

*Now that you've
decided you're ready
for C, there's just
one decision left
to make...*

Microsoft® QuickC™

Microsoft®

...and it's the easiest decision

It's really quite simple. You've chosen C, the high performance language, and you want to get all you can out of it. You want a package that provides all the power and features you need, but is supportive enough to get you through the rough spots. And you want a system that's complete—right out of the box.

The right decision for you? Microsoft QuickC Compiler. It has everything you need to hit the ground running, all in a completely integrated environment. So instead of conventional C programming with a separate editor, compiler, debugger, and linker, Microsoft QuickC lets you program with a complete, unified system. Everything is right in front of you all the time, so there's no switching between tools and no wasted time.

And to get you going quickly, Microsoft QuickC comes with the most complete set of learning tools in the business, so mastering the ins and outs of C is all very basic.

you'll ever make.

It's the smartest decision, too.

Smart, because Microsoft QuickC offers a fully integrated, menu-driven environment. All the programming tools you'll ever need, all in one place, all working together.

This editor may become your best friend.

The Microsoft QuickC editor helps you write source code easily and efficiently. You can cut, copy, and paste anything—from a single character to whole sections of code. Enter your code in insert or overtype mode. Edit more code at a time in 43-line text mode with an EGA card. And Microsoft QuickC is compatible with ProKey™, SuperKey®, and SideKick®.

Other editing features include parentheses and brace matching, which isolates blocks of code, including nested blocks. Sophisticated Search and Replace commands that even let you search for regular expressions. A "hot key" so you can toggle back and forth between two files for easy reference. And because you're only human, an Undo command to help bail you out of trouble.

Correcting compile-time errors has never been easier, because the editor actually *points out* your mistakes. The editor and compiler work as a team: When the compiler detects an error, the editor puts the cursor on the problem line of code. There's also an error window that displays a precise description of the error. And unlike some compilers that quit after finding the first error, Microsoft QuickC keeps track of up to 26 errors at a time, so you'll spend less time recompiling.

A program maintenance utility to make your day.

C programs are often made up of multiple modules. Microsoft QuickC's program maintenance utility (MAKE) gives you an easy, intuitive way to build your programs. Simply identify which modules you want to use, and MAKE automatically generates your program for you. As you make additional changes, MAKE looks at which modules have been modified since the last compile and recompiles and relinks only those modules that need to be updated. It's an efficient, intelligent way to generate your programs.

A compiler that will set your source code on fire.

Just tell Microsoft QuickC to compile, then step back. Because at speeds of up to 10,000 lines of code per minute, this compiler really smokes. And single-module programs compile even faster since there's no link phase.

A dialog box presents you with a full array of compile-time options when you're ready to compile. Just select the options you want, and the compiler does the rest. And to make your programs execute even faster, you can choose to optimize your code when it compiles. This optimizing technology, borrowed from Microsoft C Version 5.0, assures you of higher quality code for faster executing programs.

The compiler also features a built-in warning system that guides you as to safe and accepted programming practices. There's a choice of four levels of messages, so you can start out with full warnings and scale back when you're more confident.

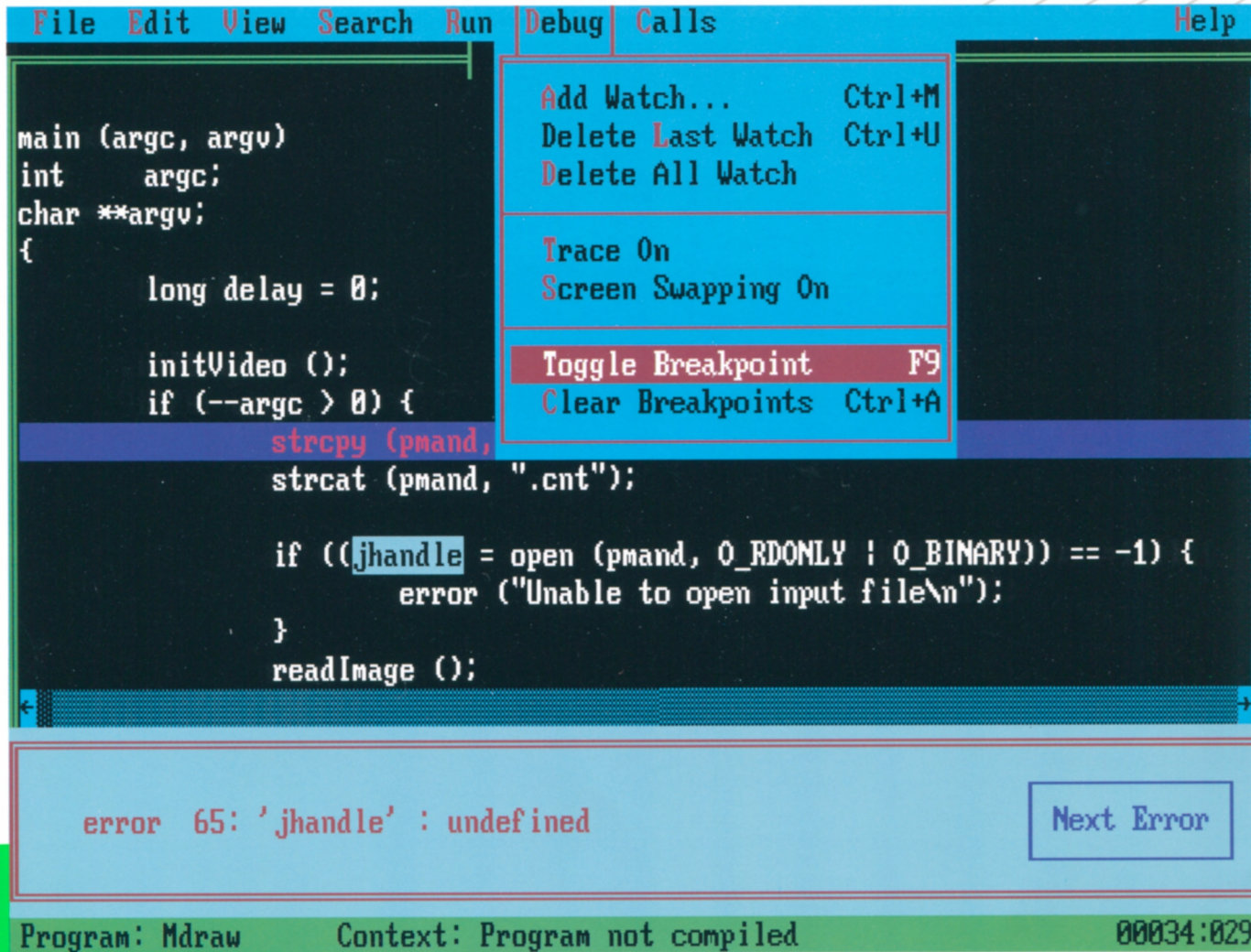
An integrated source-level debugger. Because nobody's perfect.

Microsoft QuickC puts you in complete control of debugging with an advanced, integrated source-level debugger. You see exactly what your program is doing in the same language you wrote it in, so you can approach debugging in the same way you approach programming. Based on the advanced technology of our celebrated Microsoft CodeView® debugger (standard with Microsoft C Compiler), Microsoft QuickC's powerful debugging features are instantly available whenever you need them.

You can single-step, animate, or trace through your source code to see the flow of execution. Dynamic breakpoints stop program execution at any point you choose. And the watch window lets you track multiple watch variables so you can see the values of local or global variables change as your program runs.

By isolating and examining sections of code, you can see where your program is going and why. And the stack backtrace tells you how your program got there. Program execution can always be stopped with a simple CTRL-Break, so you can begin editing or compiling immediately.

Total integration. Totally amazing!



The screenshot displays a development environment with a menu bar (File, Edit, View, Search, Run, Debug, Calls, Help) and a code editor window. The code editor shows a C program with a menu open over the 'Debug' menu item. The code includes a main function that calls `strcpy`, `strcat`, `open` (with a variable `jhandle` highlighted), and `readImage`. The error message at the bottom reads "error 65: 'jhandle' : undefined". The status bar at the bottom shows "Program: Mdraw", "Context: Program not compiled", and a timestamp "00034:029".

```
main (argc, argv)
int   argc;
char **argv;
{
    long delay = 0;

    initVideo ();
    if (--argc > 0) {
        strcpy (pmand,
               strcat (pmand, ".cnt");

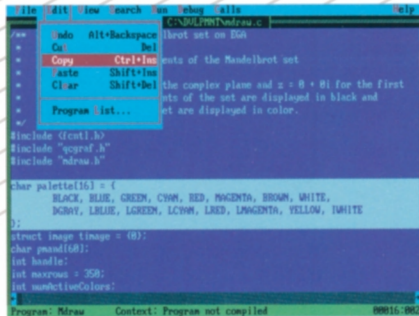
        if ((jhandle = open (pmand, O_RDONLY | O_BINARY)) == -1) {
            error ("Unable to open input file\n");
        }
        readImage ();
    }
}
```

error 65: 'jhandle' : undefined

Program: Mdraw Context: Program not compiled 00034:029

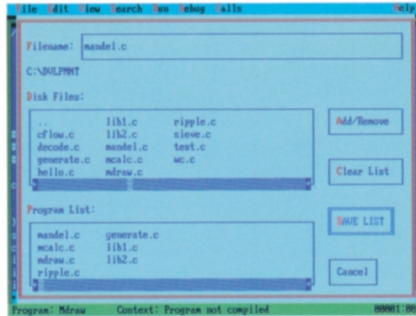
Total integration.

All your programming tools are at your command the moment you need them. Just a simple menu choice and you're working with an editor that lets you cut, copy, paste . . . a compiler that positions you on the line where any errors occur . . . and a debugger that allows you to set breakpoints, trace through your program, and set watch variables. It's that easy because you're always where you want to be.



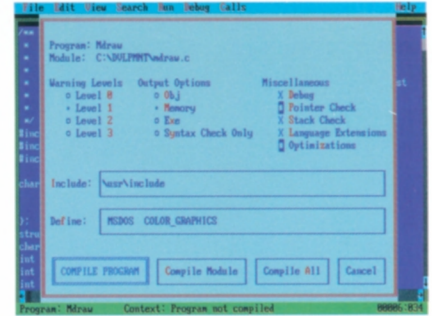
Editing.

Drop-down menus make editing a snap. If you want to move a section of code, just highlight it, cut or copy your selection, and paste it in the new location.



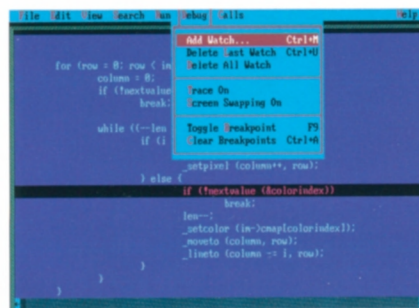
Program maintenance.

The program maintenance utility (MAKE) works totally in memory along with the compiler and linker for smooth and efficient program development. Simply give MAKE a list of file names, and it will automatically compile and link those modules into a single program.



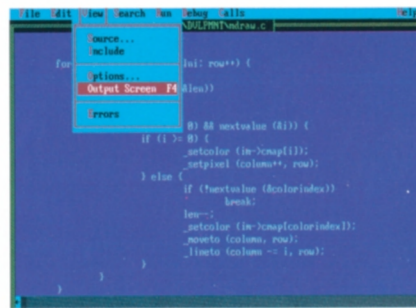
Compiling.

The compiler dialog box gives you a wide range of compile-time options so you can tailor compiling to your specifications. There are choices for output options, warning levels, and optimizations.



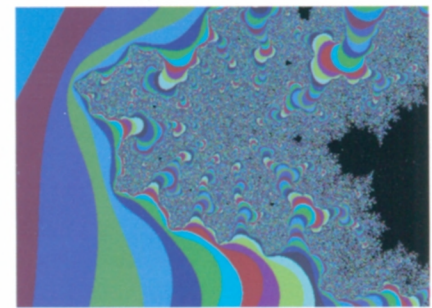
Debugging.

Integrated debugging lets you run the show because the tools are always at your fingertips. You can easily set dynamic breakpoints and watch variables (without recompiling) to help isolate problems in your code. A drop-down list of CALLS even shows you all the functions called on the stack.



Screen swapping.

You can easily switch between QuickC and your program's output to see what effect your changes have had. This is especially valuable for screen-intensive applications because it lets you see an entire screen of actual output.



Your finished application.

Created in less time than you'd think possible. Microsoft QuickC and its powerful set of integrated programming tools let you make the most efficient use of your most valuable resource—your time.

All the muscle you need for C programming.

You want to program in C because it provides unmatched power and versatility. Microsoft QuickC furnishes you with more than just the essentials. It gives you a wide range of tools to help put more punch in your C programs.

Full-featured libraries provide power and flexibility.

Microsoft QuickC supports over 300 library routines, including UNIX® System V, Microsoft specific, and proposed ANSI standard routines.

Take advantage of the extensive graphics capabilities of the IBM® Personal Computer with the free graphics library included with Microsoft QuickC. Create exciting, full-screen graphics programs, including programs with EGA support. There's also a graphics example program you can use to perfect your graphics technique.

Microsoft QuickC offers you a choice of math support, including direct in-line support for the Intel® 8087 and 80287 math coprocessors. These in-line instructions produce math routines with minimum code size and maximum speed. And for the same high degree of accuracy without a math coprocessor, there's a floating-point emulation package.

Memory model support lets you manage memory efficiently.

Microsoft QuickC supports small, medium, compact, and large model programs and includes the same medium model library as Microsoft C Optimizing Compiler Version 5.0. There's also support for mixed model programs with the NEAR and FAR keywords, so you can make your programs as small and as fast as possible.

Compatible beyond reproach.

Microsoft QuickC was designed from the ground up to support the same language and libraries as Microsoft C Optimizing Compiler Version 5.0—the choice of professional programmers who need the ultimate in speed. Just relink your object modules, and you'll be off and running.

You can also link your Microsoft QuickC programs with routines from other languages to take advantage of each language's unique strengths. Support for interlanguage calling lets you use routines written in Microsoft FORTRAN, Microsoft Macro Assembler, and Microsoft Pascal.

Superior documentation. The key to on-the-job training.

Whether you're completely new to C or have more than a few lines of C code under your belt, Microsoft QuickC provides the support you need with the most comprehensive documentation package available anywhere.

A tutorial section helps you learn C quickly and is perfect for BASIC or Pascal programmers. "How to" sections bring you up to speed quickly with the included graphics and I/O packages. A reference section provides hundreds of tested examples that clearly demonstrate how library functions are used. And an extensive index helps you track down information quickly.

For quick answers to questions on statement syntax and library functions, there's an integrated, context-sensitive help facility. No matter what level of help you need, you get it with Microsoft QuickC.

Utility and versatility complete the package.

The more you get into Microsoft QuickC, the more you'll appreciate all the extras we've included with it. You can, for instance, create, organize, and maintain Microsoft QuickC object module libraries with the library manager. And once a library is built, the subroutines can be called directly by your Microsoft QuickC program.

The object code linker is a single-level overlay linker that combines relocatable object modules created with Microsoft languages into a single program.

And CFLOW—an example program that's included with QuickC—is a valuable cross-reference utility that tells you where your functions are referenced.

All Microsoft QuickC commands can be carried out with either the keyboard or a mouse. And if you prefer, you can use Microsoft QuickC in batch mode from the command line instead of through the integrated environment.

Microsoft QuickC will change the way you think about integrated environments and the way you think about programming.

Which is why we say that deciding on Microsoft QuickC is one of the easiest, one of the smartest, and, clearly, one of the best decisions you'll ever make.



Microsoft QuickC System Requirements

- ▶ IBM Personal Computer or compatible
- ▶ 385K memory
- ▶ DOS 2.0 or higher
- ▶ One double-sided disk drive

Note: Use of the Microsoft Mouse is optional. Microsoft QuickC is available in 5¼" and 3½" disk formats.

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