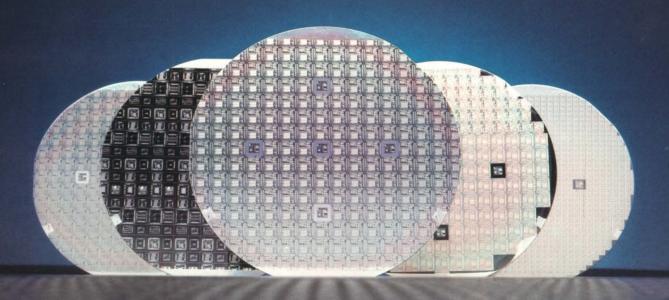
TOMORROW TODAY



CELL-BASED CUSTOM ICs FROM VTI.

FOLLOW THE LEADER AND YOU'LL END UP IN FRONT.

Until now, if you wanted to use custom IC designs to make your products more competitive in the marketplace, you had to have a large volume requirement and a very big budget. Thanks to VTI, that's all in the past.

We have the proven custom design solution that goes beyond gate arrays. One that brings your product to market much faster. Differentiates it more easily and makes it more cost-effective by dramatically reducing the risk, lengthy design times, and enormous costs of traditional custom design.

It's called cell-based custom—an exclusive process that utilizes the most advanced design technology available. And it's only available from VTI.

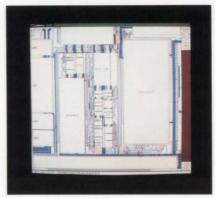
Get your product up to speed...fast.

Even if you've never had IC design experience, you can quickly create cell-based ICs with VTI's unique IC design system. By yourself, jointly with our skilled engineers, or we can do it for you.

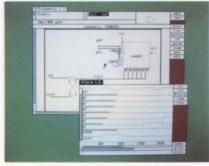
VTI has developed the tools needed to automate all the steps in IC design, and it couldn't be easier. And our tools are technology-independent, so you can choose HCMOS or HMOS, depending on your system requirement.

Schematic Entry. Design capture that's fast and easy.

VTI's Schematic Editor uses familiar functional blocks and



Composition editor and cell compilers.

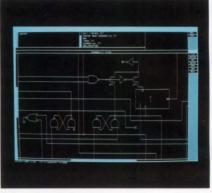


Logic/Timing simulation.

logic symbols. Once placed in the schematic, the symbols can be connected, automatically creating an electrical netlist.

Cell Compilers. Cost effective, powerful and flexible.

Our unique Cell Compiler™ library contains the building blocks needed to design your system in silicon. Cell features such as circuit speed, I/O drive capability, data path width and functional repetition all can be specified. And parameterized versions of RAMs, ROMs, PLAs, ALUs and other sub-systems are at your fingertips.



Schematic entry.

The Composition Editor. Autorouting the final design.

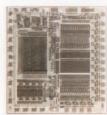
This powerful tool allows easy and efficient chip layout and autorouting. An arbitrary block router with autocompaction capability minimizes die size and production costs.

Logic/Timing Simulation. For verifying your design.

Our logic simulator verifies functional correctness of the schematics, and then predicts the IC's performance with timing simulations based on delay information taken from the physical design.

At VTI, tomorrow's design technology is here today.

Cell-based custom design is your low risk solution for cost



Graphics controller, 20,000 gates – 16 wks to working silicon.

effective chips from 500 gates to more than 20,000. With VTI's technology your designs can be completed in weeks, not

months. The bottom line: you can accurately match an IC design to your system requirement, and know that it will work the first time.

DESIGN IN YOUR OWN NEIGHBORHOOD.

Now that you've seen how productive VTI's cell-based approach is, let's turn to how simple it is to use.

You no longer have to travel to the factory to take advantage of our IC design system and support. Our Design Centers throughout the United States and Europe provide training, tools and expert engineering consulting services. We actually transfer our technology to you through our intensive training program and joint design projects.

Joint Designs. A team effort for your next project.

One of the most effective ways to develop your next project is to establish a partnership team consisting of your system or logic engineers and our expert IC designers. You bring a clear understanding of your system and can evaluate alternatives to improve performance, add features or reduce cost. And we have the IC design experience.

Design classes for all skill levels.

Because we recognize the varying skill levels of systems designers, we've broken our VLSI training program into three sections. The first introduces design methodology and

tools, using a simple design example. The second covers cells and tools for more complex designs. And the third teaches procedures for designing and verifying custom cells, plus production considerations. Each class provides you with a VLSI design workstation for hands-on experience.

The VLSI Design Workshop. Your own design in silicon.

With no more than introductory class experience, you can bring your design problem to one of our Design Centers. You get complete access to our design tools, and our people are available to answer your questions. And your IC design



A joint design project.



A VLSI design course at our San Jose Design Center.

will be manufactured in evaluation quantities using VTI's quickturn fabrication facility in San Jose, California.

TURNAROUND THAT WILL TURN YOUR HEAD.

If you're impressed with how we've made custom VLSI design technology practical, you'll appreciate what we've done for production. Most fabrication services offering advanced processes have been available only to large companies with high volume requirements. But VTI has changed that for good. Our silicon foundry service, The Silicon Express™ accommodates your fabrication needs -from prototypes to full production, from NMOS to HMOS to HCMOS - regardless of the quantity required or whether you use our design technology, your own, or

Quality is our top priority.

someone else's.

We meet or exceed the quality levels of the merchant semiconductor industry. Your designs are manufactured using the same high standards that we apply to our own product lines. After all, we have a vested interest in your successyour future business.

VTInet™ Your direct link with us.

Using our exclusive electronic foundry interface, VTInet, your database files may be transmitted to us. This express communications service also functions as an electronic mail system that provides you scheduling and order status, as well as direct technical interfacing. You get the answers you need quickly and easily.



VTI's guick-turn foundry features the latest advances in process technology and equipment.

The Multi-Product™ Wafer It lets you share the wealth.

Our exclusive Multi-Product Wafer (MPW) is nothing short of phenomenal. Tooling and wafer costs for evalua-

tion quantities are significantly me me me me me m reduced by combining several different circuits onto one set of tooling for the wafer run. And for your production needs we also offer conventional dedicated tooling. In all, you get top quality, fast-turn and rock-bottom prices.

Testing and packaging. A wide variety of alternatives.

An example of

our exclusive Multi-Product

Wafer.

The VTI foundry uses advanced

test systems. You can provide the test programs, or we can generate them from your device specifications and data pattern information. Finally, we offer a variety of packaging options - from high volume, low cost plastic to specialized ceramic packages including chip carriers and pin-grid arrays. .

For more on how VTI can solve your custom VLSI problem, mail the coupon, contact any of our locations below, or call 408-942-1810.

Sales Offices

San Jose, CA 408-942-1810 Irvine, CA 714-833-3103 Atlanta, GA 404-446-1326 Dallas, TX 214-231-6716 Boston, MA 617-229-6555 Poughkeepsie, NY 914-462-1600 Hartford, CT 203-644-4187

Design Centers

San Jose, CA 408-943-0264 Boston, MA 617-229-6555 Dallas, TX 214-231-6716 Ivrea, Italy 39-125-522929



VLSI Technology, Inc. 1101 McKay Drive San Jose, California 95131

☐ Cell-based Design Tools☐ Design Centers and Training				
My custom design ☐ Immediate	requirement is:	□ In	6 months or more	
Name				
Address				
City		_StateZip		