

Diab's MC88000 toolkit includes D-AS/88K Assembler, D-LD/88K Linker and D-AR/88K Archiver, as well as D-CC/88K optimizing C compiler. These system software tools are designed for professional programmers developing applications for Motorola's 88000 RISC processor. The assembler supports conditional assembly, MC88000 mnemonics and produces COFF (Common Object File Format). Object modules are linked by D-LD/88K and archived by D-AR/88K.

Features and Benefits

D-AS/88K

- o Fully 88000 BCS and OCS Compliant
- o Produces COFF object modules
- o Provides cross reference table for symbols
- o Supports standard MC88000 mnemonics
- o Produces standard Unix directives for organizing code
- o Supports sdb source code debug information
- o Supports conditional assembly
- o Assembles compiler output very fast
- o Produces output listings
- o Accepts binary, decimal, octal and hexadecimal numeric constants
- o Supports long symbol names

D-LD/88K

- o Processes and produces COFF modules
- o Fully 88000 BCS and OCS Compliant
- o Performs Literal Synthesis
- o Generates warnings for unidentified external references
- o Able to perform incremental links
- o Automatically searches archives for missing symbols
- o Supports Link Editor Command Language

D-AR/88K

- o Maintains multiple files in a single archive file
- o Supports Unix System V Command line options

Cross Development Platforms

D-CC/88K, when used with Diab's assembler, linker and archiver, is a complete production quality cross development tool set for the MC88000. It is available on the following platforms:

Sun 3/SunOs	Mac II/MPW
DS90/D-NIX	Delta 68/SVR3
DEC station/Ultrix	Platform 88/SVR3

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D-AS/88K

D-AS/88K supports features that professional programmers need to develop system software and applications for Motorola's 88000 RISC microprocessor. It produces Motorola modified COFF (Common Object File Format) object modules that can be linked with other assembled or compiled modules.

D-AS/88K provides "standard" Unix directives for organizing code into efficient sections or modules such as text or data sections. It produces a cross reference table for symbols and has the capability of emitting debug information that can be used by COFF conforming debuggers.

D-AS/88K supports conditional assembly. This provides a way to include code selectively, depending on the value of conditions.

D-LD/88K

D-LD/88K Link Editor combines COFF object modules produced by compilers and assemblers into one executable COFF file. The object modules consists of sections that are linked together and

relocated into output sections. The names of the sections are typically *text* for sections containing executable machine code, *data* for initialized data and *bss* for uninitialized data.

D-LD/88K performs literal synthesis to handle 32-bit addressing with 16-bit offsets.

The linker makes it possible to specify how memory is configured with the Link Edit Command Language.

D-AR/88K

D-AR/88K Archiver maintains multiple files grouped together into a single archive file. If any of the included files are a COFF object module, the archiver will generate an invisible symbol table file. With this generated information, D-LD/88K can search for missing identifiers.

D-AR/88K supports "standard" Unix System V command line options to create, extract, insert and replace files in the archive.

DIAB DATA