

BULLETIN SEPTEMBER 1989

Take full command of systems and applications programming on the IBM-PC with ...

ADVANCED TURBO C

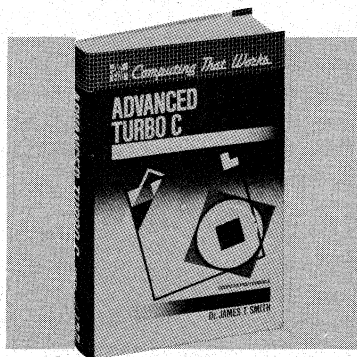
By JAMES T. SMITH

256 pages, 6 x 9, 35 illustrations

Turbo C is literally revolutionizing programming for the IBM-PC family. And now, to have the full power, versatility, portability, and elegance of this exciting tool at your fingertips, simply reach for this month's Main Selection, James T. Smith's *Advanced Turbo C*. It's your best source for mastering Turbo C's special features and programming strategies ... for learning to write large, efficient programs quickly and easily... and for developing practical, reliable software for virtually any application you or your customers demand.

A total systems approach — with emphasis on the design and use of tools

This outstanding volume brings together comprehensive, in-depth guidance on essential Turbo C concepts and the best methods for implementing them. It helps you achieve total control over your hardware and software environment without resorting to assembly



language, leading you from commonly-encountered but often tricky string processing problems all the way through to such advanced topics as the construction of keyboard and timer interrupt service routines. You'll get a firm grip on techniques for screen handling with windows and menus, directory searches, execution of other programs, memory management, and every other task involved in turning an applications program into a polished, interactive, professional software package.

You'll also find a thorough description of one of the most complete systems programming toolkits for Turbo C — *Turbo C Tools* from Blaise Computer, Inc. You'll see how Turbo C overcomes the limitations of DOS ... and why it is so effective for both high-level programming and the low-level jobs previously handled by assembly language routines. You'll even discover some of the inevitable pitfalls of Turbo C programming, together with ways of overcoming them.

A wealth of expert advice — supported by abundant programming examples

You can count on this book to furnish accurate, up-to-date answers to questions about Turbo C programming ... and to make every principle and practice covered readily accessible. Its crystal-clear explanations are supplemented by fully-documented programming examples, while its logical organization builds the step-by-step understanding you need to use Turbo C effectively in your work. In particular ...

The Introduction covers the basic elements of Turbo C, explaining software tools and development ... the Turbo C library ... and some of the advantages, disadvantages, and applications of Turbo C.

Memory Organization zeros in on the interplay between hardware and software. It discusses PC memory structure, the Turbo C features that work directly with memory, and provides six Turbo C memory models.

String Processing examines string analysis, synthesis, and manipulation — as well as text strings, numerals, and money and time. This chapter also serves as the foundation for subsequent coverage of advanced Turbo C programming and the use and development of software toolkits.

Screen Handling progresses from an overview of the fundamentals to specifics on display and buffer attributes, screen handling with *Turbo C Tools*, and *Turbo C Tools* screen windows.

Keyboard Input offers precise information on the BIOS keyboard buffer, together with *Turbo C Tools* keyboard handling and menu features.

File Handling tells you all about file handle input/output, stream input/output, and directory manipulation.

Memory Management and Program Execution is devoted to Turbo C Library techniques. You'll get current guidelines for memory allocation among programs, executing other programs, chaining, and much more.

Interrupt Services brings you down-to-earth treatment of both the interrupt process and the operating systems services offered to your programs via interrupts. You'll learn all about interrupt vectors and executing interrupts ... BIOS and DOS interrupt services ... printer services ... clock and calendar services ... serial communications services ... and also error handling.

Interrupt Service Routines shows you how to create your own custom interrupt service routines with *Turbo C Tools*. It gives full attention to obstacles that may arise from poorly-designed DOS features and techniques for circumventing them.

The Appendices cover prototypes of useful functions, declarations, and definitions; ASCII/IBM codes; keyboard codes; and DOS error codes. They also describe the optional diskette, which contains source code for all programs and routines listed in the book. A bibliography and index are also included.