

ANSI C (Release 3)



The C programming language is firmly established as the leading language for professional software development. It is the most versatile modern computer language for applications in all fields, and as a result is also increasingly in demand for computer training and education.

C features a rich set of operators and data types, and yet offers a compact, economical syntax that is especially popular with experienced programmers. C combines the flow control and data structures of a high-level language with the ability to address the processor hardware with such efficiency that assembly language programming is rarely necessary.

Now Release 3 of the Acorn ANSI C programming package provides the most powerful software development facility for the Acorn RISC OS range of computers. A full library of RISC OS calls and utilities, together with comprehensive guidance in the 500-page manual and source code examples on disc, make the power of the RISC OS processing and windowing system accessible to all software developers.

INDUSTRY STANDARDS

Acorn ANSI C is a full implementation of the draft ANSI standard language definition. Programs can be transferred between RISC OS and other operating systems, such as UNIX and MS-DOS, with the minimum of conversion work. The compiler has an option to accept pcc-style C as found under UNIX. Conversion utilities are also provided which assist with translating code between ANSI C and old-style C.

COMPREHENSIVE PACKAGE

Acorn ANSI C is supplied as a complete software development package with three 800K discs and a comprehensive 500 page manual. In addition to the compiler, linker, libraries and examples, the package

includes all the tools you need to develop software to professional standards. You can write and edit source files using the standard RISC OS Edit utility, and the specialist programming editor Twin is available from Acorn dealers for increased software development productivity.

EXPLOITING RISC OS

Acorn computers featuring the Acorn RISC processor chips and the RISC OS operating system deliver exceptional processing power. Acorn ANSI C takes full advantage of this power to achieve outstanding performance of your compiled code.

The comprehensive library of RISC OS calls and utilities included with the ANSI C package gives you full access to the powerful operating system, with its colourful, multi-tasking desktop environment. Writing software for RISC OS is covered in depth in the manual and illustrated by source code examples on the support discs, with full guidance on:

- Desktop applications using the Acorn WIMP environment.
- Writing relocatable modules.
- Using overlays in applications.
- Interfacing with assembled code.

The fast and effective windows, icon, mouse and pointer environment that is built into RISC OS allows you to design applications that have a totally professional appearance and feel. All the 'books' you need to integrate your code into the RISC OS environment are provided, with working examples to show how it is done. Your applications will share this common user interface with the wide and expanding range of commercially distributed software available for the Acorn RISC OS computer range. This will give the immediate benefit of quick learning and user enthusiasm for the programs you produce.

THE CHOICE OF PROFESSIONALS

Commercially available software developed using Acorn ANSI C includes:

- RISC OS desktop applications Edit, Paint and Draw.
- Acorn Desktop Publisher.
- Acorn programming tools including Link, Squeeze, AMU and ASD.
- 1st Word Plus.
- Smalltalk.
- PipeDream.
- RISC iX (Acorn's full implementation of the BSD 4.3 UNIX operating system) and the X Window System (developed using the -pcc option of the compiler).

UPGRADE AND MULTI-USER POLICY

Owners of earlier releases of the Acorn ANSI C compiler can upgrade to Release 3 at a favourable price.

Schools, colleges and other institutions can purchase a site licence that permits multiple users (which may be linked to an Econet network) to use the Acorn ANSI C package at a substantial saving on the cost of separate purchases. Additional copies of the manual are available separately.

TECHNICAL SPECIFICATIONS

- Hardware requirements
Acorn computers with RISC OS and a minimum of 1 Mbyte RAM.
- ANSI conformance
December 1988 draft ANSI language standard.
- Benchmark
Dhrystone Version 2.1 (C language):
Microseconds for one run through Dhrystone – 180.7
Dhrystones per second – 5532.8

ACORN, ACORN DESKTOP PUBLISHER and ARCHIMEDES are trademarks of Acorn Computers Limited. 1st Word Plus is a trademark of GST Holdings Ltd. PipeDream is a trademark of Colton Software. MSDOS is a trademark of Microsoft Corporation. UNIX is a trademark of AT & T. X Window System is a trademark of the Massachusetts Institute of Technology.

APP 160 SECOND EDITION JULY 1989

Copyright © Acorn Computers Limited 1989

Every effort has been made to ensure that the information in this leaflet is true and correct at the time of printing. However, the products described in this leaflet are subject to continuous development and improvement and Acorn Computers Limited reserves the right to change their specifications at any time. Acorn Computers Limited cannot accept liability for any loss or damage arising from the use of any information or particulars in this leaflet.

For further information contact your local dealer; for a dealer list, please contact:

Department DL, Acorn Computers Limited
Fulbourn Road, Cherry Hinton
Cambridge CB1 4JN England.
Telephone (0223) 245200
Telex 817875 ACORN G
Fax (0223) 210685
Viewdata (0223) 243642