



## **Pivotal Systems Raises \$7 Million in Funding**

**PIVOTAL SYSTEMS CAPITALIZING ON FUNDAMENTAL SHIFTS IN THE SEMICONDUCTOR MANUFACTURING MARKET BY PROVIDING REAL TIME PROCESS MONITORING AND CONTROL SOLUTIONS**

**Pleasanton, CA.—April 30, 2004**—Pivotal Systems Corporation, which is developing and deploying real time in situ process monitoring and control solutions for the semiconductor manufacturing industry, today announced that it has raised \$7 million in funding. The funding was led by leading venture capital firms that focus on advanced semiconductor technology.

### **Shifts in the Semiconductor Manufacturing Market**

As technology scales at an unrelenting pace, a new class of manufacturing issues are emerging that current tools and off-line metrology approaches are struggling to address. These issues lie in micro-variations and process shifts that occur from manufacturing chamber to chamber and wafer to wafer, directly impacting end of line yield.

“As we move into 90nm, the industry has reached a point where real time wafer-to-wafer level monitoring and control is critical to maximizing productivity. For example, defects that would not have been a concern above 90nm are all of a sudden causing multi-million dollar yield issues when you get to 90nm and below,” said Joseph Monkowski, President and Chief Executive Officer of Pivotal. “With Pivotal’s real time monitoring and control solutions, semiconductor manufacturers will be able to monitor and control critical process parameters in situ, during wafer processing, for each and every wafer. Fabs can simultaneously increase yield, avoid scrap events, and increase throughput making for a very compelling ROI.”

### **Strong Management and Technical Team**

Pivotal is led by a team with extensive semiconductor, software, and technology experience. Monkowski brings over 25 years of technical leadership experience in the semiconductor industry focused on providing process equipment and metrology solutions for next-generation device manufacturing. Prior to joining Pivotal, Monkowski held senior leadership and technical positions at Advanced Energy, LAM Research, Pacific Scientific, and Photon Dynamics. Sherk Chung, Pivotal’s Vice President of Engineering, has over 15 years of experience building production software systems for semiconductor, telecom, and information technology industries with prior leadership positions at Sapient, Fandango, and Enuviv. Mukund Venkatesh, Pivotal’s Vice President of Marketing and Business Development, has over 15 years of marketing and business building experience across the global high technology supply chain with prior leadership experience at McKinsey&Co., Alcatel, and Lawrence Livermore National Labs.

“Aside from a strong management team, Pivotal has put together some of the leading plasma physicists, mathematicians, and software control experts in the field. We are poised to deliver some very compelling solutions in the near future” said Monkowski.

## **About Pivotal Systems**

Pivotal Systems Corporation provides best-in-class monitoring and process control technology for the semiconductor manufacturing industry. Pivotal's vision is to enable an order of magnitude increase in fab productivity and capital efficiency for current and future technology nodes. This vision is achieved through its real time in situ process monitoring and control solutions. Founded in 2003 and based in Pleasanton, California, the company is led by veterans from the semiconductor and high-tech industries. For more information about Pivotal, please visit [www.pivotalsys.com](http://www.pivotalsys.com), or send an email to [info@pivotalsys.com](mailto:info@pivotalsys.com).