

## 10 BEST SEMICONDUCTOR EQUIPMENT SUPPLIER RANKINGS FOR 2019

May 14, 2019

Advantest, ASML, Teradyne, AMEC, and Plasma-Therm earn 5 VLSI Star Ratings in the 2019 10 BEST

				
10 BEST Segment	Rank	10 BEST CHIP MAKING EQUIPMENT SUPPLIERS OF 2019	Rating	Stars
L A R G E	1	 <b>TERADYNE</b>	9.44	★★★★★
	2	 <b>ADVANTEST</b>	9.23	★★★★★
	3	 <b>ASML</b>	9.18	★★★★★
	4	 ASM  Pacific Technology	8.79	★★★★★
	5	 <b>KLA</b> Keep Looking Ahead	8.03	★★★★★
	6	 <b>TEL</b> TOKYO ELECTRON	7.83	★★★★★
	7	 <b>KE</b> KOKUSAI ELECTRIC	7.75	★★★★★
	8	 <b>Lam</b> RESEARCH	7.61	★★★★★
	9	 <b>APPLIED</b> MATERIALS	7.36	★★★
	10	 <b>Hitachi High-Tech</b>	7.29	★★★
F O C U S E D	1	 <b>Plasma</b> <b>Therm</b>	9.39	★★★★★
	2	 <b>AMEC</b>	9.01	★★★★★
	3	 <b>FORMFACTOR</b>	8.89	★★★★★
	4	 <b>EVG</b>	8.51	★★★★★
	5	 <b>SPTS</b>	7.46	★★★
	6	 <b>Cohu</b>	7.09	★★★

Source: VLSIresearch  
css\_10BEST\_v19.05

These charts, graphs, and text are approved for public release by certified media and must be accompanied by a statement clearly identifying the VLSIresearch 2019 Customer Satisfaction Survey as the source. No advertising or other promotional use can be made of the information in this release or VLSIresearch's 2019 Customer Satisfaction Survey. Copyright © 2019 VLSI Research Inc. All rights reserved.

Nine of this year's 10 BEST suppliers have been recognized with 4 VLSI Stars and above by customers. Focusing on where these 10 BEST suppliers excelled, customers awarded the highest average ratings in *partnering*, *trust in supplier*, and *recommend supplier*. Overall, customers showed high regard for the support they are receiving, friendly service, and how suppliers understand the long-term big picture. All rating categories decreased except *partnering*, although the change was statistically insignificant. Improvements customers need from suppliers are more knowledgeable staffing, lower costs, and higher product quality. Congratulations to the 2019 10 BEST winners!

---

*These charts, graphs, and text are approved for public release by certified media and must be accompanied by a statement clearly identifying the VLSIresearch 2019 Customer Satisfaction Survey as the source. No advertising or other promotional use can be made of the information in this release or VLSIresearch's 2019 Customer Satisfaction Survey. Copyright © 2019 VLSI Research Inc. All rights reserved.*

## ABOUT THE COMPANIES

### Advantest

A world-class technology company, Advantest is the leading producer of automatic test equipment (ATE) for the semiconductor industry and a premier manufacturer of measuring instruments used in the design and production of electronic instruments and systems. Its leading-edge systems and products are integrated into the most advanced semiconductor production lines in the world. The company also focuses on R&D for emerging markets that benefit from advancements in nanotech and terahertz technologies and has introduced multi-vision metrology scanning electron microscopes essential to photomask manufacturing, as well as a groundbreaking 3D imaging and analysis tools. Founded in Tokyo in 1954, Advantest established its first subsidiary in 1982, in the USA, and now has subsidiaries worldwide.

**Survey Results: ★★★★★ in Large Semiconductor Equipment Suppliers**

### AMEC

AMEC is China's leading provider of process technologies, tools and expertise that help global manufacturers of semiconductors and LEDs achieve their innovation, production and profit goals. The company's etch tools enable chipmakers to build devices for diverse applications at nodes as low as 5nm, while its MOCVD systems lead the market for the production of Blue LEDs. More than 1100 AMEC process units, comprising both product lines, have been installed at 40 leading customer fabs across Asia and Europe. AMEC is headquartered in Shanghai with operations in Nanchang and Xiamen, and regional subsidiaries in Japan, South Korea, Singapore, Taiwan, and the United States.

**Survey Results: ★★★★★ in Focused Semiconductor Equipment Suppliers**

### Applied Materials

Applied Materials, Inc. (Nasdaq: AMAT) is the leader in materials engineering solutions used to produce virtually every new chip and advanced display in the world. Our expertise in modifying materials at atomic levels and on an industrial scale enables customers to transform possibilities into reality. At Applied Materials, our innovations make possible the technology shaping the future.

**Survey Results: ★★★ in Large Semiconductor Equipment Suppliers**

## [ASML](#)

ASML is one of the world's leading manufacturers of chip-making equipment. Our vision is a world in which semiconductor technology is everywhere and helps to tackle society's toughest challenges. We contribute to this goal by creating products and services that let chipmakers define the patterns that integrated circuits are made of. We continuously raise the capabilities of our products, enabling our customers to increase the value and reduce the cost of chips. By helping to make chips cheaper and more powerful, we help to make semiconductor technology more attractive for a larger range of products and services, which in turn enables progress in fields such as healthcare, energy, mobility and entertainment. ASML is a multinational company with offices in more than 60 cities in 16 countries, headquartered in Veldhoven, the Netherlands. We employ more than 23,800 people on payroll and flexible contracts (expressed in full time equivalents). ASML is traded on Euronext Amsterdam and NASDAQ under the symbol ASML.

**Survey Results: ★★★★★ in Large Semiconductor Equipment Suppliers**

## [ASM Pacific Technology](#)

ASM Pacific Technology Limited ("ASMPT") (stock code: 0522), With a global presence in over 30 countries, ASMPT leverages its strong network and infrastructure, resources and talents to grow its key businesses in Back-end Equipment, Materials and SMT Solutions. ASMPT, founded in 1975, is the only company in the world that offers high-quality equipment for all major steps in the electronics manufacturing process - from carrier for chip interconnection to chip assembly and packaging to SMT. No other supplier offers a comparable range and depth of process expertise.

**Survey Results: ★★★★★ in Large Semiconductor Equipment Suppliers**

## [Cohu](#)

Cohu, Inc. was founded in 1957 and has grown to become a global leader in test and handling equipment, thermal subsystems, test contacting, vision inspection and MEMS test solutions supplying the semiconductor industry and its test subcontractors, and a leader in printed circuit board test. We provide our customers with outstanding products and services that reflect our commitment to operational excellence, innovation and market leadership.

**Survey Results: ★★★ in Focused Semiconductor Equipment Suppliers**

## [EV Group](#)

EV Group (EVG) is a leading supplier of equipment and process solutions for the manufacture of semiconductors, microelectromechanical systems (MEMS), compound semiconductors, power devices and nanotechnology devices. Key products include wafer bonding, thin-wafer processing, lithography/nanoimprint lithography (NIL) and metrology equipment, as well as photoresist coaters, cleaners and inspection systems. Founded in 1980, EV Group services and supports an elaborate network of global customers and partners all over the world.

**Survey Results: ★★★★★ in Focused Semiconductor Equipment Suppliers**

## [FormFactor](#)

FormFactor, Inc. (NASDAQ:FORM), is a leading provider of essential test and measurement technologies along the full IC life cycle – from characterization, modeling, reliability, and design debug, to qualification

and production test. Semiconductor companies rely upon FormFactor's products and services to accelerate profitability by optimizing device performance and advancing yield knowledge. The company serves customers through its network of facilities in Asia, Europe, and North America.

**Survey Results: ★★★★★ in Focused Semiconductor Equipment Suppliers**

### [Hitachi High-Technologies](#)

Hitachi High-Technologies Corporation, headquartered in Tokyo, Japan, is engaged in activities in a broad range of fields, including Science & Medical Systems, Electronic Device Systems, Industrial Systems, and Advanced Industrial Products. The company's consolidated revenues for FY2018 were ¥687.7 billion [approx. USD 6 billion].

**Survey Results: ★★★ in Large Semiconductor Equipment Suppliers**

### [KLA](#)

KLA develops industry-leading equipment and services that enable innovation throughout the electronics industry. We provide advanced process control and process-enabling solutions for manufacturing wafers and reticles, integrated circuits, packaging, printed circuit boards and flat panel displays. In close collaboration with leading customers across the globe, our expert teams of physicists, engineers, data scientists and problem-solvers design solutions that move the world forward.

**Survey Results: ★★★★★ in Large Semiconductor Equipment Suppliers**

### [Kokusai Electric](#)

Kokusai Electric, headquartered in Tokyo, Japan, is a pure play manufacturer of semiconductor manufacturing systems. Kokusai Electric mission is to accommodate client's needs in the changing market with the leading-edge technology based on accumulated deposition technologies and become an industry leader. As an innovative corporation with the clients' perspective, we are determined to move fast to provide high quality products and services, and make contribution to highly developed social infrastructures with our technology.

**Survey Results: ★★★★★ in Large Semiconductor Equipment Suppliers**

### [Lam Research](#)

Lam Research Corp. is a global supplier of innovative wafer fabrication equipment and services to the semiconductor industry. As a trusted, collaborative partner to the world's leading semiconductor companies, we combine superior systems engineering capability, technology leadership, and unwavering commitment to customer success to accelerate innovation through enhanced device performance. In fact, today, nearly every advanced chip is built with Lam technology. Lam Research (Nasdaq: LRCX) is a FORTUNE 500® company headquartered in Fremont, Calif., with operations around the globe.

**Survey Results: ★★★★★ in Large Semiconductor Equipment Suppliers**

### [Plasma-Therm](#)

Plasma-Therm is a manufacturer of advanced plasma processing equipment for specialty semiconductor markets, including advanced packaging, wireless communication, photonics, solid-state lighting, MEMS/NEMS, nanotechnology, renewable energy, data storage, photomask, and R&D. Plasma-Therm

offers leading etch and deposition technologies and solutions for these markets. Sales and service locations throughout North America, Europe and Asia-Pacific meet the diverse needs of Plasma-Therm's global customer base.

**Survey Results: ★★★★★ in Focused Semiconductor Equipment Suppliers**

### [SPTS Technologies, an Orbotech Company](#)

SPTS Technologies, an Orbotech company, designs, manufactures, sells, and supports etch, PVD, CVD, MVD capital equipment, providing advanced wafer processing technologies and solutions for the semiconductor and microelectronics industry. End-market applications include micro-electromechanical systems (MEMS), advanced packaging, LED, high speed RF device IC's and power semiconductors.

**Survey Results: ★★★★★ in Focused Semiconductor Equipment Suppliers**

### [Teradyne](#)

Teradyne (NASDAQ:TER) is a leading supplier of automation equipment for test and industrial applications. Teradyne Automatic Test Equipment (ATE) is used to test semiconductors, wireless products, data storage and complex electronic systems, which serve consumer, communications, industrial and government customers. Our Industrial Automation products include collaborative robots used by global manufacturing and light industrial customers to improve quality and increase manufacturing efficiency. In 2018, Teradyne had revenue of \$2.1 billion and currently employs approximately 4,900 people worldwide.

**Survey Results: ★★★★★ in Large Semiconductor Equipment Suppliers**

### [Tokyo Electron](#)

Tokyo Electron Limited (TEL) is a leading global company of semiconductor and flat panel display (FPD) production equipment, TEL engages in development, manufacturing, and sales in a wide range of product fields. All of TEL's semiconductor and FPD production equipment product lines maintain high market shares in their respective global segments. TEL provides outstanding products and services to customers through a global network of approximately 77 locations in 17 countries in the U.S., Europe, and Asia.

**Survey Results: ★★★★★ in Large Semiconductor Equipment Suppliers**

### **About the 2019 VLSIresearch Customer Satisfaction Survey**

VLSIresearch received feedback from more than 86% of the chip market and 87% of subsystems customers for this year's survey. The survey spans 2 ½ months and covers five languages. Worldwide participants were asked to rate equipment suppliers among fourteen categories based on three key factors: supplier performance, customer service, and product performance. 1,820 surveys were returned, resulting in 24,514 total responses.

The VLSIresearch annual *Customer Satisfaction Survey* is the only publicly available opportunity since 1988 for customers to provide feedback for suppliers of: semiconductor equipment and subsystems. The 10 BEST and THE BEST awards provide special recognition to suppliers that are rated highest by their customers.

**10 BEST** awards recognize each **chip making equipment supplier** as a whole, regardless of product type:

- Fab, Test, and Assembly equipment ratings are grouped together for an overall rating for each supplier

- Each supplier is then listed in one of two categories based on a three-year average of total revenues for all its market segments: **Large** and **Focused**

THE BEST awards recognize the more detailed markets:

- **Fab, Test, Assembly equipment, WFE to Foundation Chip Makers, WFE to Specialty Chip Makers, and Subsystems**

The VLSI Stars rating scale:

★★★★★ 9 to 10    ★★★★★ 8.5 to <9    ★★★★★ 8.5 to <9    ★★★★★ 7.5 to <8    ★★★★★ 7 to <7.5

Click [here](#) for more details on the survey.

### [About VLSIresearch](#)

VLSIresearch is an award-winning provider of market research and economic analysis on the technical, business, and economic aspects of the semiconductor supply chain. Providing intelligence for faster and better decision making, seasoned executives in high technology, government, and finance rely on VLSIresearch's insights to guide them to the right decisions. The formula is simple: **Better intelligence leads to better decisions which deliver better results**. Founded in 1976, VLSIresearch is the leading technology research and advisory company focused on semiconductor related manufacturing.

**Contact:** Risto Puhakka | email: [analyst@vlsiresearch.com](mailto:analyst@vlsiresearch.com) | ph:408.453.8844

**VLSI**research

Ph: 408.453.8844 | 2290 North First Street Suite 202 San Jose, CA 95131



... intelligence to make better decisions faster

[VLSIresearch.com](http://VLSIresearch.com)

[ChipHistory.org](http://ChipHistory.org)

[weSRCH.com](http://weSRCH.com)

The Chip Insider®, and the CSS 10 BEST logo are registered trademarks of VLSI Research Inc. All other trademarks, service marks, and logos are the property of their respective owners.