ALPHA DATA

DESIGN, DEVELOP, DEPLOY

ALPHA-DATA.COM

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Established in 1993 and with offices in the US and UK, Alpha Data is the leading global supplier of state-of-the-art solutions targeted at compute-intensive applications, including high performance COTS reconfigurable platforms and support software.

A leading provider of AMD Xilinx FPGA-based plug-in acceleration, SoC, RFSoC and embedded computing solutions, Alpha Data caters to deployment in Extreme environments, including Space and New Space markets.

We support clients worldwide to take projects from the design board to production and deployment, and specialise in solutions for Rugged and Embedded Communications, High-Reliability Development, Digital Signal Processing and High Performance Computing.
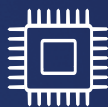
ADM-VA600

Building on a tradition of leading-edge boards tailored for extreme environments, to provide a complete radiation-tolerant solution for adaptable data processing in Proton environments.

The ADM-VA600 board powers the Versal Core Development Kit for Space 2.0 for next generation adaptable data processing in Space, enabling customers to rapidly develop a complete and adaptable solution, significantly reducing costs and time to launch.

Specifically designed for multi-year missions in extreme environments, including low-earth orbit

AMD Xilinx XQR Versal AI Core VC1902 ACAP

6U VPX form factor suitable for lab development 6U Space VPX version available for rapid deployment

Rad-tolerant DDR4 memories from **Teledyne e2v** Rad-tolerant flash memory from **Infineon Technologies**

Space-Enhanced Plastics (SEP) rad-tolerant power supplies, power management and critical system monitoring devices from **Texas Instruments**

AMD | XILINX | TEXAS INSTRUMENTS
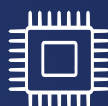
TELEDYNE e2v
Everywhere**you**look

Infineon

ADM-VPX3-9Z5

The perfect choice for demanding applications in extreme environments, including accelerated digital signal processing for remote sensing, Earth Observation, and at high altitudes.

Designed to stringent military specifications throughout and suitable for all project stages, the ADM-VPX3-9Z5 SOM is intrinsically resilient and rugged, uplifted by exceptional digital signal processing acceleration capabilities.

Vibration tested against composite launch profile exceeding VITA 47 requirement

High reliability 3U VPX card, suitable for all stages of a project, from development to deployment in rugged environments.

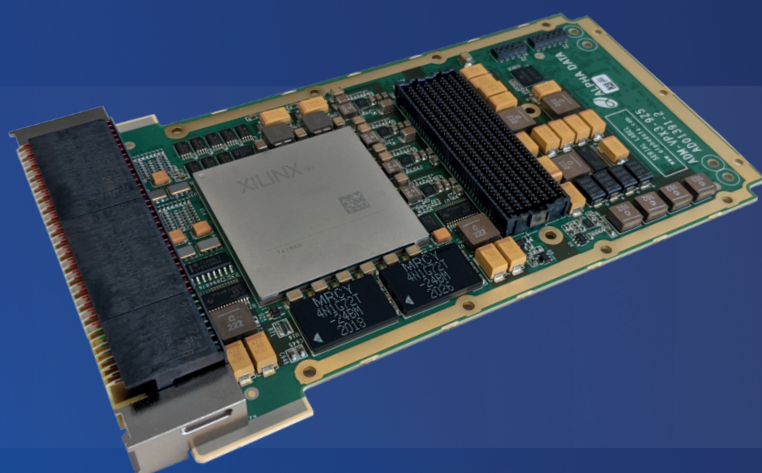System Monitoring, Power and Temperature Sensing components from **Texas Instruments**

AMD Xilinx Zynq UltraScale+ XQZU19EG FPGA

Compliant with LVAUX mode for Single Event Effects (SEE) mitigation

Full military temperature range Enhanced Plastic components (-55C to +125C)

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Edinburgh, EH11 1DQ, UK
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10822 West Toller Drive, Suite 250
Deer Creek Technology Center, Littleton,
CO 80127, Phone: (303) 954 8768

Contact us

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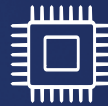www.alpha-data.com

ADM-PA100

A highly flexible and adaptable data processing unit, designed for early development and rapid deployment of solutions for high performance applications.

The ADM-PA100 board is a ready-to-use acceleration platform for the cutting-edge AMD Xilinx Versal ACAP devices, ideal for data capture and processing applications, CPU offload acceleration, and low-latency networking and analytics.

Unprecedented on-board computing power featuring high performance Scalar, Intelligent and Adaptable engines

AMD Xilinx XQR Versal AI Core VC1902 ACAP, featuring 400 AI Engines for maximum DSP and AI acceleration performance

PCIe form factor, suitable for desktop, lab, rack mount and data center deployments in commercial temperature ranges. Also capable of stand-alone deployment.

Featuring an FMC+ interface for a wide range off-chip FMC IO connection.

AMD | **XILINX.**

ADM-XRC-9R1

A high performance Radio Frequency Data Processing System on Module (SOM), specially made for NewSpace, aerospace and defence communication applications, including signal detection and jamming, radar applications, Tx and Rx 5G communications, and beamforming.
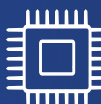
The ADM-XRC-9R1 is a single low-power device solution which combines FPGA Fabric, ADC and DAC interfaces and ARM CPU cores.
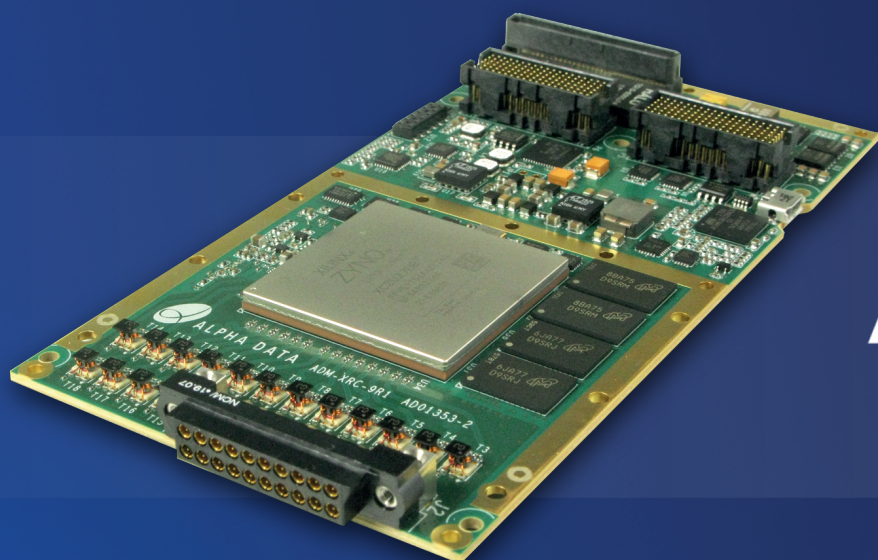
AMD Xilinx Zynq Ultrascale+ RFSoC
8x 5GSPS ADCs, 8x 10GSPS DACs, FPGA Fabric
and ARM CPUs all in one package

Available in industrial temperature grades
with air or conduction cooling

Rugged XMC modular form factor for
flexible deployment solutions

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