

lied APM883208-X1 | X-Gene™ X-C1 Evaluation Kit



The AppliedMicro® APM883208-X1 X-Gene X-C1 Evaluation Kit enables comprehensive evaluation of the APM883208-X1 processor, while accelerating customers' hardware and software development time.

Highlights

- Comprehensive, easy-to-use evaluation kit designed for customer setup in 15 minutes or less
- Comprehensive Software Development Kit for software development and evaluation of the AppliedMicro X-Gene Family of products
- Industry-standard U-Boot firmware, Linux operating system, and Linux software development tools
- Board schematics, layout files, U-Boot source, and Linux source are available from AppliedMicro
- Direct connection to the host system for initial configuration, downloading, and running applications
- Remote connection via a router or the Internet is also supported
- On-board JTAG connector enables connection of any compatible external JTAG probe for run-control debugging

Product Overview

The AppliedMicro X-Gene X-C1 evaluation kit provides users with a comprehensive set of resources to evaluate the APM883208-X1 processor as well as to start system development. The X-Gene X-C1 evaluation board, incorporating

the industry standard Linux operating system and U-Boot firmware, is an optimized, low-cost platform designed specifically for evaluation purposes. Schematics and layout files for the board are

Schematics and layout files for the board are available so that customers can start their designs from a proven baseline.

Likewise, the Linux code and U-Boot firmware source are available to accelerate customers' software development. The kit includes advanced software development tools to assist customers in selecting the most appropriate development and run-time environments.

X-Gene X-C1 Board

The X-Gene X-C1 board, with a 170mm (L) x 170mm (W) Mini-ITX form factor, is a custom-designed platform developed by AppliedMicro for evaluating the APM883208-X1 processor:

- · Mini-ITX board form factor
- AppliedMicro APM883208-X1 8-core processor (up to 2.4 GHz)
- Two DDR3 UDIMM 2 X 8 GB
- One SPI NOR Flash (128Mbit) for booting
- One 10G Ethernet port (XFI)
- Two 10/100/1G Ethernet ports (SGMII)
- One 10/100/1G Management Ethernet port (RGMII)
- Two USB 2.0 Host ports
- · One PCI Express x8 connector
- · Up to four SATA 3.0 ports
- One serial port (UART)
- · JTAG and trace connectors
- Two SPI ports
- I2C with 1024Kb and 256Kb EEPROM
- One SDIO 3.0 port
- BMC connector
- Expansion connector for GPIO

System Design Resources

Customers can use this kit not only to evaluate the APM883208-X1 processor, but also as the starting point for their own product designs. To facilitate this, the complete hardware/software design is available to customers from AppliedMicro:

- Linux code (source and binary) for the X-Gene X-C1 board
- U-Boot firmware (source and binary) for the X-Gene X-C1 board
- Linux development tools used to develop the X-Gene X-C1 code
- Schematics and layout files for the X-Gene X-C1 board
- · Sample application code

Development Tools & Operating Systems

The X-Gene X-C1 evaluation board is provided with Open Source Linux and U-Boot boot loader. Eight-core Linux SMP for the eight X-Gene processors and four-core Linux SMP for the four MSLIM processors.

Through the AppliedMicro Partners program, many other companies provide operating systems and development tools that support the AppliedMicro processor.

Kit and Accessories

- · Mini-ITX Desktop chassis w/Power supply
- 500GB SATA-3 HDD w/APM Linux OS
- 120/240V US Power Cord



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Ordering Information

The X-Gene X-C1 evaluation kit may be ordered from AppliedMicro or any authorized AppliedMicro distributor using part number EV-883208-X1-PRO-1. For more information, please visit http://www.apm.com/contact/sales/.

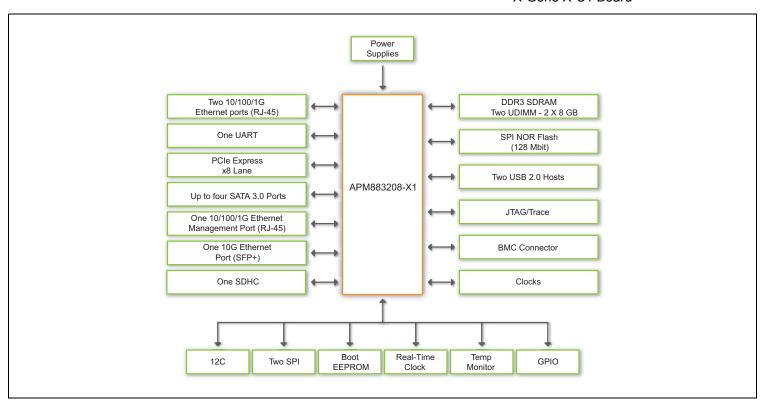
AppliedMicro Partners Ecosystem

AppliedMicro's processors are supported by an extensive ecosystem of products and services from a wide range of leading suppliers. The AppliedMicro Partners program includes industry-standard providers of:

- Operating systems
- Hardware and software development tools
- Software platforms
- · Board-level products
- · System design services
- Technical training
- · Silicon partners



X-Gene X-C1 Board



X-Gene X-C1 Block Diagram



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