



Mike Bradley, Teradyne CEO

Dear Shareholders,

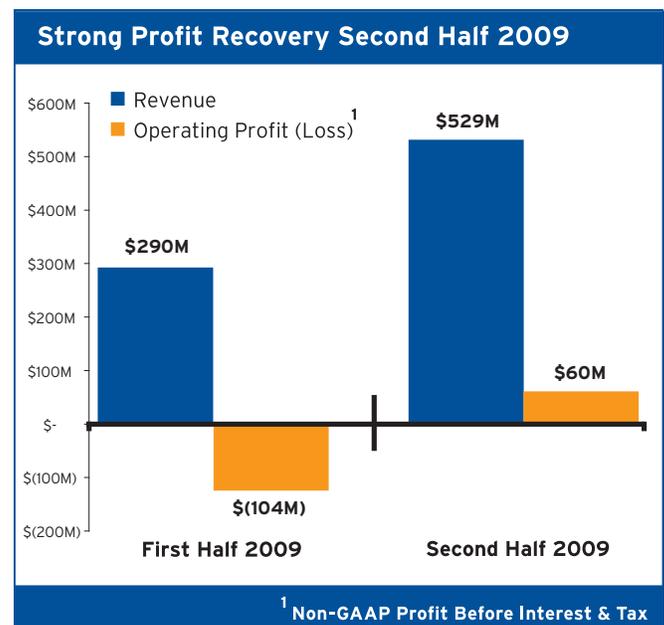
Last year at this time, the semiconductor test equipment market hit rock bottom... with a thud. In the winter of 2008/2009, semiconductor chip production contracted at the fastest rate in more than 20 years. Companies like ours, that are tied to device unit growth, faced the sharpest pullback in capital spending since the mid-1980s. It wasn't pretty for us or for any company supplying production equipment to the semiconductor industry. But the early 2009 downturn also coincided with three offensives that were just hitting stride and that would shape our company for the future.

1. Aggressive Cost Control: Operating expense reductions which had started in 2008 were expanded in early 2009. Nothing was off limits. By year-end, we had cut our annual fixed costs by more than \$150M and our quarterly non-GAAP break-even stood at \$200M down from \$275M in the prior year. Much of our earlier work had been tied to completing our outsourced manufacturing footprint in China, but in 2009 every function in the company anted up to the cost reduction efforts. Our objective was to size the company for long-term, over-the-cycle profitability while preserving an industry-leading R&D effort.

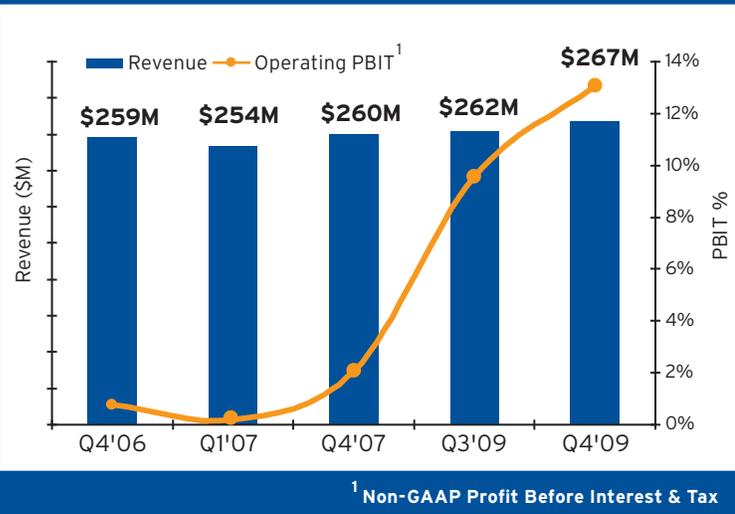
2. Strengthening the Core: With an annual R&D engine of close to \$200M, we're number one in semiconductor test market share for the second straight year, and we offer industry-leading products in defense, aerospace, automotive and assembly level testing. More than 80% of our R&D is centered in semiconductor test where we lead in System-On-a-Chip (SOC) applications with more than 40% market share. Our Nextest and Eagle Test acquisitions completed in 2008 broadened our reach into the memory and high-performance analog test market segments while our UltraFLEX-M high-speed memory tester established itself at the leading DRAM manufacturers in Asia. More than 1,000 hardware, software and support engineers are dedicated to the design and maintenance of the broadest semiconductor test product portfolio in the industry. Make no mistake, Semi Test is our core business... today and into the future.

3. New Growth Engines: While our main focus is on SOC test, we've expanded our offerings in memory test in order to grow our served market by up to 50% in the years ahead. But we're also in constant search for new markets where we can leverage our technology, sales and support capabilities. In 2009, we launched a major offensive into hard disk drive (HDD) test. Our Neptune™ HDD Tester has been a resounding success as scores of systems are installed in Asia, each one testing nearly 5,000 disk drives in parallel, around the clock.

To get a feel for how these three programs have taken hold, see the adjacent charts. First half revenues totaled



New Model Delivers 10% Greater Profit¹



\$290M with a Non-GAAP operating loss of \$104M. In the second half of the year, we grew revenue to \$529M and had Non-GAAP operating profit of \$60M. As demand for SOC testers kicked in and we held our costs in check, our profit drop through was solid. We coupled that with initial revenue from high-speed memory break-ins and added top and bottom line contributions from our growing hard disk drive business... all at the same time that we stayed profitable in our Systems Test business unit. When you add it up, we now deliver 10 points more in operating profit at comparable sales levels of the past.

Those of you who follow the competitive landscape in semiconductor test will have noticed not only that we

returned to profitability sooner than all of our peers, but that we're also delivering better bottom line performance than everyone in our space. And, we're doing this without any marked recovery yet in the memory, automotive diagnostics, or commercial board test arenas. When those markets kick in, we'll show even better results.

We've been doing heavy lifting these last two years. Admittedly, the worldwide economic meltdown gave us even more urgency on the cost side of the ledger. But our deeper focus has been on growth. In 24 months we've gained market share in our core, we've integrated two major acquisitions (Nextest and Eagle Test) and we've launched organic offensives in high-speed memory and hard disk drive test. All told, these accounted for 25% of our revenues last year. And while this may look like a full plate, we still intend to search out additional growth prospects going forward.



A final word as we approach a major milestone later this year. In 2010, we will mark the fiftieth year of our existence as a company. When Alex d'Arbeloff and Nick DeWolf set up shop above Joe and Nemo's hotdog stand in 1960, I'm sure they couldn't have envisioned today's world of instant connectivity and unlimited access to information. But they could and did envision that electronic technology would be at the center of the action somehow. We're grateful for their vision and we're all proud to carry on the culture of innovation and teamwork that they started 50 years ago.

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