

■ Feature 3: Technology Acquisitions

Features: Technological Innovation in Pursuit of Growth

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Timely Acquisitions to Seize Opportunities for Growth



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Tokyo Electron conducted four acquisitions in 2012, each with distinct growth objectives.

We acquired U.S.-based FSI International to strengthen existing businesses. This addition will quickly improve the competitiveness of Tokyo Electron's cleaning systems, one of the most important areas of our core semiconductor production equipment business, which we are targeting for expansion. The synergy of this acquisition has already begun to show.

The acquisition of U.S.-based NEXX Systems expands Tokyo Electron's lineup of wafer level packaging

products, helping us provide a wide range of solutions to meet the increasingly complex needs of our customers.

Tokyo Electron secured next-generation core technologies through the acquisition of Irish venture company Magnetic Solutions, obtaining magnetic field annealing technologies necessary for the production of a promising new memory.

We acquired the Swiss company Oerlikon Solar to expand our field of operations. With this acquisition, Tokyo Electron made a full-fledged entry into the photovoltaic panel production equipment business, with plans to grow

it into a core business over the medium and long term.

As planned, Tokyo Electron is advancing the integration of new resources acquired via M&A with Tokyo Electron's own proprietary technology,

global network and sales support capabilities. Technological innovation moves at a rapid pace in the markets that Tokyo Electron operates in, and it is imperative to be the leader in developing and commercializing superior, differ-

entiated technologies. Going forward, we will flexibly consider a wide range of collaboration, extending to M&A, with other companies in order to achieve a profitable growth.

FY2013: Corporate acquisitions for further growth

Objectives	Technologies acquired	Completion of acquisition
Strengthening SPE business	<p>Cleaning technology</p> <ul style="list-style-type: none"> Single wafer cleaning systems <p>Advanced packaging technology</p> <ul style="list-style-type: none"> Electrochemical deposition systems Sputtering systems 	<p>FSI International, Inc. (now TEL FSI, Inc.)</p> <p>October 2012</p> <p>NEXX Systems Inc. (now TEL NEXX, Inc.)</p> <p>May 2012</p>
Obtaining next-generation core technology in SPE business	<p>MRAM manufacturing technology</p> <ul style="list-style-type: none"> Magnetic annealing systems 	<p>Magnetic Solutions Ltd. (now TEL Magnetic Solutions Ltd.)</p> <p>December 2012</p>
Entering new business areas	<p>Photovoltaic panel manufacturing technology</p> <ul style="list-style-type: none"> Thin-film silicon photovoltaic panel production equipment 	<p>Oerlikon Solar AG (now TEL Solar AG)</p> <p>November 2012</p>

Acquisition of FSI International

Expanding Tokyo Electron's cleaning system business with new complementary single wafer cleaning technology

Acquisition of NEXX Systems

Strengthening the lineup of advanced packaging products, a future growth driver

Existing TEL Systems

Batch cleaning



Single water cleaning



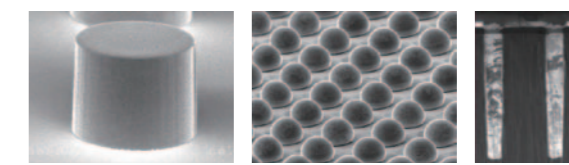
Dry cleaning



Physical cleaning



Stratus, Electrochemical Deposition System



Cu pillar Micro bump TSV Cu filling

By acquiring NEXX Systems, Tokyo Electron expanded its lineup of TSV 3DI packaging technology with NEXX's electrochemical deposition and sputtering systems for advanced packaging.

TSV: through-silicon via

Tokyo Electron will increase its competitiveness in single wafer cleaning systems through the acquisition of FSI International. FSI International boasts high-dosed resist stripping technology with high temperature SPM process, an increasingly important technology.