



Language Processors Inc.

COMPANY PROFILE

Introduction

Language Processors, Inc. (LPI) was founded in 1980. Today, it employs more than 70 people and counts among its customers some of the world's largest manufacturers of computer systems and software development firms.

LPI was among the first independent software suppliers to offer a production-quality family of high performance compilers and related software development tools. The compilers were first designed to run on the Motorola™ MC68000 microprocessor, and have been extended to power WE32100 and INTEL 80386 microprocessors. This positioning helped make LPI the top supplier of compilers for "wide word" chips and UNIX/XENIX-based systems.

LPI Technology

What sets LPI apart from other independent software vendors is its commitment to produce an integrated family of true, high performance compilers. To meet this goal, LPI pioneered a modular approach to compiler development, called Component Architecture.

This technology segments the functions of compilers into discrete components. Only the front end component — which contains the command structures and syntax for the particular language—differs across each of LPI's seven languages. All other components are common to each compiler.

This approach minimizes the amount of compiler code that is tied to a particular machine, enhancing the reliability of each compiler. It also allows us to extend and modify key components — front-ends, code generators and run-time systems — quickly.

Our Component Architecture also includes:

- A special table-driven development tool, called a Code Generator Generator, that allows us to produce a code generator for a new machine semi-automatically; and
- A table-driven front-end technology that streamlines the implementation of source language extensions for easy migration of customer applications.

This technology allows us to port our languages to new systems with relative speed, without sacrificing true compiler performance.

THE PRODUCTS

LPI's family of compilers includes LPI-COBOL, LPI-FORTRAN, LPI-PL/I, LPI-PASCAL, LPI-C, and LPI-BASIC, each operating with our powerful source-level debugger, LPI-DEBUG, and LPI-RPG II which includes compiler and system utilities.

Designed for Performance:

- Each LPI language is a true compiler that products native code, tuned to the host hardware.
- Each language includes a sophisticated optimizer that streamlines source code to produce efficient applications.
- LPI languages accommodate large applications; they impose no artificial size limitations on programs.
- LPI compilers result in superior run-time performance.

Designed for Productivity:

- Comprehensive error messages not only identify errors, but also point out their exact location and often specify how to correct them.
- Cross-language calling allows developers to combine programs written in different LPI languages within a single application. Using any LPI language, developers can also access data files stored under programs written in other LPI languages.
- LPI-DEBUG is a powerful debugger that works with all LPI languages, except LPI-RPG II. Designed to speed program development and software maintenance, it lets you test your programs interactively using the conventions and symbols of the source language.
- LPI languages feature a common user interface. This means programmers only have to master a single set of easy commands to operate all LPI compilers.

Support Current Language Standards

Besides adhering to established or de facto industry standards, LPI compilers are compatible with popular language dialects. As a result, customer applications can be moved to a new system that hosts an LPI compiler simply by recompiling the programs.

Language standards:

LPI-COBOL: ANSI standard X3.23-1974 at the high level; RM/COBOL and Microfocus COBOL Level II compatible.

LPI-C: Kernighan and Ritchie C.

LPI-PASCAL: ANSI/IEEE standard Pascal.

LPI-RPG II: IBM System/3, System/34 and System/36.

LPI-PL/I: ANSI standard PL/I General Purpose Subset.

LPI-FORTRAN: ANSI standard FORTRAN-77.

LPI-BASIC: ANSI minimal BASIC; Microsoft BASIC and CBASIC compatible.

Support

LPI provides its customers with dedicated, on-going support, including:

- Clear, concise documentation: a comprehensive Language Reference Manual that describes the commands each language supports and a User's Guide that explains how to operate an LPI compiler on a specific hardware system;
- Responsive Hot-Line Service staffed by experienced compiler writers;
- Maintenance Update Service that provides customers with software releases which include new features and functionality as well as bug fixes; and
- Rigorous quality assurance to ensure high standards of product stability and performance.

Proven Products

LPI compilers are currently available on the following hardware systems:

Altos 3068.

Arete 1200 and 1600.

AT&T/IS UNIX PC, 3B1, 3B2, 3B5, 3B15, and 3B20.

Burroughs XE550.

Convergent Technologies' S/50, S/120, S/220, S/320, S/640, S/1280 CTIX.

Enmasse ECS 1000, 1250, and 1500.

Motorola VME-10.

NCR Tower Family.

Sagem Carrousel 10/100/200.

Sperry 5000/20, 5000/40, 5000/50, 5000/60, 5000/80, and 5000/90.

Sun Microsystems SUN 2 and SUN 3.

The LPI Advantage: Benefits

LPI compilers produce fast and compact machine code to significantly boost the performance of most applications.

As powerful porting tools, LPI compilers enable customers to upgrade hardware to take advantage of superior price/performance without the expense and trouble of reworking current applications. This same feature allows software developers to offer their application packages on a broad range of systems.

Component Architecture allows LPI to tune its family of compilers to a new hardware system relatively quickly — without compromising performance. This allows OEMs to introduce a new system that is equipped with a full set of quality development tools and to minimize its time to market.

LPI compilers provide programmers with a complete and productive development environment. Features such as error handling, cross-language calling, code optimization, common user interface and LPI-DEBUG result in greater programmer productivity and lower development costs.



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