

**Optimized to help developers evaluate the operation and performance of the AMD Alchemy™ Solutions Aul500™ processor.**

## Overview

The AMD Alchemy™ Solutions DBAul500™ Development Board kit is an integrated hardware and software system that leverages the power of the Aul500™ processor—a MIPS®-based solution-on-a-chip (SOC) with PCI controller. The processor enables the development of high-performance, low-power-consumption Internet Edge solutions, including wireless gateways, wireless access points, handheld computing, Web pads, set-top boxes, and multimedia applications.

The DBAul500 Development Board is a turnkey solution that integrates a processor, memory and peripherals together on a single board, along with debugging assist features and software.

The DBAul500 Development Board underscores AMD's commitment to providing customers with integrated systems that address their hardware and software needs, and positions AMD as a valued partner in the development of future Internet Edge solutions.

## Highlights

Our DBAul500 Development Board kit has been designed to help Internet Edge solutions providers:

### Test processor performance

The DBAul500 Development Board integrates hardware and software into a complete, ready-to-run system, which can help developers test the performance of the Aul500 processor in a variety of demanding Internet Edge applications.

### Bring Internet Edge applications to market faster

The debug assist features and software that are part of the DBAul500 Development Board have been optimized to help customers rapidly develop new Internet Edge applications based on the Aul500 processor. The system incorporates an Aul500 processor, SDRAM, AMD MirrorBit™ Flash memory, and two AMD 10/100 Ethernet PHYs together onto a single board, along with debug assist software (including a YAMON monitor/debugger), drivers, and design files. The result is a fully integrated system that is ready to run customer-developed software, which in turn can help reduce the time to market for new Internet Edge solutions.

### Learn from best practices

The AMD DBAul500 Development Board kit is a complete hardware and software solution that serves as a model for the development of future Internet Edge solutions.



## Features

### Memory devices

- 64MB of 100MHz SDRAM
- 32MB AMD MirrorBit Flash memory (Am29LV640)
  - 16MB Boot Flash memory
  - 16MB Parameter Flash memory

### Expansion

- Two hot-swappable PCMCIA slots
- Static memory interface connector
- IDE ATA/133 connector
- 3.3V/PCI connector

### Debug assist features

- YAMON monitor/debugger
- EJTAG connection to Aul500 processor
- Test points for key signals
- LEDs for easy notification of system activity
- Bank of 7-segment LEDs for software status
- User-settable switches

### On-board peripherals

- Two AMD 10/100 Ethernet PHYs (Am79C874VC)
- USB host port
- USB device/host port
- AC'97 audio CODEC stereo

- Two serial ports

- PCI-ATA/133 controller

### Software included

- YAMON monitor/debugger in Flash memory
  - Assembly/disassembly
  - Memory modify/display
  - Register modify/display
  - S-record, download via serial and Ethernet

- Quick Start

- Peripheral initialization routines

- Diagnostics

- Example code

- Development tools

- Microsoft® Windows® CE.Net, VxWorks, embedded Linux demonstration images

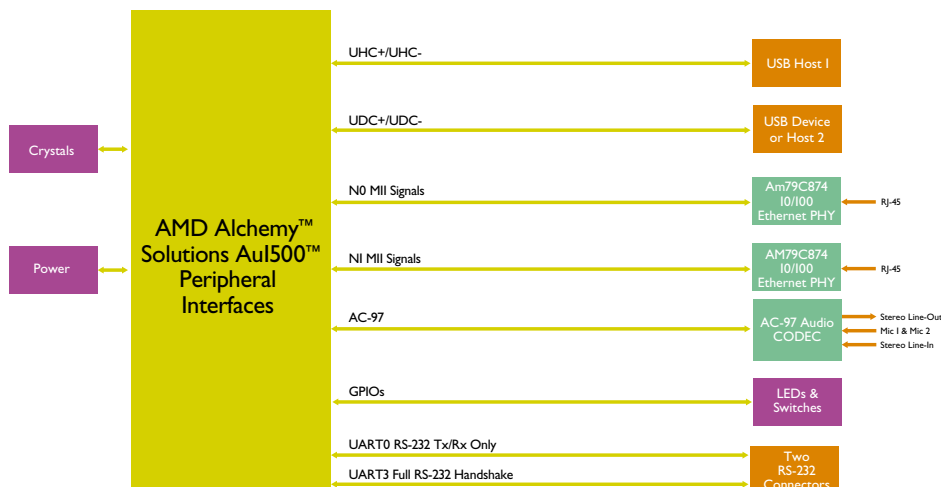
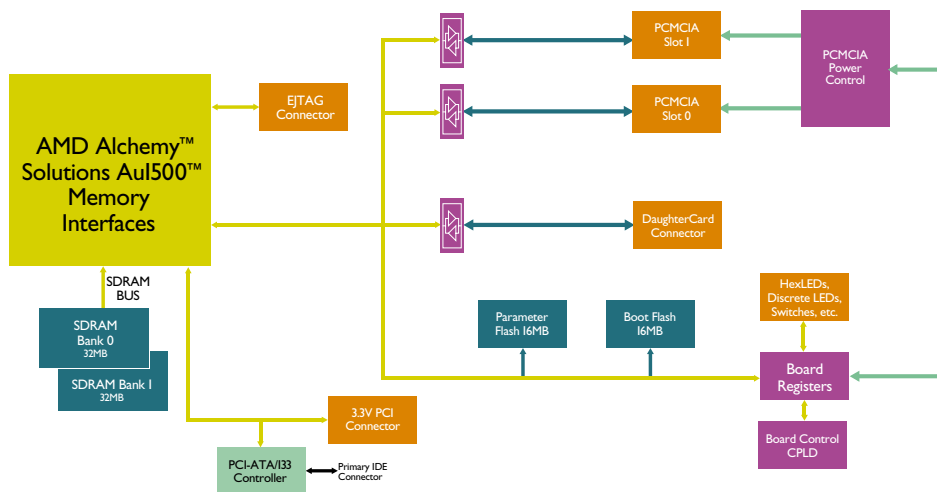
### System documentation

- User's guide

- Hardware datasheets

- Complete set of hardware design files, including schematics, layout, and BOM

# AMD Alchemy™ Solutions DBAu500™ Development Board



## About AMD

AMD is a global supplier of integrated circuits for the personal and networked computer and communications markets with manufacturing facilities in the United States, Europe, Japan, and Asia.

AMD, a Fortune 500 and Standard & Poor's 500 company, produces micro-processors, Flash memory devices, and support circuitry for communications and networking applications.

Founded in 1969 and based in Sunnyvale, California, AMD had revenues of \$3.9 billion in 2001. (NYSE: AMD)

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