

Developers' Newsletter

No 34 - July 1994

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General News

Registered Developers' Logo

You will find a Drawfile of the Registered Developers' logo on Developers' Disc 33/34 enclosed with this newsletter. The logo may be used on your stationery, advertisements and promotional literature in line with the conditions in the Registered Developers' Agreement you have signed with Acorn. You may not use the logo to suggest any Acorn approval or branding for your products. Details of the size, dimensions and colouring of the logo are included in the Drawfile.

Risc PC availability

We've been inundated with Developer orders. Some of you will have received your Risc PC but some will not yet. I apologise if you're still waiting. If you ordered in May, we expect to fulfil your order in the next two or three weeks. We do give Developers priority - together with demo machines for dealers and AiECs. Not only have orders surpassed our Sales and Marketing Division's expectations - especially on those top-end machines most needed by Developers - but we have also had some production problems. The case tool needed to be modified, for instance, and a world shortage of DRAM persists. I can assure you, however, that we are doing our utmost to reduce delay to a minimum.

Risc PC lapel badge

We have pleasure in including a Risc PC lapel badge for you. I trust it arrives safely.

Online Media

You will find enclosed with this newsletter a letter and Information release about a new division of Acorn - Online Media. If you require a pack of information about this new venture, please contact Developer Support.

Acorn Education Directory, Issue 6

This is the second Directory to be produced with the shortened product descriptions. The first, Issue 5, was published in January 1994. Issue 6 differs from Issue 5 in that it includes an index and details of products tested by Developers on Risc PC prototypes prior to launch. Otherwise there are few changes. Major updating - in preparation for Issue 7 - will take place during July and August 1994. A copy of Issue 6 is included with this newsletter together with a Directory correction sheet to return giving an overview of amendments necessary and a Product Directory Information Form. Please use the information form if you have additional products you wish us to add.

CDFS, PhotoCD and PhotoView

Acorn PhotoView is an application which allows Kodak Photo CDs to be viewed and used as a resource in other applications. The PhotoView product is supplied with the latest version of Acorn's SCSIFS and CDFS drivers to enable this product to be used with all Acorn SCSI cards - owners of third party SCSI cards should contact the original supplier of the card for details of PhotoCD support.

Since the product now includes a full implementation of the Photo CD access application, there has been a small increment in the price compared to previous ROM only CDFS upgrades. Pricing is as follows:

AKA35 Acorn PhotoView (inc. CDFS 2.2) RRP £34.95 exc VAT, Developers' price £28.31 exc VAT - now in stock.

Developer Support has written to all current licencees of CDFS asking them if they wish to upgrade to include CDFS with their product. Although we would like everyone to do so, the final decision rests with each supplier.

Distribution of Acorn code

If you wish to ship Acorn code, e.g. network modules, ChangeFSI etc., with your products, please first contact Developer Support to find out whether a licence is required to allow you to do so and what is the latest released version of the software.

If a licence is required, there will be a fee attached which is generally on a per-Developer rather than a per-product basis. The licence should be in place before you distribute your product so please try to apply early, making a formal request and stating clearly the items you wish to license.

Note that Acorn copyright should be acknowledged both in the software itself and in the documentation.

NB No licence is required for Registered Developers wishing to distribute the shared System resources provided that they do so in line with the conditions given on Developers' disc 32 and its supplement.

Hardware Developers' Forum - Focus on Risc PC

The meeting held in May for Hardware Developers was well-attended and, we hope, useful. At the meeting Developers were given copies of Risc PC circuit diagrams and details of the Hardware Conformance Scheme.

Hardware Conformance Scheme

The Acorn Hardware Conformance Scheme was launched in May. Hardware Developers wishing to claim conformance should obtain from Developer Support an application form. The completed form and any supporting information should be returned to Developer Support who

will inform the Developers whether or not permission to use the logo is granted. At the same time, Developer Support will send a copy of the logo on disc together with instructions as to its colour, dimensions and use.

Developers should note that the logo should only be used in connection with a specific product and that it shows their claim to have followed Acorn's specifications; it should not be used to convey any suggestion of Acorn approval.

Proposed meeting for C Developers

We plan to hold a meeting, probably in August or September, for Developers known to be using C. The purpose is to inform you of the directions Acorn is taking with respect to the Development Environment and to make available to relevant Developers beta versions at a reasonable price.

C Release 5 and Desktop C Release 2 beta

All Developers who purchased the Desktop C Release 2 beta have been sent an alpha release of C Release 5, as promised in Newsletter 33. Don't forget that, if you require C Release 5 you should send your cheque for £14.10 made out to Acorn Computers Ltd. We will send you both Desktop C beta and C Release 5 - six discs in all. It is assumed that you already have a copy Desktop C itself and its documentation. New Registered Developers, please note that Desktop C beta is an update (mainly bug-fixes for a range of items in the product pack together with a revised release 4 compiler) to Desktop C (i.e. C release 4) and that C Release 5 alpha is an update to the compiler itself.

SIMMs and VRAM for the Acorn RISC PC

We can provide, on request, an Application Note giving details of SIMMs for Risc PC. Some hardware developers can provide DRAM and VRAM upgrades for Risc PC. Among those we know of are Atomwide, Simtec and HCCS. Please let us know if you also supply devices conforming with the guidance provided on the Application

Note.

Acorn World 94

This year's Acorn World Show will be held at Wembley in the same hall as last year from 28th to 30th October. If you have not been contacted and wish to exhibit, please contact Melanie Lilley on 0223 254244 for further information.

Risc PC upgrades

The following information may be of interest to Developers wishing to upgrade their Risc PCs.

1MB and 2MB VRAM cards have been coming into stock, although demand currently exceeds supply. If you need an upgrade to a 2MB card, you can place an order with Developer Support or consider having your 1MB card upgraded by a third party through the addition of extra VRAM chips. Atomwide is one company providing this service on a quick turnaround.

Ethernet cards should be in stock by the end of July; similarly Econet cards.

The Risc PC will be purchasable from Developer Support with a CD-ROM drive already fitted within the next 2-3 months or alternatively you can obtain an upgrade from Cumana. Other third parties are also expected to offer a similar upgrade.

Please note that availability of the Risc PC PC card is expected to be November/December with demonstrations planned at Acorn World. Plans for the ARM 700 processor card have not yet been firmed-up, but availability is not expected until early 1995.

FPA11 Floating Point Accelerator

Tests on samples recently received of this new, faster chip are proceeding well. The chip, planned to be available this Autumn, will enable users of 33 Mhz A5000 machines to fit an FPA chip. The current FPA10 chip can only be used with a clock rate of 26 Mhz or lower.

Technical News

REMINDER - RISC OS 3 Style Guide

Customers have been inconvenienced where Developers have ignored the RISC OS 3 Style Guide guidelines with respect to shared resources. A typical case is where the system resources take up most of a floppy disc which adversely affects users without hard discs. Equally, those users with computers with only one or two megabytes of fitted RAM find that they cannot run, concurrently, multiple applications as they have previously been able to do.

Developers who have shared resources which they believe

are useful to a wide range of applications may apply to Developer Support for those resources to appear in !System.modules. Any Developer so doing must be prepared to provide Acorn with the module and its sources. These will be placed in Acorn's Drawing Office so that customers can be provided with support if necessary. The Developer must also agree to keep Acorn informed of any modifications to the resource modules. All other shared resources should be placed inside the Developer's own resources directory the name of which should be registered with Developer Support using the electronic allocation software, copies of which are included again on Developers' Disc 33/34 included with this newsletter.

RTF Rich Text Format

Developers have been asking about the format of RTF files so they can import them to and export them from RISC OS applications. The printed documentation for RTF is in an appendix in the Microsoft Word Technical Reference, ISBN 1-55615-290-6. An online help version is available for Windows in the Visual C information.

Colour Picker

The Colour Picker forms part of RISC OS 3.5 which is the operating system version in Risc PC 600 computers. We now have a version of the Colour Picker for use with RISC OS 3.1. A copy of the software is on Developers' Disc 33/34. If you wish to make use of this and distribute it with your products, please apply formally to us for a licence to do so. The licence fee is £100 plus VAT. The licence allows you to include the Colour Picker with any of your products.

Expansion cards in Risc PC - SLOTS and EMC

The subject of slots, e.g. rectangular air gaps, and EMC has been the cause of some concern recently, with some views appearing to contradict those considered as 'correct'.

Here are some facts provided by our hardware team:

- A slot will, under certain conditions, act as an antenna.
- The efficiency of such an antenna is maximum

when the slot length is equal to half the wavelength of the exciting frequency. The radiating efficiency reduces in the order of 20dB per decade as the frequency decreases (i.e. the wavelength increases).

Slots should be orientated parallel to the incident field.

A rule of thumb for design is to limit slots (and holes for that matter) to one tenth of the wavelength of the maximum frequency of interest/concern.

We have an Acorn in-house design guide to limit slots to about 35mm.

Arrays of slots are better than a large single slot but not as good as a single small slot.

Some slots are a consequence of mating edges other than a purpose-designed aperture. In such cases overlapping joins are much better than butt joints.

The position of the slot in relation to the pcb and on noise source is important.

Mating 'flat' surfaces do not touch all along their length; in fact they may only touch on two places at either end.

In summary, the design of an enclosure should attempt to minimise the length and correctly align all slots/apertures with regard to the above comments. If this is not possible then radiated emission measurements may be the only way of ascertaining their impact.

Application Note in preparation

An application covering CD-ROM development and duplication is in preparation. Please let us know if you would like a copy when it is complete.

News from other sources

Kate Crennell of Fortran Friends sent us the following information about the following conference. Acorn is not attending this year although we have done so in previous years.

Interactive Learning '94 Conference

Heriot-Watt University, Edinburgh
11th-14th August, 1994

Background

The annual Edinburgh Conference has become the definitive event for practitioners at the leading edge of multimedia and education. In schools, colleges, universities, industry and the home the promise of the computer as a learning tool is starting to be realised.

Who should attend?

Those in education who are strategically involved in the application of the new technologies.
Publishers, manufacturers and producers who have a focus in the educational market place

Scope of this year's conference

Telematics: The Virtual Campus, multimedia networks, computer conferencing, video conferencing, 'Video on Demand', information superhighways, the Internet.

Platforms: Windows-based PCs, Apple Macintosh, Acorn Archimedes.

Video: Video CD/MPEG, Video for Windows, Indeo, Fractals, QuickTime, Replay.

Audio: Speech synthesis, voice recognition

Compact disc: CD-ROM, CD-I, Photo-CD, CD-R

Design: Design for learning, authoring tools and techniques, ScriptX.

Titles: Resource discs and interactive multimedia titles.

Publishing: Size of market, needs, opportunities, CD-ROM publishing.

This year's conference

The enormous success of IL '93, coupled with the rapid growth of interest in educational multimedia, has necessitated plans for a much bigger event in 1994.

There are four main strands to the conference:

The Virtual Campus: Digital technologies re-shape our view of the learning environment, removing barriers of

distance and disability. The Internet points the way to the information superhighways of the future.

CD-ROM Publishing: Digital video adds yet another new dimension to a rapidly-expanding CD-ROM publishing scene.

Authoring IS Learning: Multimedia composition by the communicators of tomorrow is a learning process in itself.

Design and Creativity: We have the technology, but without design and creativity it is but an empty shell.

Organisation

The conference is directed by Roger Rist and his team at the Institute for Computer Based Learning (ICBL) and chaired by John Barker, editor of Inside Multimedia.

Exhibition

A major exhibition will be a feature of this year's conference. An exhibition pavilion is being attached to the rear of the James Watt auditorium to accommodate up to 30 stands.

Posters

Developers (including TLTP projects) are invited to display work.

For further information and registration forms contact

Margaret Sherry
In Conference Ltd
22 Great King Street
Edinburgh EH3 6QH
Scotland
Tel +44 (0)31 556 9245
Fax +44 (0)31 556 9638

Or email your postal address to il94@icbl.hw.ac.uk to request a registration form.

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