Acorn J233 StrongARM Risc PC

Introduction

This superb, high-performance StrongARM™ RISC-based desktop computer has been updated to maximise the potential offered by today's networked world. The J233 version combines the universally acclaimed expandable Risc PC architecture, together with the software technology needed to take advantage of the emerging platform independent standards, including HTML3:2 and Java.
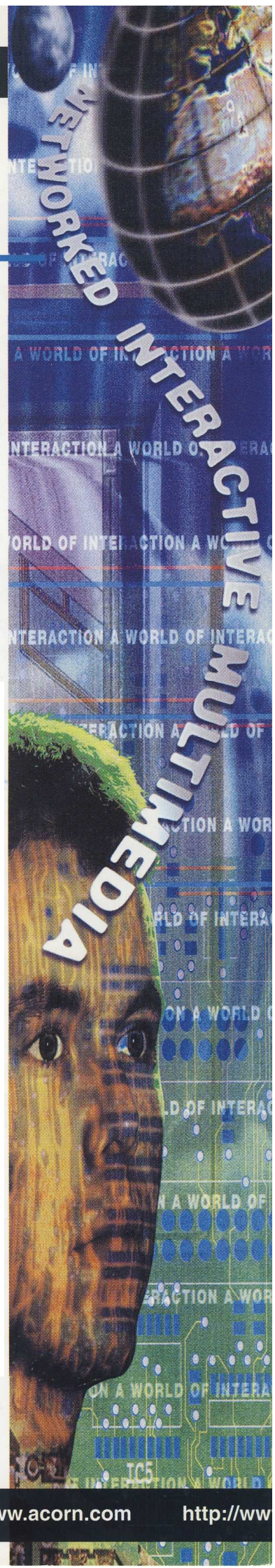
Every StrongARM Risc PC comes with true multimedia capabilities. With the power of the latest StrongARM processor, the J233 StrongARM Risc PC can access the wide range of resources available on the net. It can manipulate extremely large full-colour images and combine them with text, graphics, video and sound to demonstrate the full potential of multimedia. Capable of running most PC applications at up to 586 speeds, with StrongARM Risc PC Card connected to the Open Bus slot, it can use many applications in the PC world whilst retaining state-of-the-art features from the Acorn desktop environment.

An overview

The Acorn J233 StrongARM Risc PC offers:

- StrongARM processor running at over 233MHz as standard
- Web browser and Java Virtual Machine
- 32MByte DRAM as standard
- 2MByte VRAM as standard
- 24-bit colour
- 1280 x 1024 resolution with photo-realistic colour palette
- Integrated 16-bit digital sound
- x24 speed CD ROM
- Modular construction (multi-slice expansion)
- 486/586 mode with low cost and high performance option
- ROM-based operating system with soft-loadable extensions
- Comprehensive hardware peripheral support
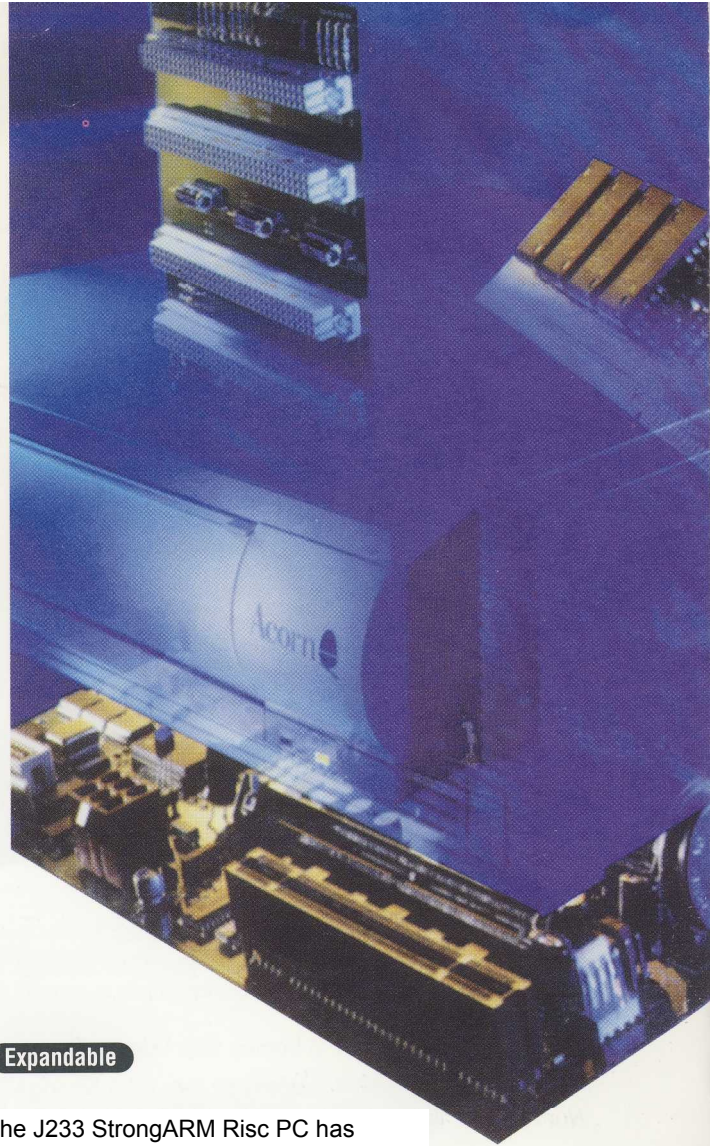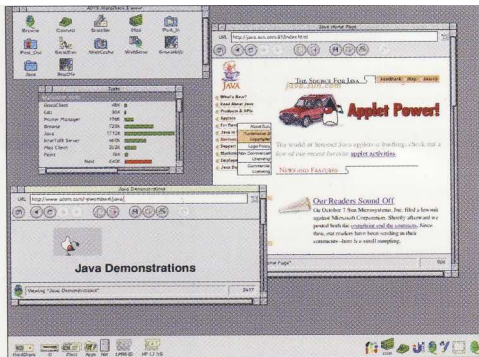
Acorn

Powerful

With the latest StrongARM RISC processor at its heart and running at 233MHz as standard, the J233 StrongARM Risc PC has both flexibility and speed. It is this processor that offers the levels of performance, now and for the future, which other manufacturers cannot offer on their own standard priced machines. And as technology develops, it is the StrongARM Risc PC that will give you the power to keep pace.

Web

The J233 StrongARM Risc PC has the latest technologies to get the most out of the massive growth in the use of the internet, from the easy to use connection application that has support for all the main UK internet service providers, to the POP3 mail clients which will enable you to get online. The web browser is designed to the HTML3.2 standard and has support for frames and table extensions.
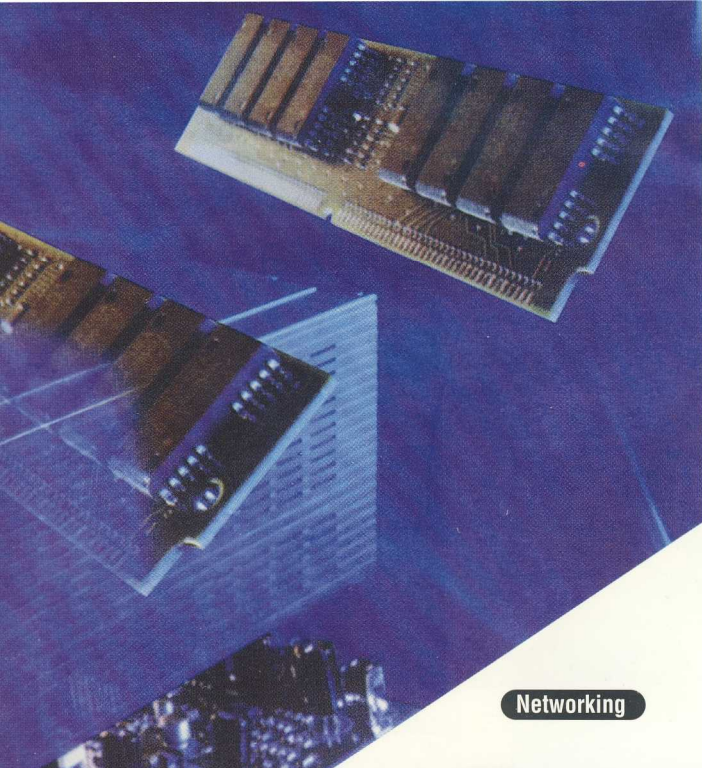
Expandable

The J233 StrongARM Risc PC has been designed as a totally modular system. Coupled with innovative mechanical and electrical design, it has virtually unlimited upgrade capabilities. This 'future-proofing' allows you to start with a basic configuration and gradually expand - confident that your investment will not be wasted at any stage.

Java

Developed by Sun to be truly platform independent, Java gives a new dimension to the use of the Risc PC Applications and applets that are written in Java can be run on any Java capable machine irrespective of the operating system on which they were written. The J233 version of the StrongARM Risc PC has be specifically designed to take advantage of this rapidly emerging standard. The Java virtual machine is integrated with the web browser, making the downloading and running o Java applets totally transparent, while the memory and processor speed deliver the power for many demanding Java applets:

Compatible

While offering you access to the vast range of both RISC OS software and Java applets, the J233 StrongARM Risc PC will not lock you out of other platforms. Supporting access to PC based applications running under Windows or DOS, it gives interconnection to other technologies including the ability to run UNIX native. The flexible design of the StrongARM Risc PC also allows the sharing of memory, drives and CD-ROMS in addition to the transferring of text and graphies between the operating systems:

Networking

The J233 StrongARM Risc PC integrates easily into a wide range of different network configurations. Its dedicated network slot, with the addition of a network card, enables communication over an Ethernet system. Combined with the built-in OmniClient II software this gives seamless integration with NFS, UNIX, Windows NT Server, Lan Manager, Windows 95, Windows for Workgroups and OS/2 Server. Omniclient maintains the user-friendly characteristics of RISC OS while working in a heterogeneous networking environment. This ease of use extends to giving administrators SAM access to change NT server passwords remotely from within RISC OS.

Built to last

StrongARM Risc PCs are designed to stand up against continuous progress in hardware performance, and built to withstand the rigours of use: It offers newcomers a comfortable environment in which to take their first steps while in addition being powerful enough to cater for the professional user.

RISC OS

The J233 StrongARM Risc PC's operating system - RISC OS - is a stable, scalable multitasking operating system, which has been designed to run from ROM, leaving a large amount of the hard disk available for your own data. Also, conserving system memory and virus protection are other advantages of the RISC OS ROM based operating system. Shipping in over 600,000 systems worldwide indicates the suitability to a large number of applications, from regular productivity tools including spreadsheets and database applications through to sophisticated multimedia authoring and video editing systems.

Complete user control

RISC OS recognises that every user needs to use their machines in their own individual way. A number of unique facilities enable on the fly configuration of screen resolution and memory usage to adapt to specific applications and requirements.

A large desktop gives easy access to any application or file: Opening, moving, modifying or copying files and directories is as simple as clicking and dragging. The Pinboard allows icons to be pinned to the desktop for quick access and an icon bar lets you control any application that has been loaded.

Multimedia

As one of the most powerful and flexible solutions yet devised, the J233 StrongARM Risc PC has a x24 speed CD-ROM together with 16-bit sound built in as standard, removing the need for additional graphics or audio cards.

Acorn Replay is the multimedia architecture for RISC OS. Using Replay on RISC OS enables several audio and video codecs to be played through a simple-to-use interface. The RISC OS multimedia pack contains two software video codecs that provide high quality video playback running movies up to 25fps:

Technical Overview

32-bit ARM RISC

- StrongARM @ 233MHz
- OpenBus architecture supporting 486/5x86 second processor
- IOMD custom I/O and memory controller ASIC
- VIDC20 custom Video Controller ASIC

Memory

- 32Mbyte DRAM standard
- 1 additional SIMM socket supports expansion
- 2MByte VRAM standard
- 4MByte page mode ROM
- 240Byte battery backed CMOS SRAM

Unique Reference

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

System Software

- RISC OS 3.7 ROM-based operating system capable of supporting soft-loadable extensions
- Java 1.0.2 virtual machine
- HTML 3.2 compliant web browser
- Mail and news clients
- Omniclient II network access software

Audio

- CD quality 16-bit stereo digital sound system with mixer for second internal audio source (eg CD-ROM)
- 3.5mm stereo jack socket capable of driving 32 Ohm headphones or for use as a line output, plus internal speaker

Video

- Wide variety of screen modes including:
  1600x 600 at 16 BPP (32K colours,pixel doubled) 56Hz
  1280x1024 at 8 BPP (256 colours) 60Hz
  1024x768 at 16 BPP (32K colours) 75Hz
  800x600   at 24 BPP (16M colours) 60Hz
  640x480   at 24 BPP (16M colours) 75Hz

Expansion

- Two 32-bit EASI expansions slots (per expansion slice, up to a maximum of 8 slots in total)
- Dedicated network card expansion slot

Internal mass storage

- IDE hard disc drive (1:7Gb standard, greater capacities available)
- 1:6MByte 3:1/2" floppy disc drive
- x24 ATAPI (IDE) CD-ROM

I/O ports and interfaces

- RS 232 serial port, 9-pin D-type
- Parallel printer port, 25-pin D-type
- Monitor output via a standard 15-way high density D-type
- Internal video Genlock port
- Stereo audio output 3.5mm stereo jack socket

Physical

- Dimensions: width 355mm, depth 383mm, height (single slice) 117mm, extra slice 182mm. Weight: approx 3.75 kg
- 102 key PS2-style keyboard with 3-button PS2 mouse

Electrical

- Integral 103W switched mode PSU with IEC 320 power inlet and outlet connectors
- Switchable PSU from 110V to 240VAC, 50Hz or 60Hz

Standards compliance

- CE marked and certified to: EN60950 (electrical safety) EN55022 class B (EMC conducted and radiated) EN50082-1 (EMC susceptibility)
- FCC compliance

AG P24.79.50

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