

- 32-bit transputer based accelerator package that delivers the power of parallel processing and Reduced Instruction Set Computing (RISC) technology
- Unlimited expandability allowing the construction of large parallel processing systems
- 4 high-speed inter-processor links

**TransLink™**

**High-Speed Parallel Processing  
for the Macintosh II and Macintosh SE**



# TransLink™

LEVCO's TransLink is an expandable, transputer based accelerator package that delivers the power of parallel processing and Reduced Instruction Set Computing (RISC) technology to the Macintosh II™ and Macintosh SE™.

TransLink is a modular parallel processing system consisting of TransLink Cards for the Macintosh II and Macintosh SE, a variety of transputer modules which plug onto the TransLink Cards, and a complete set of software development tools.

## Innovative Transputer Technology

The heart of the TransLink is the INMOS™ Transputer, a high-speed parallel processor. The 32-bit transputer contains 4 inter-processor links which provide ultra high-speed communication and synchronization, the key to effective parallel processing. With a throughput of 10 million instructions per second (MIPS), a single transputer delivers the performance of a VAX™ 8600 mainframe computer! In LEVCO's TransLink system, individual transputers are mounted upon credit-card sized modules which also carry high-speed RAM.

## TransLink Cards Provide Unlimited Expandability

Transputer modules plug into TransLink cards and act as modular building blocks, allowing the construction of large parallel processing systems.

LEVCO's TransLink II Card for the Macintosh II is a single-slot Nu-Bus card that holds up to 4 transputer modules. The TransLink SE Card for the Macintosh SE plugs into the Macintosh SE Bus, and holds up to 2 transputer modules. Starting with a TransLink Card configured with a single transputer module, a system can be expanded by plugging in more transputer modules, adding extra TransLink Cards, or even by linking multiple Macintosh computers together. Parallel processing systems comprised of thousands of transputer modules are possible.

## Transputer Processors

Transputer Modules are available with either the INMOS T-414 integer processor or the T-800 floating-point processor with full 64-bit IEEE floating-point support on-chip. The 20-MHz T-800 processor performs floating-point operations at an impressive 4 million Whetstones/second. This processing power makes the TransLink invaluable for applications such as scientific computing, signal processing, image processing, artificial intelligence, high-resolution graphics and large data-bases. Transputer Modules with different processor speeds can be mixed on a single TransLink Card.

## Transputer Memory Options

Individual transputer modules can be configured with either 1 or 4 megabytes of fast 100 nanosecond RAM arranged in a 32-bit wide data path. These high-speed

memory configurations take advantage of the transputer's 25 Megabytes/second memory interface. Transputer modules with different memory sizes can be mixed on a TransLink card.

## Programmable Link Switch

A programmable link switch on the TransLink II Card makes configuring the inter-transputer links simple and straightforward. The link switch functions like a switchboard, allowing up to 32 transputer links to be interconnected in any desired arrangement. Inter-transputer links on the TransLink SE Card are configurable as well. All links have full DMA transfer capability at 20 megabits/second.

## Complete Software Development Tools

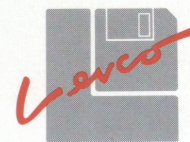
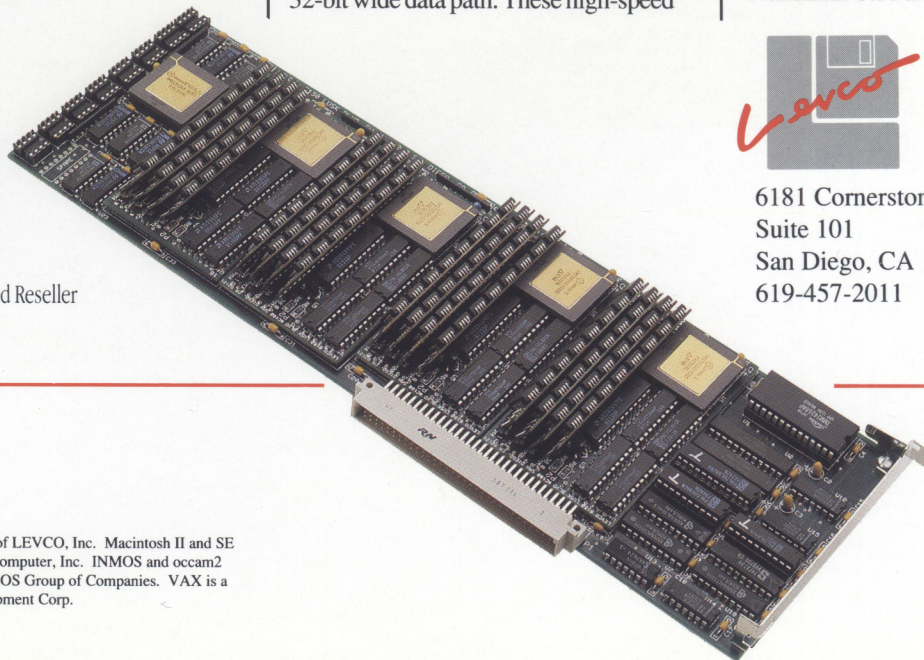
LEVCO offers a full complement of software development tools designed to run under the Macintosh Programmer's Workshop (MPW). The complete development system includes a C Compiler, Transputer Assembler, Linker and Loader. A software simulator is presently under development. The full INMOS™ occam™ 2 development system is also available through LEVCO.

## Low-Cost Starter Kit Available

Low-cost starter kits for the Macintosh II and Macintosh SE are available, including a single transputer module (15-MHz Transputer processor and 1 MB of RAM), TransLink Card and Software Toolset.



Authorized Value Added Reseller



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