

# Lam Research Corporation Announces Jdp With National Semiconductor To Develop Advanced Aluminum Etch Processes

Lam Research Corporation Announces Jdp With National Semiconductor To Develop Advanced Aluminum Etch Processes  
FREMONT, Calif., November 16, 1998 - Lam Research Corporation (Nasdaq: LRCX), a leading supplier of wafer fabrication equipment to the worldwide semiconductor industry, today announced a joint development program (JDP) with National Semiconductor Corporation to develop advanced aluminum plasma etch processes. Processes will be developed on Lam's TCP 9600PTX metal etch cluster system at National's Advanced Technology Group development facility in Santa Clara, California. The project objective is to develop and qualify advanced manufacturing processes for direct patterning of aluminum for National's 0.18 through 0.13 micron device technologies. Simultaneously, National will take delivery of a TCP 9600PTX metal etch cluster system for its South Portland, Maine, manufacturing facility where it will be used to meet immediate production requirements.

"Lam is committed to providing equipment and process expertise that enables our customers to minimize successfully the risk associated with rapidly shrinking device geometries and changing device designs. Our partnership with National enables the pursuit of parallel development paths for advanced metallization, which includes aluminum etching and dual damascene. The focus of this JDP will be to develop and qualify processes for production of 0.18 through 0.13 micron devices," stated Dr. Greg Campbell, Lam's vice president and general manager of the etch products group.

"National has developed devices that have clock speeds exceeding 500 MHz, and we are committed to leveraging our design and process expertise to provide market-leading cost/performance solutions. This project focuses on metal etch technology for advanced multilevel designs and represents a continuation and strengthening of the relationship between Lam and National," according to Paul Murphy, director of the Advanced Technology Group at National. "We selected Lam's TCP 9600PTX cluster system for these advanced processes because of its high throughput and technical performance. In addition, the hardware and process support committed by Lam will speed the transfer of processes to manufacturing. This support is critical for a flexible and fast-ramping fab startup," Murphy said.

Lam Research Corporation is a leading supplier of wafer fabrication equipment and services to the world's semiconductor industry. Lam's headquarters are located in Fremont, California. The company's common stock trades on the Nasdaq National Market under the symbol LRCX. Lam's World Wide Web address is <http://www.lamrc.com>.

"Safe Harbor" Statement under the Private Securities Litigation Act of 1995: Except for historical information, this press release contains certain forward-looking statements and other prospective information relating to future events, including, but not limited to, statements relating to the release of new products, product performance and current and future applications, the company's participation in the semiconductor equipment market, and etch market segment specifically, and the current and future significance of certain technology. These statements and other information are subject to various risks, uncertainties and changes in condition, significance, value and effect that could cause results to differ materially and in ways not readily foreseeable, including, but not limited to, a continued downturn in the semiconductor equipment market, competition, development or acceptance of new products or product technologies, challenges to existing or anticipated technology rights, and other risks detailed from time to time in the company's SEC reports, including the report on Form 10-K for the year ended June 30, 1998, and the Form 10-Q for the quarter ended September 30, 1998. The company assumes no obligation to update the information in this press release.

---

<https://newsroom.lamresearch.com/1998-11-16-Lam-Research-Corporation-Announces-Jdp-With-National-Semiconductor-To-Develop-Advanced-Aluminum-Etch-Processes>