The compiler family allows you to compile a variety of programming languages to a DS90 system.
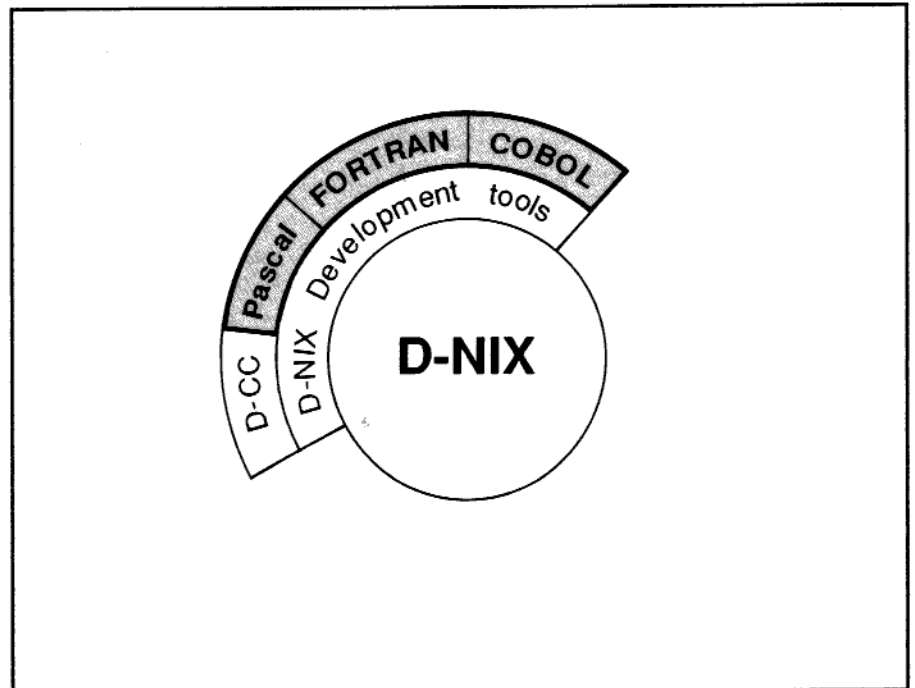**Sophisticated intermediate code optimisers, present in all compilers increase performance and reduce code size.**
Common code generation concept allows intermixing of code.

Different languages

FORTRAN 77

The FORTRAN compiler conforms to the ANSI standard X3.9-1978, has been extended with the EIA bit manipulation features, and is officially validated for Motorola type processors.

Pascal

The Pascal compiler adheres to the Standard Proposal from ISO, and contains features of the Pascal/MT+TM dialect (dynamic string handling).

COBOL

The COBOL compiler can be used in three modes. The ANSI X3.23-1974 standard mode which has been extended to meet the X/OPEN™ COBOL definition, the RM™ mode and finally the CIS™ mode.

Environment

The compilers are available for D-NIX system V.

Programming convenience

D-NIX with extension includes several editors to create and modify programs. With the D-NIX optional Source Code Control System (included in the D-NIX extension package), users can automatically keep an audit trail of program changes and recreate any previous source version.
A wide variety of compiler options is available to accomodate a range of test and development possibilities. All modules can be compiled separately. All cross references are resolved and any required library routines are incorporated into the load module by the linker.

Optimiser

All compilers include powerful optimisers to increase performance and reduce code size.

Datatypes

- Character (one byte). Value between -128 to 127.

- Integer*2. At compiler-time all integer*4 can be converted to integer*2 to save memory. Value between -32768 and 32767.

- Integer*4. Value between -2147483648 and 2147483647.

- Logical integer (four bytes).

- Real (four bytes). Values are based upon an 8 bits exponent and a 23 bit mantissa. Real is converted to double precision at arithmetic calculations.

- Real with double precision. Values are based upon an 11 bits exponent and a 52 bit mantissa.

- Complex.

- Complex with double precision.

- Matrix. The element can be of any type. Multidimensional matrix is allowed.

Debug support

FORTRAN 77, Pascal and the D-CC compilers support the symbolic debugger SDB.

D-CC

For information about D-CC compiler and D-NIX development environment see leaflet D-NIX Development Tools.

Installation considerations

079-8711-XX   D-NIX Extension

Ordering information

079-8108-XX   FORTRAN
079-8104-XX   Pascal
079-8359-XX   COBOL

XX is machine dependent