



**TERADYNE**  
2008 Shareholders' Letter



Mike Bradley, Chief Executive Officer

## Fellow Shareholders,

Few investors, and few of the world's best-prepared companies, were ready for the economic meltdown that started in 2008. As a leading supplier of testing technology to factories producing semiconductor chips and electronics products around the globe, we took our lumps, as the unfolding financial crisis triggered the sharpest capital equipment pull-back in the history of the semiconductor industry.

The market numbers weren't pretty. Orders for semiconductor capital equipment fell approximately 41 percent in the second half of the year. Integrated Circuits (IC) inventories grew to levels not seen since 2001. And wafer fabrication equipment utilization rates plummeted below 50 percent as the year ended.

A combination of market share gains, productivity improvements and cost-cutting enabled us to weather our own 42 percent decline in orders for the second half of the year. But while we were in the black for the full year on a non-GAAP operating basis, our fourth quarter non-GAAP operating results showed red ink.

At this writing, the pressure hasn't subsided. World markets continue to tumble... and expectations for a

recovery are being pushed out daily. So we've continued to sharpen our focus on new products, customer support and cost reductions... all with the intent to be leaner and stronger when the markets recover.

While most of the business headlines reviewing 2008 will undoubtedly dwell on the negatives endured by consumers and businesses alike, let me underscore our progress toward being one of the most relied upon business partners in semiconductor and electronics test.

### Solid Progress on Many Fronts

We've set out in the last few years to accomplish three things. First, to solidify our position as the leading test equipment supplier for System-On-a-Chip (SOC) technology. Second, to expand our served market through entry into

### Financial Highlights

(Results and sales from continuing operations • In millions except earnings per share)

	2005	2006	2007	2008
Net Sales	\$ 1,045	\$ 1,356	\$ 1,102	\$ 1,107
(Loss)/Income	\$ (63.7)	\$ 208.2	\$ 71.9	\$ (398.6)
Non-GAAP (Loss)/Income	\$ (11.8)	\$ 175.6	\$ 83.2	\$ 32.4
(Loss)/Income per Common Share-Diluted	\$ (0.32)	\$ 1.06	\$ 0.39	\$ (2.34)
Non-GAAP (Loss)/Income per Common Share-Diluted	\$ (0.06)	\$ 0.90	\$ 0.45	\$ 0.19

In November 2005, Teradyne sold its Connection Systems Division (TCS), and in August 2007, Teradyne sold its Broadband Test Division (BTD). BTD and TCS are classified as discontinued operations and their results are excluded from these numbers. In 2007, the difference between the GAAP and non-GAAP results relates mainly to an in-process research and development charge related to acquired technology. In 2008, the difference between the GAAP and non-GAAP results relates mainly to a \$333 million goodwill impairment charge and restructuring charges.

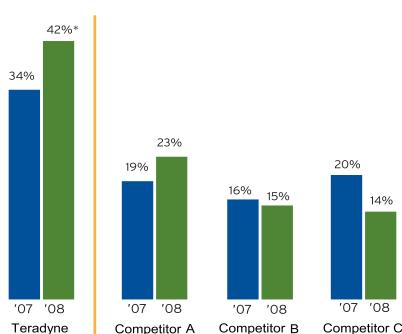
memory device testing. And third, to establish a business model that delivers industry leading over-the-cycle financial performance.

We made headway on all three fronts in 2008.

In the SOC test space, our FLEX® and J750™ systems are firmly entrenched as market-leading test platforms. Nearly 5,000 of these testers were operating on test floors throughout the world by year-end. That meant that consumers around the globe could rely upon the silicon technology of products like cell phones, PDAs, medical electronics and gaming systems because our testers verified that technology.

In 2008, we added The Eagle Test Systems', Inc. product line to our stable of SOC products. Eagle Test technology is the established standard in analog SOC testing of devices like power ICs and audio amplifiers. With the addition of Eagle Test Systems, we now offer a full array of test solutions for every segment of the SOC device spectrum, further expanding our total available market and providing us with an even greater opportunity to expand our market share lead.

In 2008, Teradyne grew its System-On-a-Chip (SOC) Test market share from 34 percent to 42 percent.



With more than 40 percent of the SOC test market on Teradyne products, we also set our sights on expanding into memory device test in 2008. A major step in this initiative came early in the year when we acquired Nextest Systems

Corporation, the up-and-coming player in the flash memory test market.

This acquisition proved to be well-timed as the Nextest® Magnum I and Magnum II products bucked the memory test market contraction in 2008, gaining five points of share in the overall memory market. At year-end, multiple Magnum II units were testing some of the industry's most complex multi-chip (DRAM and flash) memory packages.

So we've grown through a combination of acquisitions and organic share gains, providing a balance between the cost efficiency of developing products on our own and the time-to-market advantages that come through acquisitions.

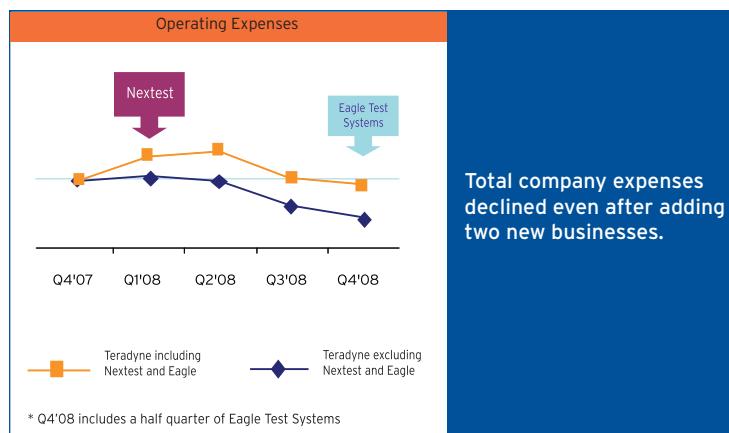
### Financial Strength for the Future

The strength of our future starts with solid product offerings in every market we serve. As the leading test equipment supplier in our core semiconductor test market, we further strengthened our position in 2008 through the launch of five new products that delivered nearly \$150 million of new business in the year.

Our Defense & Aerospace business also delivered strong results and bucked the trends seen in nearly every other electronics segment. This was fueled by the selection of Teradyne test instruments for the new Air Force Versatile Depot Automatic Test Station (VDATS), plus strong program buying from the Army and Navy. We continued to post share gains within the in-circuit test market with TestStation in storage and networking applications, and as a major supplier into Tier One subcontract manufacturers in Asia. And automotive test products from our Diagnostic Solutions unit showed resilience through the year's end, even as that industry experienced a worldwide shock wave.

Other elements of our financial model improvement were tied to the completion of manufacturing transfers to our Asia manufacturing partner, and the streamlining of our cost structure, some of which was connected to synergies from our two acquisitions. In fact, our cost focus allowed

us to add these two new businesses at the same time that we lowered our fixed costs and breakeven... a major accomplishment achieved by the across-the-board efforts of our combined workforce.



### Change is Constant, but Testing Still Matters

We obviously have much ahead of us. We must continue to weather the storm of the economic meltdown; keep the pipeline of new products flowing; and focus on tightening costs, all while we show customers the kind of responsiveness and support they've come to expect. We will be operating in an economic landscape that is fundamentally changed. As the number of companies that can afford the R&D stakes of this industry gets

smaller, customers will lean toward suppliers who have the technology and scale to advance through these vicious market cycles.

We are radically changed from the Teradyne of just a few years ago. Today, we offer more products to more markets with more technology leverage... fully integrated and outsourced manufacturing... and low cost offshore repair. But, at our core, we are still the same. Our culture and values remain intact. We continue to focus on providing world-class products and superior customer service. And we believe in the fundamental need for silicon-based innovation in electronic products to improve the quality of life and expand information across cultures.

We know that test will always be an essential component of that innovation and that, to continue to be an industry leader, we must remain faithful to our enduring pledge to consumers that they can rely on the electronics critical to their everyday lives.

Challenging times? Without a doubt. But we at Teradyne are up to those challenges. Because, as always, we believe in a present, and a future, where testing matters.

Mike Bradley  
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**TERADYNE**  
Because Testing Matters

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