A Dynamic New Formula For High Quality Compilers: The Philon Approach™ = Fast Execution + Portability
"A product that uses state-of-the-art techniques for building systems software."

A Product Designed With The Programmer And End-User In Mind: Fast To Develop And Fast To Execute

The Philon Approach is a highly effective and cost-efficient system which uses state-of-the-art techniques for building systems software. It is comprised of:

- A Completely Integrated System of compiler front ends, debuggers, code generators, operating system interfaces, and run-time libraries, housed in.

- A Totally Portable Environment capable of being moved from one hardware/operating system to another, boasting.

- A Highly Efficient System that affords the end-user unprecedented speed of execution plus development features generally offered only by mainframe compilers, including:
  
  - Extensive semantic checking
  - Easy-to-understand error messages
  - Quick location and correction of programming errors
  - Testing tools
  - Inter-language subroutine linkage
  - A high-powered debugger

The Philon Approach is produced and maintained by a staff of highly-trained professionals. They are dedicated to the ongoing support of their products and clients.
A Unique Compiler Capability To Meet The Needs Of Hardware Manufacturers, System Integrators, Application Suppliers, And The Government

How It Works: Phi-Code

The Philon Approach provides an integrated method of developing language systems and uses common intermediate code called Phi-Code.

This Phi-Code is environment independent and may be used to generate the object code for the target machine. Phi-Code can also be interpreted by a high-level debugger—the Phi-Analyzer—which references and displays the program source code.

The Object Code Generator accepts the Phi-Code and produces optimized object code. The final program is surrounded by its own environment, including the operating system interface and run-time libraries. Only the object code generator and the operating system interface need be modified for each hardware/operating system environment that is chosen—a relatively simple task.

As a result, the full complement of Philon compilers can easily and cost-effectively be moved to a new environment.

How It Debugs: The Phi-Analyzer

The Philon Approach includes a high-powered debugger of unexcelled efficiency: the Phi-Analyzer.

Serving as a common debugger across all Philon languages, the Phi-Analyzer provides these functions:

- **Single-Stepping**
  Executes Phi-Code one statement at a time

- **Variable Monitoring**
  Continuously displays the values of programmer selected variables

- **Profiling**
  Counts the number of times a statement is executed

- **Breakpoints**
  Stops execution on a particular statement, when a given variable is modified, or when a particular programmable condition is met

- **Variable Modification**
  Permits variable values to be modified at breakpoints

The Phi-Analyzer operates on the intermediate Phi-Code and displays each source statement as the program executes. Additionally, the Phi-Analyzer can be used in a “quick compile” mode without object code being generated. This saves the programmer considerable time in testing and debugging.
How To Provide Programmers With Fast Executing, Efficient—and Portable—Compilers

For years, the challenge to the industry has been clear: design an integrated series of very fast executing compilers that will be portable over a wide range of hardware/operating system environments. . . . a product that brings the capabilities of mainframe quality compilers to micro's and mini's. And develop an approach that must provide:

- Fast execution of programs
- Full instruction sets and additional capabilities that assist the programmer in developing efficient application systems.
- Extensive and easy-to-read error messages, in addition to an interactive debugger, help the programmer save time.
- Compilers that can be easily modified and maintained

In 1980, Philon, Inc. was formed to meet this specific challenge. The result: a singularly effective solution—The Philon Approach.
The **PHILON** Approach...

An essential system to serve both your current and future needs,

Supported by a highly trained, dedicated team of professionals.

- Designed for Fast Program Execution...
- Designed for Portability...
- Designed for the Programmer...
- Designed for You!
For more information about how you can profit from The Philon Approach, complete and return the attached convenient reply card. Or call:

Bob Gildenberg  
Vice President of Marketing

PHILON, INC.  
(212) 807-0303

YES! I am interested in learning more about how The Philon Approach can maximize my current and future application development productivity.

□ PHILON FAST/ BASIC-C
□ PHILON FAST/ BASIC-M
□ PHILON FAST/ COBOL
□ PHILON FAST/ C
□ PHILON FAST/ RPG