Acorn TVCentric Technology

Acorn

Acorn have developed key technologies which allow high quality text and images to be displayed on television based interlaced displays.

These displays can be connected to a variety of Acorn hardware/software designs, which provide access to Intranet and Internet resources using low or high bandwidth connections.

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.

TV-Centric

Acorn display technology is highly suitable for use with NTSC/PAL configured television sets through the use of an unique hardware/software solution which provides;

- Anti-aliased fonts for high definition text
- Anti-twitter software for stable text and images on interlaced displays
- Software programmable video resolution, colour depth and scan rates

These technologies combine to provide some of the best TV based display solutions available in the world today.

Hardware Design

Acorn is currently able to license extensive 'off the shelf' (see Acorn NetStation and Acorn 'Fast' NetStation datasheets) and 'concept' designs as well as providing customised designs on an individual customer basis.

Highly integrated processor designs are available including the 7500FE (CPU, FPU, MMU, video and audio logic all on one chip) as well as the StrongARM which provides 200MHz performance.

Acorn specialises in providing complete hardware designs (including ASICS design) based around the range of ARM processors, providing a comprehensive product design and hardware service from conce.

CLAN

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. System expansion modules such as file systems (eg network clients) and GUIs can be added or separated as required.

This allows Acorn 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.

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

Applications

ART 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 with a variety of codecs) and text editors.

ROM based applications can be added to or omitted as required, providing application suites designed to exact requirements.

Complete Flexibility

Because Acorn has expertise in every part of the product development process it is able to provide complete 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 and technical training packages can all be supplied to customers who wish develop or port their own applications or other components.