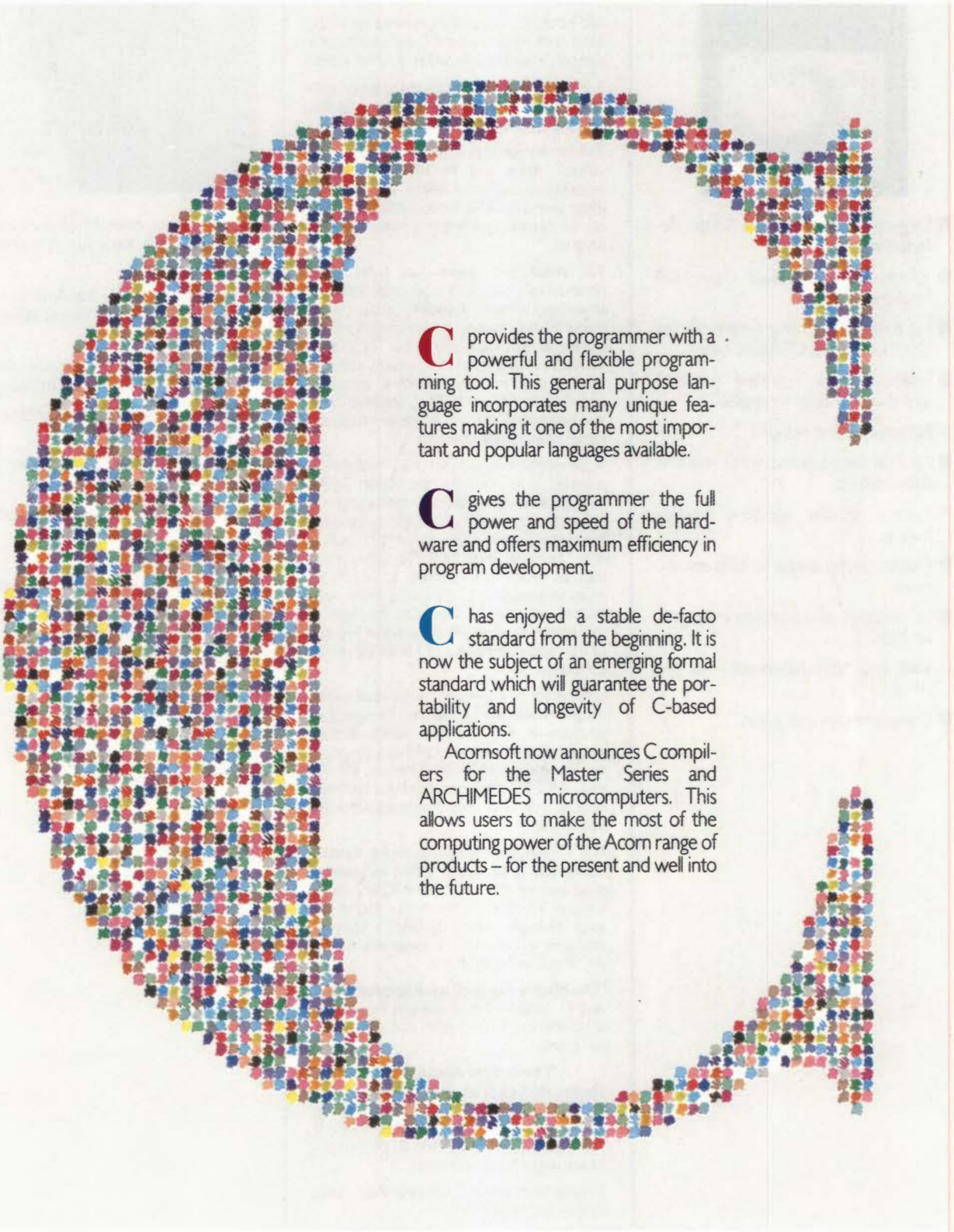
ACORNSOFT



C provides the programmer with a powerful and flexible programming tool. This general purpose language incorporates many unique features making it one of the most important and popular languages available.

C gives the programmer the full power and speed of the hardware and offers maximum efficiency in program development.

C has enjoyed a stable de-facto standard from the beginning. It is now the subject of an emerging formal standard which will guarantee the portability and longevity of C-based applications.

Acornsoft now announces C compilers for the Master Series and ARCHIMEDES microcomputers. This allows users to make the most of the computing power of the Acorn range of products – for the present and well into the future.

C

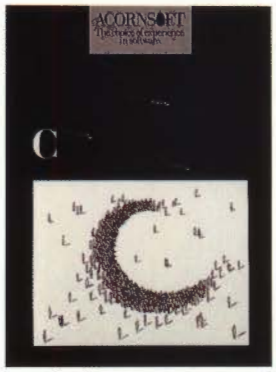
FOR THE MASTER COMPACT
AND MASTER 128
MICROCOMPUTERS

BRITISH BROADCASTING CORPORATION
MASTER SERIES MICROCOMPUTER

C

FOR THE ARCHIMEDES
HIGH PERFORMANCE
COMPUTER SYSTEMS

Archimedes



- Language to Kernighan & Ritchie de-facto standard.
- X/Open library standard – over 100 functions provided.
- Full access to operating system calls (eg OSCLI, OSBYTE, OSWORD, etc).
- Extensive error reporting provided with over 100 error messages.
- Full screen editor included.
- Can call user-supplied 6502 machine code routines.
- System provides run-time function tracing.
- Object can be linked to different libraries.
- Re-direction of input/output streams available.
- **void** data type supported – as per ANSI C.
- Comprehensive user guide.

C can be purchased from your local dealer or from Vector Services Limited. Telephone 0933 79300.

Master Series C	Product Code	SNL28
Archimedes C	Product Code	SKL28

Acornsoft Master Series C is a full implementation of this flexible language based on the Kernighan and Ritchie standard. It consists of a compiler, linker, libraries and a run-time system.

ARCHIMEDES C is a full implementation of the latest draft ANSI standard C and consists of a compiler, linker, libraries and a run-time system.

C is a modern block-structured language with strong data-type checking allowing a flexible approach to program control.

The familiar **for** loop together with the more versatile **while** and **do while** syntax are provided, as well as a **switch** statement for group selections. All of these control structures can be **nested**, resulting in a highly readable program.

The **struct** and **union** data types allow powerful data structures to be constructed in a similar way to Pascal. **typedef** is also provided to give the programmer greater flexibility in the naming of new data structures. The Master Series C includes some more recent additions which appear in many modern C compilers (including the ARCHIMEDES C compiler), such as unrestricted use of structure members' names and the **void** data type.

A comprehensive set of library functions is provided (over 100). For the Master Series, these conform to the X/Open standards group proposals. For the ARCHIMEDES implementation, these conform to the draft ANSI specification. The higher levels of the libraries contain routines which are common to almost all implementations of C. Programs from many sources can easily be moved to Acornsoft C and extensions allow use of particular features of the Master Series or ARCHIMEDES microcomputers.

Systems can be developed as individual source programs and linked together for speed of development. On the Master Series, libraries are provided for memory intensive programs that do not use all library functions. On the ARCHIMEDES, this is unnecessary as the linker includes only those library modules which are referenced.

The C run-time system provides function tracing and a full screen editor for ease of programming. On the ARCHIMEDES, the C compiler interfaces to the Arthur source language debugger which provides a common debugging environment for programs written in C, Pascal and FORTRAN.

The Master Series C package contains:
Two C system discs, a function key card, a comprehensive C user guide and a configuration leaflet.

The system discs contain:
The two discs supplied contain identical compilers. The 5¼" floppy disc with 80T DFS format is for use with a Master 128 or a BBC Model B. The 3½" floppy disc with 80T ADFS format is for use with a Master Compact.

The discs contain the C compiler, the C linker, libraries and header files.

The DFS disc contains a C editor and two command files to configure the C system for use with or without a 6502 Second Processor.

The ARCHIMEDES C package contains:
One 3½" disc, a comprehensive C user guide and a configuration leaflet.

Acorn
The choice of experience.

Acorn Computers Limited
Cambridge Technopark, 645 Newmarket Road,
Cambridge CB5 8PB

- Language to draft ANSI standard (superset of the Kernighan & Ritchie de-facto standard).
- Draft ANSI library standard (over 100 functions provided. Almost identical to X/Open standard).
- Full access to operating system calls (eg OSCLI, OSBYTE, OSWORD etc).
- Extensive, user-friendly diagnostic messages.
- Full IEEE standard floating point arithmetic.
- High quality code generation – approximately 5K Dhrystones on ARCHIMEDES.
- Supports source language debugging.*
- Fully flexible direct linking scheme – inter-language calling supported.
- Re-direction of input/output streams available.

*Note this support is only available in release two onwards. Release one purchasers will be able to obtain an upgrade.

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