

# Manufacturing Market

TM

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## The Impact of Mergers and Acquisitions on the EMS Industry

The EMS industry has experienced extraordinary growth over the last twenty years, not only from organic expansion of the overall electronics sector, but even more from the mergers and acquisitions that have taken place since the beginning. There is a saying that “Once one cow crosses the river, they all will cross,” and so it is that once OEMs started divesting their manufacturing facilities to EMS companies, all (Western) companies were seen to follow suit.

I remember a meeting with Michael Marks, then president of **Flextronics**, in 1997, when as an independent consultant I was attempting to sell a small manufacturing operation owned by **Alcatel** that was in danger of being closed down. I was taken aback when Marks said he wanted to talk about buying “ALL of Alcatel’s factories.” The cows were gathering and starting to cross the river! For the next several years we saw the industry grow, from approximately \$40 million in 1994 to \$250 billion in 2004.

This large transfer of revenue occurred because many OEMs had come to realize that printed circuit board assembly was a low-value-add business and EMS companies, in addition to being willing to accept low profit margins, could maximize their SMT manufacturing equipment with 2–3 shifts a day as opposed to the 1–1.5 shifts that OEMs commonly

employed. Moreover, this outsourcing to EMS companies freed up capital because OEMs no longer had to maintain leading/bleeding-edge equipment investments.

**Hewlett-Packard** was one of the first companies to embrace the outsourcing model; in 1994, HP sold its Grenoble, France facility to **SCI Systems** for approximately \$50 million. Then **Allied Signal** sold a facility to **Current Technology** and **Philips** sold a Mexican facility to **Group Technologies**. By 1995 the cow stampede had started, with **IBM** selling its Valencia, Spain operation to **MSL** and its Hortolandia, Brazil operation to Group Technologies. HP sold two operations: one in Boeblingen, Germany to **Solectron** and another in Boise, Idaho to **MCMS**. In all, 11 facilities were sold off that year by such OEMs as **Digital Equipment, Genicom, Unisys, Square D, AT&T, Logitech** and **Marconi**. In 1996, eleven transactions were completed to EMS firms like **AVEX, Astron Group, Flextronics, IMS, Kimball, SCI Systems, Solectron, and XeTel**, of OEMs such as **Force Computers, Apple, Maxtor, Nokia, Ericsson, Titan Corp.**, and various smaller companies.

In 1998, the M/A market really began to rumble, with 39 transactions that involved a mix of OEM divestments, EMS acquisitions, and various supplier purchases. **Celestica** got into

Table 1: M&A Transactions

Year	No. of M/A Transactions
1994	3
1995	11
1996	11
1997	30
1998	39
1999	68
2000	93
2001	54
2002	56
2003	44
2004	46
2005	48
2006	40
2007	37
2008	48
2009	27
2010	38
2011	29
2012	24
2013	27
2014	28

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the game with the acquisition of two HP facilities and its purchase of **Design to Distribution**, based in Wales, UK. Flextronics grabbed an Ericsson facility in Karlskrona, Sweden, while Solectron got **Ericsson's** Infocom Systems in Sao Paulo, Brazil. SCI Systems absorbed Group Technologies, acquiring its operations in Mexico and Brazil. A trend was already starting of EMS companies buying other EMS companies for customer market share or regional operations, but OEM assets were still the real prize.

In 1999, things expanded further with a total of 68 transactions that included divestments by such OEMs as **3Com, ABB, Alcatel, Comtel, ECI Telecom, Ericsson, Evans and Sutherland, Fluke, HP, Honeywell, IBM, Motorola, Nokia, Nortel, Olivetti, Stratus, Trimble, Verifone, and Zenith**. There were nearly as many EMS acquisitions of companies like **AVEX, CMC Industries, GET Mfg., GSS/Array, Hi-Tech Mfg., Kyrel EMS, Manu-Tronics, PAGG, SeaMED, Sidus Systems, Smartflex Systems, and Tanon**, which were snapped up by top-tier EMS companies, but also increasingly by second-tier suppliers. A new trend, supplier purchases, emerged; there were 20 such purchases that covered everything from repair to component technologies.

The year 2000 was the peak in M/A transactions, with 93 deals executed. It was a year in which the EMS industry nearly doubled in revenue from 1999, surpassing \$100 billion. M/A deals went nuclear, with Wall Street was giving EMS companies astronomical valuations on which these public companies quickly cashed in. Flextronics alone executed 22 transactions, acquiring smaller EMS firms like **JIT Holdings, PCB Assembly, and QCom AB**, but still grabbing OEM assets from **Ascom, Bosch, Cabletron, Siemens AB, and Fujitsu-Siemens**. This last transaction was the first Asian operation to be pulled into the outsourcing industry, setting a trend for more to follow. Celestica made some good purchases, including an IBM operation, two **NEC** facilities, and a **Bull Electronics** unit. **Sanmina** was successful in capturing a Lucent plant and a **Harris PCBA** facility.

Similarly, SCI Systems was busy acquiring **Telrad Networks, Packard Bell NEC** assets, and **ERG's** operation. Solectron had a fruitful year in acquiring Alcatel facilities, the **Bluegum Group, IBM, Nortel, and Ericsson** operations, and lastly obtaining a **Sony** facility based in Miyagi, Japan.

In the years 2001–2005, M/A transactions declined but averaged in the 50-per-year range (see Table 1). OEM factory divestments continued to be transferred to top-tier EMS companies. Substantial manufacturing assets of **ABB, Agilent, Alcatel, Casio, Cisco, Ericsson, HP, IBM, Intel, JDS, Kyocera, Marconi, Mitel, Motorola, NEC, Nokia, Nortel, Oce, Philips, Seagate, Sony, StorageTek, Tellabs, Teradyne, Thales, Thompson, Valeo, and Xerox** were sold off—many with multiple operations. Acceptance of outsourcing had arrived, and with the selling of all these OEM manufacturing facilities (and the product builds that went with them), the industry grew another \$50 billion during this time. In contrast, consolidation or acquisitions of competitive EMS companies continued, beginning in 2001 and increasing as OEM divestiture opportunities dwindled and industry shakeout increased. Most transaction activity was small and involved regional plays, yet one stands out in 2001—the acquisition of SCI Systems by Sanmina Corp. at a cost of \$4.4 billion, making the combined company one of the largest in the industry. Another big move was made by Solectron, which acquired **NatSteel** for around \$2.6 billion. Top-tier suppliers understood that size and scale captured the big assembly contracts and customers, so Solectron went on to buy **C-MAC** for \$1.7 billion, making it the largest EMS company in the industry—for the moment. Toward the end of the period a lot of small and vertical EMS companies were acquired by mid-tier suppliers and even some top-tier EMS firms. Some firms were in distress or had manufacturing geographies that were attractive to the particular buyer. **Foxconn** first appeared on the scene in 2004 and again in 2005 with its purchase of an Australian HP facility and **Chi Mei Communications Systems**.

In the years 2006–2010, M/A activity dropped off considerably, with an average of approximately 40 transactions per year. By this point, all the low-hanging fruit had been picked. Fewer OEM deals were available, but still there were operations to be had among such companies as **Andrews, Adaptec, Bayer, Kodak, Magna Donnelly, Powerwave, ThyssenKrupp, and Windurance**, along with some leftover assets from **Alcatel-Lucent, Dell, JDS, Nortel, Philips, Seagate, Siemens, and Sony**. EMS company acquisitions were still plentiful, but ranged in size from \$20 million to \$100 million in revenue. The biggest deal by far in this period was the acquisition of Solectron by Flextronics in 2007, which strengthened the latter's position as the second largest EMS company in the world. (Foxconn established parity with Flextronics in 2004, with both companies reporting revenue of some \$16 billion. Since then, Foxconn has never looked back.)

The most recent period of M/A activity for the EMS industry (2010–2014) can be characterized as one of more consolidation of the industry as opportunistic buyers acquire smaller or weaker firms. It is clear, as of this writing, that the industry is overpopulated with suppliers, and that the strong are getting stronger, the weak getting weaker. There have been a few interesting deals, such as the sale of **LaBarge Technologies** to **Ducommun** in 2011, the acquisition of a Cisco facility by Foxconn, **IMI's** acquisition of **EPIQ** operations, and the beginning of **Sparton's** spending spree for assets near and far. In 2012, **Asteel/Flash** acquired **EN ElectronicNetwork** and Flextronics bought **Saturn Electronics & Engineering**. In 2013, **Benchmark** bought **Suntron**—a struggling EMS spin-off out of **Honeywell**—and **EOLANE** purchased the failing operations of **Elcoteq** in India, among others. **Jabil** made a significant investment in **Nypro** and in an IBM operation in Poughkeepsie, NY. Not to be ignored, **Natel Engineering** began its growth drive by acquiring **EPIC Technologies** in 2013, and it has recently purchased **OnCore** (2015). Sparton continued its successful expansion with four minor acquisitions of EMS and OEM assets. In 2014, aggressive companies like **EOLANE, KeyTronic, and Sparton** continued to execute their growth strategies with multiple supplier, OEM, and EMS investments.

In summary, there have been over 800 investments/transactions by EMS companies since 1994, when we first started to follow this industry.

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The growth has been spectacular and resulted in one of the largest transfers of revenue from one industry to another in this century. As a result, the electronics manufacturing industry has been forever transformed—it is more efficient, innovative, and dynamic—yet perhaps not so profitable. It is important to note that many of the asset investments have resulted in the closure of manufacturing facilities—the so-called “high-cost” operations. Thus, the transfer of jobs to

“low-cost” regions was inevitable.

To be fair, consumers, investors, manufacturers, and suppliers alike have all benefited from this economic trend. We expect this to continue, albeit moderated by innovations in technology development, best manufacturing practices, and the separation of low-skill versus high-skill production. The industry will

definitely grow at a slower rate than before, with many new product opportunities yet to unfold.

The next part of this story will be to explore the potential of Chinese and Indian resources and manufacturing opportunities in EMS.

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*Our thanks to David Dalton, President/CEO of General Microcircuits, for suggesting this article.*

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## Some Quarterly Results

**Flex (Flex).** Flex reported revenue of \$6.3 billion and non-GAAP EPS of \$0.27. CTG performed better than expected, offsetting weaker growth in IEI. The inclusion of the **MCi** acquisition bumped the HRS margin up by 80 basis points to 7.4%, lifting the overall EBIT margin by 30 basis points sequentially.

Flex delivered above F2Q16 results and F3Q16 guidance, as new deal wins and strong growth in the Consumer Technology Group (CTG) offset weak end markets and macro pressures. Solid cost controls also drove up growth in Operating Margins, which is expected to continue into F3Q16. Headwinds expected from declines at top customer **Lenovo** and macro weakness in Industrial & Emerging Industries (IEI) persist, pressuring sales growth, but Flex’s positive mix is driving improved profitability.

Despite weak end markets, Flex delivered solid results with upsides driven by new program ramps in its Integrated Network Solutions (INS) segment, as well as strength in CTG from wearables, connected home, and gaming, which more than offset weaker China handset demand. IEI was the only segment to miss expectations, driven largely by the weak macro environment. Stronger guidance was driven in part by the acquisition of **NEXTracker** (which adds roughly \$100 million to sales in F3Q16), and also reflects continued

new program ramps in INS, as well as underlying strength in CTG.

**Jabil Circuit (JBL).** JBL reported F4Q15 sales of \$4.68 billion and EPS of \$0.53. EM sales were up 1% y-o-y, a bit below guidance, while DMS sales were up 47% y-o-y, above expectations. Operating Margins ex-options declined 20 bps q-o-q to 3.5%, driven by lower EM margins, which was not offset by DM margins. Management guided F1Q16 sales to \$5.1–5.3 billion and core EPS to \$0.72–0.88.

**Apple** business increased from 18% to 24% of revenue during FY15. Jabil’s revenue with Apple increased by 50%, and Apple contributed 73% of total revenue growth. DMS was up 39% for the year and is guided to increase another 33% in FY16, hardly any deceleration. Apple is 60% of DMS, so the inference is that Apple business again will grow at a rate at least above 30%. That might reflect strength in Apple’s own business, but our opinion is that Jabil is involved in more Apple products. For example, **Green Point** has excellent plastics capabilities, which didn’t work out supporting the 5c iPhone but now apply to Watch bands and iPad Pro keyboards, among other offerings.

Jabil is putting money behind its growth opportunities by investing another \$900 million in capex in FY16. The company spent ~\$950 million in capex this past FY and is expected to invest another \$800 million to \$1 billion in FY16. We believe this is a testament

to management’s confidence in the growth opportunities available to Jabil.

These opportunities seem broad based, with the majority of them in the DMS business. Management stated that the company typically spends \$400 million on maintenance capex and that it didn’t expect this high level of capex investment to continue indefinitely. Recall that management typically strives for a 15% ROIC. With this level of investment, we believe the company will be able to hit its revenue target of \$20 billion and \$2.60 EPS in FY16 as previously stated.

Jabil is expecting strong growth next year. The company is guiding for Q1 revenue to come in at \$5.1–5.3 billion (14% y-o-y growth at the midpoint) and EPS of \$0.72–0.88 (45% y-o-y growth at the midpoint). This significantly exceeds consensus estimates at \$4.9 billion and \$0.61. The DMS segment is expected to grow 33% y-o-y and generate all the growth, while the EMS segment stays relatively flat y-o-y. We believe margins start expanding as prior investments start to generate revenue. Management also issued full-year guidance that beat consensus. For FY16, the company is targeting \$20 billion in revenue and \$2.60 in EPS compared to consensus at \$19.3 billion and \$2.38. Although capex investment is expected to stay in the \$800 million to \$1 billion range for FY16, it can be reduced in future years to generate higher FCF.

### Benchmark Electronics to Acquire Secure Technology

**Benchmark Electronics, Inc.** (Angleton, TX) announced that it has entered into a definitive agreement to acquire Secure Communication Systems, Inc. and its subsidiaries (collectively referred to as “Secure Technology” or “Secure”), a leading engineered products and solutions provider, for approximately \$230 million in cash, on a debt-free, cash-free basis subject to a working capital adjustment.

**Secure**, headquartered in Santa Ana, California, is a leading provider of customized high-performance electronics, subsystems, and component solutions for mission-critical applications in the highly regulated industrial, aerospace, and defense markets. The transaction is expected to be immediately accretive to Benchmark’s margins and earnings per share.

The transaction will be funded with Benchmark’s bank credit facility and is expected to close in the fourth quarter of 2015, subject to customary closing conditions, including regulatory approvals.

J.P. Morgan Securities LLC is acting as financial advisor to Benchmark, and Sheppard, Mullin, Richter & Hampton LLP is acting as its legal counsel. Harris Williams & Co. is acting as financial advisor to Secure, and O’Melveny & Myers LLP is acting as its legal counsel.

### Briton EMS and 42 Technology Partner for Wind Tunnel System

**Briton EMS** (United Kingdom) and product design and development consultancy **42 Technology** (United Kingdom) have joined forces to help the Aircraft Research Association (ARA) develop and launch a new research tool for use within its high-speed wind tunnel in Bedford.

The two companies have developed a control system for ARA’s new gust generator capable of simulating gusts at transonic, or cruising, speeds typically experienced by aircraft.

The new generator will help to drive new research into improving understanding of how turbulence affects aircraft performance. It is part of an investment at ARA in new systems and services, funded to the order of £9 million by the Aerospace Technology Institute.

Briton EMS and 42 Technology—which have frequently worked together for industrial and consumer electronics clients—teamed up with ARA’s in-house engineering team to design, manufacture, and install the control system for the new generator.

42 Technology designed the system to link the generator’s control desk with a network of 1,800 solenoid valves, each of which needs to be opened and closed within 20 milliseconds to deliver the required gust profiles.

### Celestica Appoints New Executive VP for Diversified Markets

**Celestica** (Canada) has appointed Jack Lawless as Executive Vice President, Diversified Markets. Jack joins Celestica with over 25 years of experience across a variety of industries, including the aerospace and defense, industrial, and semiconductor market segments. As the leader of Celestica’s Diversified Markets organization, Jack will be responsible for driving the profitable growth of the company’s aerospace and defense, energy, industrial, and healthcare businesses.

Before joining Celestica, Jack was the CEO of Associated Air Center, a subsidiary of **StandardAero**, an independent global aerospace maintenance, repair, and overhaul company.

### Flex Opens New Medical Manufacturing Facility in Mexico

**Flex** (Singapore)—formerly Flextronics—has opened its new medical device manufacturing facility and Center of Excellence in Tijuana,

Mexico, dedicated to the development and manufacturing of medical devices. The new Flex medical facility will serve as the showcase location for Flex medical operations, employing 2,400 workers and spanning over 530,000 square feet.

Flex’s facility is dedicated exclusively to medical device manufacturing. The facility includes over 120,000 square feet of class 7 and class 8 level clean room space, with plans for additional expansion.

### Foxconn Acquires Wcube

The Taiwanese EMS company has acquired optical product maker **Wcube** from **Ace Noble Investments**. Foxconn reportedly paid \$10.62 million when acquiring a 21.18% stake in the company.

Previous to this transaction, Foxconn had already invested some \$20 million in Wcube. Following the latest transaction, Wcube—and its optical product-making subsidiary—have become fully owned by Foxconn, according to a report in *DigiTimes*.

### Foxconn May Team Up with Apple to Buy Sharp LCD Stake

**Foxconn Technology Group** has signed a letter of intent to buy a stake in **Sharp Corp.**’s liquid-crystal display business in a deal that would give Foxconn management control as the Japanese electronics maker spins off the unit, according to those familiar with the plan.

The companies still need to complete price negotiations and due diligence, and there is no guarantee a final deal will be reached, per reports. Taipei-based Foxconn would get management control under the preliminary terms, though it won’t necessarily hold a majority of equity in the unit, which makes display panels for mobile phones and tablets, sources said. Sharp, a supplier to **Apple, Inc.** and **Xiaomi Corp.**, is under financial pressure to reach a resolution for the LCD business after years of negotiations without result.

## Inventec to Build New Office in Shanghai

The ODM **Inventec** (Taipei, Taiwan) is tearing down an idle factory in Shanghai, and in its place it will construct two new 18-story commercial/office buildings.

The company has scheduled the completion of the new buildings for 2018. Inventec will reserve one of the buildings for its own use, and either sell or rent out the other one, according to a report in *DigiTimes*.

## Xiaomi Notebook to Enter Mass Production in 1Q16

China-based **Xiaomi's** first notebook products reportedly will enter mass production in the first quarter of 2016. The vendor plans to release two models, a 12.5 inch and a 13.3 inch, the former made by **Inventec** (Taiwan) and the latter by **Compal Electronics** (Taiwan), according to sources from the upstream supply chain.

Xiaomi's notebooks are expected to feature a price/performance ratio as high as its smart phone products, and Xiaomi's strong brand recognition in China is also expected to help boost its notebook sales. The sources also believe Xiaomi is likely to bundle its notebook with a smart phone to promote both product lines; such a strategy could pose a great threat to its notebook competitors.

The sources believe Xiaomi's entry into the notebook market will impact **Lenovo** the most, initially, and Xiaomi is also rumored to have been aggressively headhunting Lenovo's executives.

With China still a major battlefield for the notebook market, Xiaomi's advantages in price competition is expected to affect existing notebook players and impact notebook' average selling prices (ASPs), as reported by *DigiTimes*.

## Kitron Receives Order from Kongsberg

Kitron has, through its subsidiary **Kitron AS** in Arendal, Norway,

received an order from Kongsberg Defence & Aerospace AS for military communications equipment.

Some of the equipment to be supplied will be part of an upgrade of the NASAMS air defense system for the Norwegian Armed Forces.

Kitron will supply various communications products, and production will take place at Kitron's factory in Arendal. The contract has a value of NOK56 million for Kitron, and deliveries will take place in 2016.

## Leif Thorwaldsson Leaves PartnerTech

**PartnerTech** (Sweden) President and CEO, Leif Thorwaldsson, leaves the company to take up a position with the private equity group **Altor** as President and CEO of the ÅLÖ Group. Leif leaves the company at the end of October 2015.

Christer Härkönen, a member of the board of **Scanfil**, will take over as CEO of PartnerTech for the duration of the integration phase following Scanfil's acquisition of PartnerTech.

Christer's background includes positions such as SVP Supply Chain at Sandvik Mining and Construction in Sweden and Holland, and head of the RFID business of UPM Oyj, as well as various executive positions in **Elcoteq Oyj**, **Fujitsu ICL**, and **Nokia**. Christer was to assume his role on October 1st, 2015.

## Avago Sells Optical Module Unit to Foxconn

**Avago Technologies, Ltd.** (Singapore) is reportedly selling its optical module unit to contract manufacturing giant **Foxconn** for an as-yet-undisclosed sum.

Avago has further agreed to act as worldwide sales agent for its former optical subsystems line after the deal closes, through a strategic partnership with Foxconn. Over 900 Avago employees will join Foxconn, reports *SeekingAlpha*. The new deal comes two years after Avago bought optical component maker **CyOptics** for \$400 million.

Last year, Avago sold its flash storage module/controller chip business to **Seagate** for \$450 million, and its Axxia

network processor unit to **Intel** for \$650 million.

## Microsoft to Sell Xbox Production Facility to Flex

**Microsoft** (Redmond, WA) has reportedly sold its manufacturing facility in Manaus, Brazil to **Flex** (Singapore) as the company withdraws its presence from the city.

The value of the deal was not disclosed. Flex will take over the manufacturing of Microsoft's smart phones and the Xbox 360 and Xbox one consoles, according to a report in Brazilian *TeleSintese*.

The sale of the facility is a result of the company's global restructuring in which the company aimed to reduce costs—which included a revaluation of assets acquired from **Nokia**, as well as layoffs.

The company claims that the employees at the Manaus facility will receive all necessary support for the transitional period, the report continues.

In a statement to the paper, Microsoft explained that it was looking for ways to increase efficiency in its operations, and that after consideration the company decided to appoint Flex as its manufacturing partner for Xbox and smart phones in Brazil, starting in January 2016.

## Foxconn to Build Solar Farms in China

**Foxconn Technology Group** has decided to construct a combined 400,000 kW of solar farms in China by 2018.

The first will be in Henan Province, home to its main plant for **Apple** smart phones. The aim is to generate renewable energy equivalent to the electricity consumed in final production of iPhones at the plant, according to the US technology giant's announcement.

Apple plans to step up use of renewable energy as a way of polishing its brand image. Hon Hai (Foxconn) is cooperating with its largest customer on this in China, which faces a serious pollution problem.

Apple has completed construction on 40,000 kW of solar projects in Sichuan Province. It also plans to build more than 200,000 kW of solar farms in northern, eastern, and southern China.

## Sparton Corporation To Close Lawrenceville, GA Manufacturing Facility

**Sparton Corporation** (Schaumburg, IL) will be closing its Lawrenceville, Georgia manufacturing operations no later than June 30, 2016.

The company explains in a press release that the closing is one of the actions being taken related to acquisition synergies that optimize its facility footprint.

The Lawrenceville facility was acquired as part of the **Hunter Technology** acquisition in April 2015 and has been operating within the Manufacturing & Design Services (MDS) segment. Products currently manufactured in Lawrenceville will be transferred to the company's other MDS facilities.

The closing will affect 82 employees. The company—with the help of various state and local agencies—will support displaced employees with job search assistance.

## Cicor Concentrates PCB Production; Layoffs Ahead

EMS provider **Cicor** (Switzerland) is concentrating its PCB production in the Advanced Microelectronics & Substrates Division (AMS Division) in Boudry, Switzerland.

In addition, the Electronic Solutions Division is to concentrate customer support in Switzerland at the ES Division's principal location in Bronschhofen. Restructuring costs associated with these two measures will affect the Cicor Group's year-end results in the amount of CHF 4.9 million (€4.53 million), the company states in a press release.

Cicor Group has decided to merge the AMS Division's two PCB production locations in Switzerland. This move will involve consolidating the Cicorel SA location in Moudon with the location in

Boudry. Existing competencies and manufacturing processes in Moudon will be integrated into the Boudry site. This means that customers of Cicorel SA in Moudon will in future be served by the Boudry location.

Cicor Group has also decided to merge the ES Division's customer support operation in Switzerland from its previous two locations into one joint location. As part of this measure, the Ticino sales office in Quartino will relocate to the ES Division's headquarters in Bronschhofen and have its existing competencies integrated there.

The company also states that layoffs in Moudon and Quartino will be unavoidable, but does not specify how many.

## Sony to Set Up Production in Thailand

**Sony** (Japan) is planning to launch a new manufacturing facility aimed at making smart phones in Thailand. The company is setting up a start-to-finish production system, covering chip mounting through assembly, writes *Nikkei News*.

Sony will add a new production line to an existing site in the Pathum Thani Province, which has been suspended since the floods back in 2011, the report continues.

The investment is planned to become a reality during the year, and mass production is expected to begin during the company's fiscal year 2016, with volumes set to reach several million units per year.

## Kinpo to Move Production Lines from China to Thailand

Taiwanese ODM/EMS provider **Kinpo Electronics** is shifting some of its printer production capacity from its facility in southern China to a facility of affiliated **Cal-Comp Electronics** in Thailand.

The company shifted a portion of its production lines as a response to client requests, but also in connection with the rising wages and short supply of labor around the coastal regions of China,

according to a report in *DigiTimes*.

Kinpo also has production lines running in the Philippines, where the company recently expanded its capacity.

At the moment, the company sees roughly 20% of its revenues coming from the Philippines.

## Dell Buys EMC for a Whopping \$67 Billion

**Dell** (Round Rock, TX) and data storage company **EMC Corporation** (Newton, MA) have signed a definitive agreement under which Dell, together with its owners, will acquire EMC, while maintaining **VMware** as a publicly traded company.

Under the terms of the agreement, EMC shareholders will receive \$24.05 per share in cash in addition to tracking stock linked to a portion of EMC's economic interest in the VMware business. Altogether, the offer is \$33.15 per share in cash and special stock. The total price tag for the transaction is approximately \$67 billion.

The EMC Board of Directors approved the merger agreement and intends to recommend that stockholders of EMC approve the agreement.

Following completion of the transaction, Michael Dell will lead the combined company as chairman and chief executive officer. Joe Tucci will continue as chairman and chief executive officer of EMC until the transaction closes. Dell's headquarters will remain in Round Rock, Texas, and the headquarters of the combined enterprise systems business will be located in Hopkinton, Massachusetts.

The transaction is expected to close in the second or third quarter of Dell's fiscal year ending February 3, 2017.

## Jabil Extends Its Capabilities in Israel with Acquisition of Shemer

EMS provider **Jabil** (St. Petersburg, FL) has acquired Israel-based **Shemer**,

thus expanding the company's capabilities and footprint.

Shemer brings to Jabil expertise in the ship-to-customer level of capital equipment, from basic to highly complex mechanical fabrication, as well as integration to full systems-level assembly, test, and fulfillment.

Shemer has manufacturing facilities in Israel. Its metal plant in Misgav and its motion plant in Yokneam house more than 350 employees and over 11,000 square meters of production capacity and administration facilities.

## Compal to Set Up Healthcare Unit Next Year

**Compal Electronics** (Taiwan) is planning to set up a new business unit focusing on healthcare technology products in 2016, following the establishing of a healthcare R&D center and partnership with Taiwan's Chang Gung University.

The business unit will integrate the resources and healthcare technology from other departments within the company in order to develop medtech devices, according to a report in *DigiTimes*.

On a side note, Compal recently invested some money to buy a 20.54% stake in **Avalue**, an embedded product company, in order to strengthen its position within the healthcare industry, the report concludes.

## SMTC Changes Its Corporate Headquarters to California

EMS provider **SMTC Corporation** has relocated its headquarters to its San Jose, California location.

SMTC's Toronto, Canada location will be known as the SMTC Toronto Division and will still be representing several "Centers of Excellence" within the company.

This new direction will better position SMTC Corporation with its investors while allowing it to continue to develop new customers globally and serve existing customers with the same world-class service levels it has been known for.

## New Director at Connect Group

**Connect Group NV** (Belgium) has appointed Klaus Kroesen as its new director. Klaus Kroesen is co-opted by the Board of Directors until the April 2016 Annual General Meeting.

Kroesen has years of experience in the electronics industry at the board level. In recent years (2009–2012), he was CEO and a shareholder of a German electronics subcontractor.

## Compal Begins Mass Production of Smart Phones in Vietnam

**Compal Electronics'** plants in Vietnam have started mass production, though in small volumes, and currently have about 100–200 workers. Compal aims to recruit a total of 2,000 workers.

Compal has invested \$500 million in the Vietnamese plants and will use the production lines to manufacture smart phones.

Facing China's rising labor costs and increasingly strict labor laws, Compal has decided to shift a small portion of its smart phone production to Vietnam in order to lower risks, according to a report in *DigiTimes*.

## Toshiba in Talks to Offload Image Sensors Unit to Sony

**Toshiba** is in talks to sell its image sensor business to **Sony** for about ¥20 billion (\$165 million), in the latest effort by the loss-making nuclear-to-semiconductor conglomerate to raise cash after a \$1.9 billion accounting scandal.

The deal, which includes a handover of Toshiba's image sensor manufacturing plant in southern Japan, would allow Sony to boost its production capacity to meet demand for its camera sensors, according to people familiar with the talks. The sensors are used in handsets made

by **Apple**, **Samsung Electronics**, and China's **Xiaomi**.

For Sony, the deal would be the latest in a series of investments the company has made in the image sensor business, which is one of its key growth drivers in the wake of a pullback in mobile phones and other consumer electronics products.

In terms of value, Sony controls about 40 percent of the global market for CMOS sensors, which are used in smart phones and digital cameras, according to Techno Systems Research.

## Hon Hai Loses Battle to Control Taiwan Chip Company

In a setback to its diversification efforts, **Hon Hai Precision Industry Co.** lost a struggle for control of a Taiwanese semiconductor company that is developing an important technology used in the latest iPhones and smart watches.

Shareholders of the Taiwan-based chip-assembly company **Siliconware Precision Industries Co.**, or **SPIL**, voted down the company's plan to increase its share capital, which would have allowed Hon Hai to become the largest shareholder in SPIL.

**Foxconn Technology Group** has been locked in a battle for the past two months with the world's largest chip-packaging company, **Advanced Semiconductor Engineering, Inc.**, to gain control of SPIL, the world's third ranking chip-packaging and -testing company by market share. (US-based **Amkor Technology, Inc.** is the sector's second-largest company.)

SPIL plans to expand in the market for system-in-package (SiP) technology, which squeezes additional components into a tiny chip. That allows smart phones and wearable devices to be thinner, more energy efficient, and more powerful. SiP design is used in Apple, Inc.'s iPhone 6S and Apple Watch. Analysts say Hon Hai, ASE, and SPIL are targeting billions of dollars in potential revenue and new orders from Apple, as reported by the *Wall Street Journal*.

## Cisco to Place Server Orders with Wistron

The fourth-largest server brand vendor worldwide, **Cisco** (San Francisco, CA), reportedly has recently switched its manufacturing partner to **Wistron** (Taiwan) from **Foxconn Electronics** (Hon Hai Precision Industry, Taiwan) because of Foxconn's joint venture partnership with **Hewlett-Packard** (HP) (Palo Alto, CA), according to sources from the upstream supply chain.

Cisco has been aggressively transforming from a network communication product vendor to an IT integration services provider and has launched Unified Computing System (UCS) servers for datacenters. Cisco currently has a global market share of 6% and its share in the blade server market in terms of revenues lags only behind that of HP.

Although Cisco's business is stable in both North America and Europe, its sales in Asia/Pacific have been dropping, especially in China. Cisco has recently invested in China-based **Inspur** (China), hoping to expand in China.

Before deciding on Wistron, Cisco originally planned to cooperate with **Quanta Computer** (Taiwan), but has given up the idea because the OEM business is no longer a focus

for Quanta's server business, and Quanta's aggressive entry into the datacenter market has made the Taiwan-based ODM a strong competitor to Cisco.

Although Wistron is also expanding in the datacenter market quickly, the two still have formed a partnership as they target different clients. Wistron is still pushing its OEM business aggressively, as reported by *DigiTimes*.

## Kimball Electronics Now Part of Top 20 Largest Contract Manufacturers Globally

We have included **Kimball Electronics** (Jasper, IN), which has been ranked 19<sup>th</sup> on our Top 20 Largest Contract Manufacturers list. Kimball reported revenue of \$201.1 million in 4Q2015 and has replaced **AmTRAN Technology**. With the inclusion of Kimball, the second-quarter revenue for the entire group totaled \$79.9 billion, an improvement of 0.1% compared to the numbers published in *MMI* September 2015 of \$79.7 billion (which included AmTRAN Technology and not Kimball Electronics). A revised table of Q2 and six-month 2015 results for the 20 largest contract manufacturers' revenue would show an increase of

2.5%, an improvement of 0.2% due to the inclusion.

First-half sales of the 20 CMs amounted to \$160.9 billion, an increase of 4.5% year over year compared to that reported in September's *MMI* issue. Kimball Electronics had a very positive contribution to the first-half net income, which increased by 0.7% to \$3.36 billion when compared to our September *MMI* issue.

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