

Acorn NCLite



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 network computers 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 NCLite offers a complete reference product design highly using a highly integrated silicon design, together with a filing system, network stack, graphical user interface and easy to use applications. NCLite is designed for use with TV sets without special connections.

Hardware Details

Physical description:	Dependent on configuration choice
Form factor:	Option of single box (thick keyboard) or 11.5"x10"x1.5" case plus keyboard
CPU:	ARM 7500FE (see relevant datasheet)
TV Input	Standard RF coaxial cable, or optional composite or S-Video and 3.5mm jacks for audio.
Parallel:	Bi-directional DB25 parallel connector
Input:	Wired or IR keyboard, pointer, TV styled remote, joystick options
Network:	33.6Kbs modem, soft controlled
Memory (RAM):	8MB - EDO DRAM SIMM
Memory (ROM):	8MB ROM card holding execute in place OS
Other/Misc:	On/Standby LED and switch. NC™ SmartCard support available

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 RISC OS 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.

Acorn has built the OS and selected applications to optimise the balance between functionality and memory requirements. This minimises the use of system memory (RAM) whilst maximising the number of available applications. System expansion modules such as a file system (eg for network clients) and GUIs are included but could be removed or changed if required.

Because of the modular nature of RISC OS, applications and GUIs 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

RISC OS is available for licensing today and can be sourced with or without Acorn hardware reference designs.

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. Application suites can be optimised to your exact requirements by adding or omitting ROM based applications. A range of emulators is also available to help maintain application compatibility.

Complete Flexibility

Because Acorn has expertise in every part of the development and production product 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.

