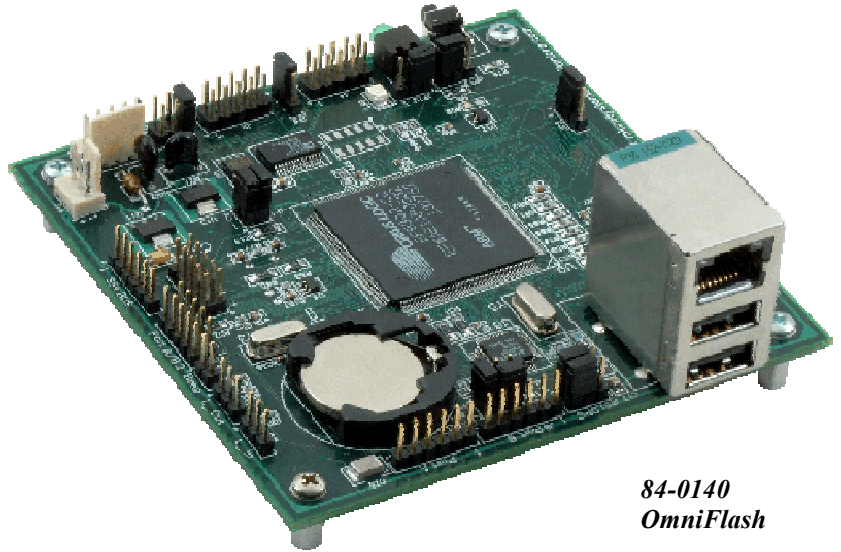


# OmniFlash

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- **200 Mhz Arm Processor**
- **10/100 Mbit Ethernet**
- **32 MegaBytes RAM**
- **16 MegaBytes Flash**
- **16 Digital I/O Lines**
- **2 Port USB 2.0**
- **SPI Bus**
- **AC97 Audio Line In/Out**
- **Battery Backed Clock Calendar**
- **Small Size (4.0" x 4.0")**
- **2 Serial Ports**



84-0140  
OmniFlash

The OmniFlash single board computer is ideal for the growing complexity of embedded applications. With its compact size (16 square inches!) there are a wide variety of features driven by the powerful ARM core. In addition to the standard 2 serial ports and 16 lines of digital I/O, the OmniFlash brings both USB and audio capabilities to your application. The battery backed clock/calendar also comes standard, making sure your time sensitive programs have access to a reliable time.

Development is greatly expedited by the OmniFlash. Programs can now be easily transferred and run from a simple USB Flash Pen drive, eliminating the need to wait for lengthy RS-232 file transfers. Expansion through the USB ports offers a wide range of possibilities, including wireless Ethernet capability, extra Flash memory, and more. Peripheral expansion also becomes easy through use of the SPI port, allowing simple access to many proprietary devices. Audio capabilities are also included, allowing for both audio recording and audio playback.

The OmniFlash also offers several power saving options to maximize power efficiency, particularly with portable devices. The 10/100 Ethernet connection can be put into a power efficient state, turning off the port altogether if it is not in use. Additionally the on board flash memory can be write protected in the hardware to prevent tampering with your final application.

Additionally, the OmniFlash is pre-loaded with the powerful Linux operating system, adding ease to development and an open source operating system that can be modified by the user. It also brings with it the power of Linux Module programming, allowing the root user to modify the kernel while it is running.

**The OmniFlash Development Kit (99-0140) gives the user a bootable Knoppix environment, giving access to the powerful GNU C/C++ cross compiler and sample programs. Additionally the kit includes an OmniFlash microcontroller, console cable, 110Vin AC adapter, schematic, and cabling connectors.**

# OmniFlash

## Specifications

Processor	200Mhz Arm9 Processor
Operating System	Linux 2.4 Kernel
Memory	32 MB RAM, 16MB Flash
Ethernet	10/100 Megabit Ethernet
Serial Port 0	RS-232 + 3 handshaking or RS-232 TTL Level (Rx, Tx only) or RS485 half duplex
Serial Port 1	RS-232 with no handshake lines
Digital I/O	16 Digital I/O lines (3.3V TTL) 15 interrupt capable (Level and Edge) Individually configurable
Audio	AC97 Line Level in/output
Other	Hardware Clock Calendar and Watchdog
Power	5V +/- 5% DC regulated, 2 Watts typical
Humidity	5 - 90% non-condensing
Temperature	-40 to + 70 C
Weight	88 grams
Dimensions	4.0" x 4.0" x 1.3" (101.6mm x 101.6mm x 33.0mm)

## Connectors

J1	I/O ports A/H
J2	Serial Port 0
J3	RS-485/Serial 0 TTL
J4	Serial Port 1
J7	I/O ports A/B
J8	I/O ports B
J10	Audio Line In
J11	SPI port
J13	Audio Line Out
J14	Power (5v DC)

1.1 Changed RAM to reflect actual size. - April-6-2006 AY

