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 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 at 1.6 GHz
- Two DDR3 UDIMM - 2 X 4 GB
- One SPI NOR Flash (128Mbit) for booting
- One10/100/1G Ethernet ports (SGMII)
- One 10/100/1G Management Ethernet port (RGMII)
- Two USB 2.0 Host ports
- One PCI Express x8 connector
- One 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

- X-Gene X-C1 board
- Mini ITX Power Supply
- Serial/USB FDTI cable
- Documentation

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-PRB-1. For more information, please visit *http://www.apm.com/contact/sales/*.
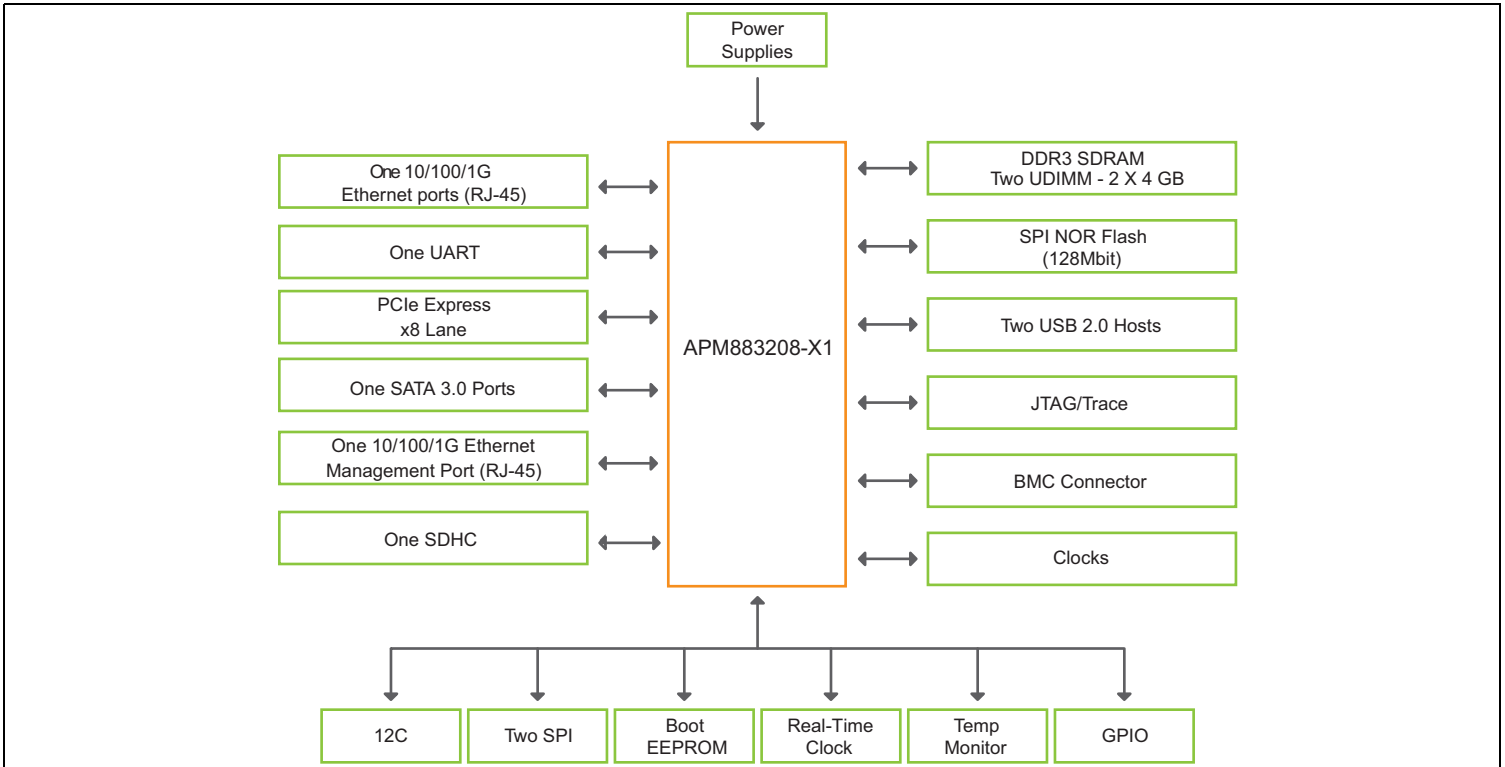
AppliedMicro Partners Ecosystem

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