NewsPAD

- High performance, touch screen tablet-style portable computer

- Photo-realistic colour

- Powersaving technology for increased battery life

- PCMCIA type 3 support (2 × type 2 / single type 3 slot)

- Microphone and camera input

- Internet support pack

- Ideal for vertical market applications

- Available in

   — Sample format

   — Fully licensable design

   — Full-scale Production (subject to order lead time)

The NewsPAD computer is being developed as a technology demonstrator within the European Union 'OMI-NewsPAD' project (EP9252), within the ESPRIT Framework through the European Commission's Open Microprocessor systems Initiative. The NewsPAD project includes the development of prototypes and user trials of a potential real electronic alternative to traditional newspapers — comparably portable, but able to deliver multimedia-rich content including sound and video, animation and animated 'infography'. The long-term intention is to provide context sensitive and user-profile deterministic content streams, coupled with thematic threading — so that readers ultimately can fully personalise the scope of 'their' newspaper to reflect their own interests — all in a portable multimedia-capable access and display device.

For more information about the NewsPAD *project,* see the NewsPAD Home page htt.://www.ictnet.es/public_newspad/. For more information about the OMI, see the Open Microprocessor Initiative's home page http://www.omimo.be/.

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Technical Overview

32-bit Processor
- 40MHz ARM 7500, 35.9 MIPS (dhrystone 2.1) peak
- 4KB instruction and data cache
- Write buffer for enhanced performance
- Fully static operation, low power consumption
- Sub-microsecond interrupt response

Memory
- 2 SODIMM Memory expansion sockets each capable of holding 4MBytes to 128MBytes of DRAM
- 4MBytes ROM for Operating System
- 496 Bytes non-volatile RAM

Mass Storage
- 2.5" IDE Hard drive (current size 420MByte)
- 1.6MByte Floppy disc drive connection available via docking station

Unique Reference
- 48-bit software readable unique identifier for use by networking software

Power Management Modes
- Suspend Mode – CPU clock may be halted while video and I/O systems continues to run, halves power consumption of ARM7500 core chip
- Stop Mode – All clocks are stopped and unit remains in 'frozen' state until re-activated minutes, hours or days later. DRAM in self-refresh or slow-refresh mode

System Software and Development Tools
- Extensive graphics rendering support, including outline anti-aliased fonts, Bezier curve-based graphics and bitblt operations
- Extensive high-level language support available, including C, C++ and debuggers
- Run-time support for Macromedia Director

Video
- 10.4" 800 x 600 SVGA active matrix LCD panel, 32K colours
- Support for external monitor with resolution up to 1600 x 600 pixels 16 colours and colour depths up to 16 million colours (via docking station or cable adaptor).

Audio
- CD quality (16 bits per channel) stereo sound
- 16 bit variable rate sound capture
- Built-in speaker

1/0 Ports & Interfaces
- 10.4" Resistive Analogue Touch Screen with medium or high resolution interface options
- 2 x Type II or 1 x Type III PCMCIA socket
- Stereo headphones output
- AC adaptor connection
- Docking station connector, via docking station, will reproduce parallel port floppy disc interface, serial port, keyboard port, PS/2 mouse port, video monitor connection, AC adaptor connection
- Bi-directional infrared link
- Provision for CCD camera module

Physical
- Dimensions: width 215 mm, height 300mm, depth 38mm. Weight: 2.0kg

Electrical
- External switched mode PSU / battery charger, auto-ranging from 110V to 240VAC, 50 to 60 Hz (output 18Vdc 1. 2A)
- Battery life in continuous use: NiCd (1400mAh), up to 2 hours. NiMH (1800mAh), up to 3 hours
- Three stage charge control algorithm including fast charge
- Charge remaining or 'Gas Gauge' monitor