

ANTARTIX OBC COMPUTER



MAIN FEATURES



Antartix v2.0 OBC is a high-performance, user-friendly onboard computer and FPGA development board built around the **AMD Xilinx Artix-7 FPGA**. Optimized for running **MicroBlaze** and **PetaLinux**, it delivers exceptional processing capabilities and is ideal for a wide range of space applications.

Fully compatible with the **PCI/104-Express form factor**, it ensures seamless integration into LEO nanosatellites, microsatellites, and launch vehicles. Its comprehensive set of interfaces enables reliable connectivity for subsystems and payloads, making it a versatile solution adaptable to the demands of any mission.

Engineered for versatility and reliability, Antartix v2.0 OBC is built entirely with extended temperature range components, ensuring robust performance in harsh environments.

It features the **AMD Xilinx XC7A200T—FBG484I FPGA**, and is also available in a variant populated with the **XQ7A200T-1RB484M**, offering defense-grade qualification for mission-critical applications.



SPECIFICATIONS

Form factor

PCI/104-Express Fully compatible

FPGA

AMD Artix-7 XC7A200T-1FBG484IHz

Memory

DDR3L SDRAM 4Gb 933 MHz 20 ns MT41J128M16HA-125:K

Flash Memory

On board - NOR Memory IC 128Mbit SPI - Quad I/O 104 MHz

Additional Memory

BPI On board - NOR Memory IC 512Mbit Parallel 133 MHz 96 ns

PCIe interface

x1 lane PCle Gen1.0(2.5GT/s)

PCI BUS

Local Bus

General purpose I/O

x11 @ 3.3V, x7 @ 1.8V

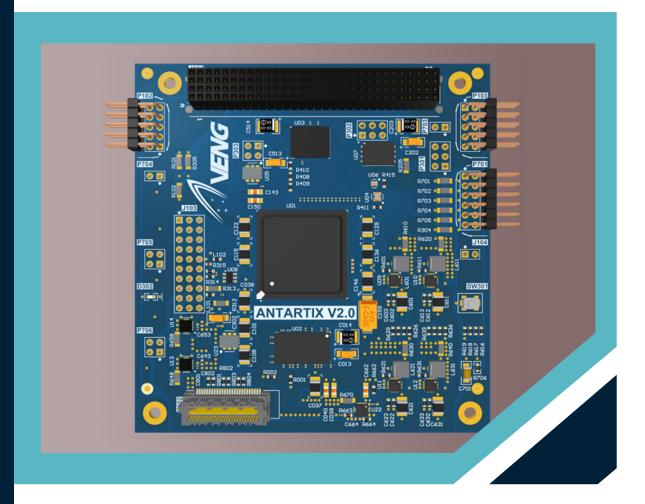
Power consumption

5 VDC, X.X A

Dimensions

Length: 3.775 inches (95.89 mm) Width: 3.550 inches (90.17 mm) Stand-off Height: 0.600 inches

(15.24 mm)





APPLICATIONS

We use advanced electromagnetic simulation tools such as HFSS for the design and optimization of our antennas. This process allows us to:

- Optimize the design to meet specific mission requirements.
- Accurately predict antenna behavior under real conditions.
- Minimize development time and reduce costs.
- Analyze and solve potential problems before manufacturing.







Aero Space Product Prototype Development

Telemetry

Communication Device Development

Data Acquisition

Signal Processing

Development and Testing of custom embedded processors

Parallel Processing and Accelerators





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