Acorn 'Fast' NetStation

Acorn Computers Ltd is one of the leading suppliers of network computer technology in the world today. With over 500 man years experience in developing for the ARM™ processor alone, Acorn has an unparalleled track record in developing low cost, high functionality networked solutions which do not require localised storage.

Acorn has experience in building highly specialised NCs in a variety of form factors, such as interactive television (low and high bandwidth), office based intelligent terminals. portables (PDA), fax and games systems.
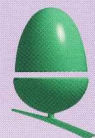
Product Details

The Acorn 'Fast' Netstation offers a reference product design based on a very high performance silicon design, together with a selection of filing systems, network stacks, graphical user interfaces and applications. These can be provided for TV-Centric or intelligent terminal applications.

Hardware Details

Physical description:	11.5"W x 10"D x 1.5H, Black case
Form factor:	Desktop, sits under separate monitor or next to TV
CPU:	StrongARM 110 (200MHz)
Video:	SVGA 2MB VRAM (to 1280 x 1024), or composite video (NTSC or PAL TV)
Audio:	Stereo line jacks (3.5mm jack)
Parallel:	Bi-directional DB25 parallel connector (female)
Input:	Wired or IR keyboard, mouse
Network:	33.6Kbs modem, Ethernet ISDN, ADSL and ATM25. Employs modular network interface card (NIC) for plug and play replacement
Memory (RAM):	8MB - DRAM SIMM
Memory (ROM):	8MB ROM card (user replaceable)
Other/Misc:	On/Standby LED and switch. NC™ SmartCard support

A wide range of device drivers eg printers, ZIP drives can be supplied and additional device support (including driver development) can be provided as required.

Operating System

Acorn NCOS (Network Computer Operating System) is a stable, scalable multitasking operating system which is designed to be run from ROM. As such it is ideal for embedded applications and can be 'enriched' as required with system wide OS extensions and applications. The Kernel provides basic features such as memory allocation (linear), interrupt handling and DMA services. The OS is fully compliant with NC' specification of Oracle/NCI Acorn NCOS, is available for licensing today and is sourced with the Acorn hardware reference design and support services.

If required, Acorn is able to build the OS to users requirements and substitute expansion modules to maintain functionality/memory requirements. This minimises the use of system memory (RAM) whilst maximising the number of available applications. System expansion modules such as file systems (eg for network clients) and GUIs can be added or separated as required.

Because of the modular nature of NCOS OS, GUIs and applications with different 'looks and feels' can be added to the basic services and tasks undertaken by the underlying OS. APIs have been established by Acorn to allow this flexibility.

Applications

Acorn is able to provide a wide range of ROM optimised applications such as web browsers,(Java, Shockwave and other plug-ins available) word processors, vector graphics programmes, video players (Acorn proprietary !Replay, AVI and MPEG codecs) and text editors. ROM based applications can be added or omitted as required, providing application suites designed to exact requirements. A range of emulators is also available to help maintain application compatibility.

Complete Flexibility

Because Acorn has expertise in every part of the product development process it is able to provide complete design solutions, cost reduction exercises and/or consultancy to specific customers.

Development solutions including ARM based development systems, C, C++ and ARM assembler based development tools as well as technical training packages can all be supplied to customers who wish to develop or port their own applications or other software components.