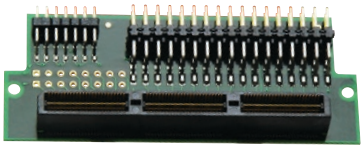
APCe7000 AcroPack® mPCIe-based Carrier Cards

- XMC or AcroPack module slots
- Up to 8-lanes of PCIe-based support depending on carrier
- Support high-speed serial interface between neighboring cards using protocols such as XAUI or Aurora
- JTAG support for FPGA programming

3 Add your EDK

EDK Engineering Design Kit

- Includes AXM-EDK extension module providing standard JTAG header and LVTTL I/O
- Includes parts list and location, schematics, complied FPGA file and example VHDL code
- Loads VHDL code and establishes DMA transfers to CPU



The AXM-EDK front I/O extension module includes a JTAG interface and LVTTL I/O for application interface or debugging purposes.

4 Pick your OS

Software Support Package

- For XMC: PCISW-API-WIN Windows® DLL | PCISW-API-LNX Linux® | PMCSW-API-VXW VxWorks®
- For AcroPack: APSW-API-WIN Windows DLL | APSW-API-LNX Linux | APSW-API-VXW VxWorks

Visit Acromag.com/FPGAS TO LEARN MORE

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