Manufacturing Market INSIDER™

inside the contract manufacturing industry

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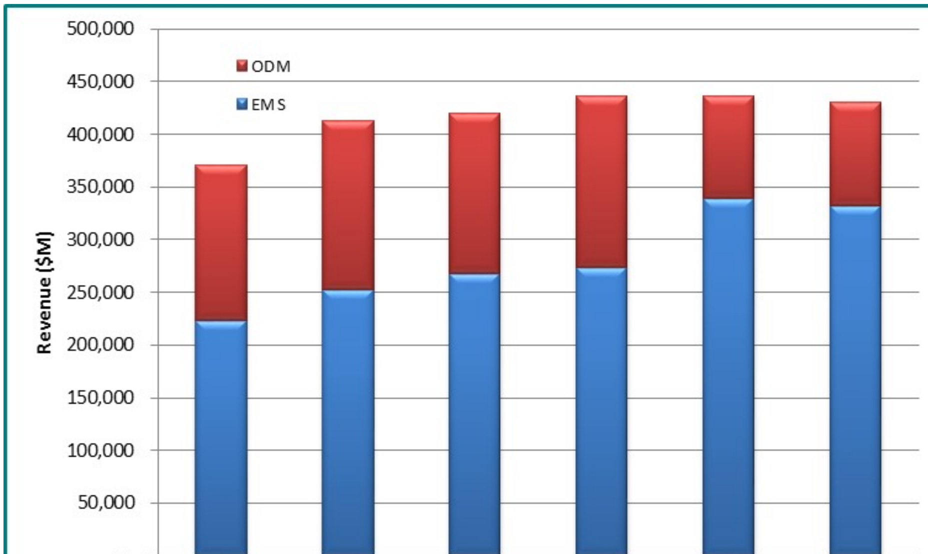
Tepid Growth for the OEM and Contract Manufacturing Services Industries

Figure 1 The Worldwide CM Market, 2010–2015



	2010	2011	2012	2013	2014	2015
ODM	147,518	160,237	152,079	163,327	98,036	97,476
EMS	223,220	252,516	267,417	273,392	338,747	332,606

Following a very strong year in revenue growth for electronics assembly services in 2013 of 10.7 percent, the market in 2014 grew 8.0 percent, but declined 2.4 percent in 2015. This low growth in revenue trickled down in the EMS industry, as will be seen in this report. What little growth occurred came from the automotive sector (5.6%), while all other sectors expanded between 2 and 3 percent.

The computer sector declined 14.6 percent in revenue, offset by the communications sector, which grew 1.5 percent. The consumer market did second best, with growth of 3.4 percent. The industrial, medical, and defense/aviation sectors all expanded between 2.4 percent and 2.9 percent.

Table 1 (p. 2) summarizes the assembly of electronics products by manufacturing type and industry segment for 2015. Most noteworthy is the percentage of EMS and ODM revenue from the computer and communications (IT) sectors. These two sectors ostensibly accounted for approximately 69 percent of total CM revenue and an amazing 83 percent of ODM revenue, as the latter suppliers are concentrated in the computer, communications, and consumer electronics sectors (including consumer electronics, the percentage rises to 98 percent for ODM total revenue). EMS companies tend to be more general-purpose manufacturers compared with ODMs, and often specialize in high-complexity and high-mix assemblies. It is interesting to note that a substantial proportion of available manufacturing remains in-house, particularly among the Japanese, Korean, and Chinese OEMs. Additionally, there is a large proportion of the market that cannot be readily outsourced, as the assemblies are too low in volume and high in complexity, or contain proprietary information or designs that should remain in-house.

Some articles in this issue

Because of price pressures, as well as economies of scale in purchasing capital equipment, the amount of OEM outsourcing is likely to increase over time. There are periods of market contraction, however, as evidenced in 2009 and more recently in 2015, in which consolidation occurs and weaker suppliers get weeded out. In previous years, *MMI* has observed a number of mergers and acquisitions that redistributed the market share of leaders, as is normal for most markets. Lower-tier EMS companies tend to make attractive acquisition targets, as they can provide a strategic solution such as the provision of a regional footprint, access to specific customers, technical capabilities, or positive cash flow. Most EMS companies cannot succeed via organic growth alone, but must supplement growth by acquiring weaker EMS players or suppliers that have good customer bases or regional control.

Table 1 The Worldwide Assembly Market by Manufacturer Type and Industry Segment, 2015

Total Assembly ($M)	EMS	ODM	OEM	Total	Percent
Computer	127,498	18,545	183,552	329,594	24.8%
Communications	88,438	62,186	237,214	387,837	29.2%
Consumer	47,738	14,731	207,267	269,736	20.3%
Industrial	30,374	743	84,367	115,483	8.7%
Medical	15,800	223	46,132	62,155	4.7%
Automotive	11,459	1,048	83,799	96,306	7.3%
Aviation/Defense/ Other Transportation	11,300	-	55,318	66,617	5.0%
Total	332,606	97,476	897,647	1,327,729	100.0%

Communications

The EMS communications market expanded significantly for Pegatron in 2015, increasing its market share by approximately $20 billion. The entire communications CM industry expanded by over $18 billion in 2015, suggesting that Foxconn lost market share. Other tier-one suppliers appear to have experienced a decrease from the previous year, with growth going to the suppliers that participated in mobile phone assembly. This industry is expected to continue to grow, being driven by the extraordinary popularity of smart phones. Flex assisted Google (formerly Motorola) and Nokia merged with Microsoft in April 2015. EMS firms still dominate this segment, accounting for 87 percent of all revenue in 2015, although ODMs are making smart phones as a specialty.

Computers/Peripherals

The CM computer market declined by more than $18 billion in 2015. Foxconn’s revenue increased by almost $1 billion, while most of the others reported different numbers due to better data collection. Notebook computers saw a small drop, whereas desktop computers and tablets experienced a significant decline. Leading EMS companies in 2015 were Foxconn, Jabil, and Pegatron, whereas leading ODMs in 2015 were Quanta Computer, Compal Electronics, and TPV technology. EMS firms still dominate this segment, accounting for 59 percent of all revenue in 2015, although ODMs are making LCD panel technology as a specialty.

The computer market segment also includes peripherals such as monitors, storage systems, and printers. Monitors and printers are manufactured mostly in China today, as HP, Canon, and Epson either outsource or utilize their captive suppliers for assembly.

Consumer Electronics

The consumer electronics market segment declined by more than $7 billion in 2015 as a result of a slump in demand for digital TVs from the previous year. Once again, Foxconn dominated this segment, with almost $27 billion in revenue ($.05 billion more than in 2014), mostly involving LCD/LED display products (TVs, monitors, etc.). EMS firms still dominate this segment, accounting for 77 percent of all revenue in 2015, although ODMs are making LCD panel technology as a specialty. The most popular products involved set-top boxes, games, and personal navigation systems.

Industrial

The CM market for industrial products increased by approximately $4 billion in 2015, nearly all of it accruing to EMS companies. Pegatron emerged as the largest supplier to this segment, followed by Flex, Foxconn, and Jabil. The largest increase was in the process control and test and measurement market sectors of chip manufacturers of IC devices. Other industrial sectors, like clean energy, robotics, and HVAC, also benefited. The ODM supplier market decreased in size due to the reorganization of suppliers by manufacturing source.

Medical

The CM medical equipment market only increased by an estimated $0.4 billion in 2015, after experiencing very high growth in 2010 and 2011. Jabil and Flex are the leading suppliers in this category, followed somewhat distantly by Plexus, Sanmina, and Celestica. The majority of outsourced medical product assemblies are performed by small to medium-sized EMS companies worldwide. ODM suppliers experienced a flat year in revenue for 2015.

Automotive

The automotive market segment appeared to experience a small decrease in revenue of approximately $0.25 billion in 2015. Still, gains were made by companies like Jabil, IMI, and VIDEOTON. Given the specialties required by this industry, it is often necessary to have a dedicated division to service market needs. OEM companies prefer to outsource noncritical assemblies, such as instrument panel subsystems containing a microcontroller and sensors (federally mandated assemblies such as emission control and ABS are typically not outsourced). Moreover, EMS firms, and increasingly ODMs, are assisting in the assembly of the latest entertainment, Internet, and navigation systems.

Commercial Aviation, Defense, and Other Transportation

The combined market segment for all aerospace and military/defense spending for electronic assemblies stayed flat in 2015, despite the dramatic increase in spending for commercial aviation. There was no increase in commercial aviation, defense, and other transportation revenue in 2015. North American top-tier EMS firms are the primary suppliers to this sector, followed by second-tier suppliers like Ducommun, Sparton, and NEO Tech.

The above discussion is excerpted from The Worldwide Contract Manufacturing Services Market – 2016 Edition *by **NVR.***

Healthy Start for North American Group

For a group of eight mid-tier and smaller EMS providers based in North America, combined Q1 sales grew from the year-earlier period. The group's revenue rose 3.3% year over year, as the group started on a positive note with strong growth on which to build in subsequent quarters. The US economy started on a stronger footing, too, which increased at an annual rate of 0.8 percent in the first quarter of 2016, according to the "second" estimate released by the *Bureau of Economic Analysis*. Thus, this North American group as a whole outgrew the US economy by 250 basis points versus a year earlier, which could be a good sign. If the group can continue to maintain this growth rate for the rest of the year, then it should see annual growth above what is projected for the economy; the **International Monetary Fund** is estimating 2.4% GDP growth for the US economy in 2016.

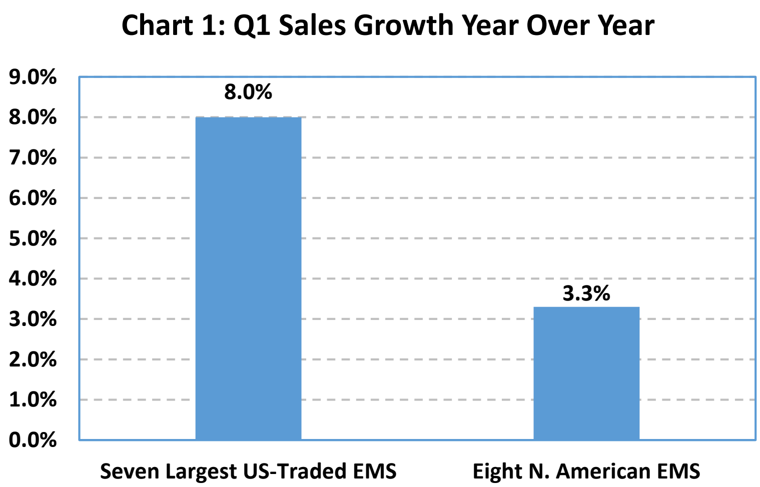
This North American group of eight mid-tier and smaller providers posted solid growth in a Q1 comparison with a cohort of large competitors. On a year-over-year basis, collective sales growth of the mid-tier and smaller providers in Q1 was 4.7 percentage points above that of the seven largest US-traded EMS providers (Chart 1, p. 4). Overall, smaller was better in this Q1 analysis. In a quarter-over-quarter comparison, the seven US-traded EMS providers posted a better result, with a sales decline of 3.8% versus a decline of 5.8% for the eight North American EMS providers.

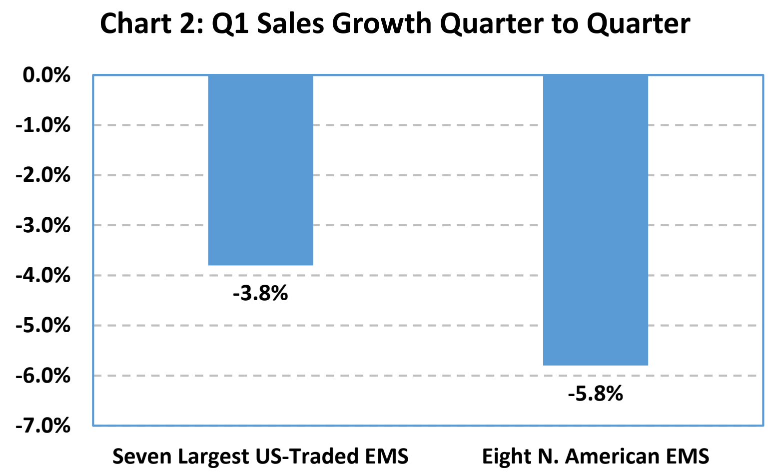
Q1 revenue for the mid-tier and smaller group totaled $676.1 million, compared with $654.4 million in the same period a year ago. Year-on-year sales increases at six providers were essentially offset by declines at two others. **Kimball Electronics** recorded by far the highest sales growth at 15.3%; **SigmaTron** came in a close second with

Table 2: Q1 and Nine-Month 2016 GAAP Results for Eight Mid-Tier and Smaller EMS Providers Based in North America (M$ or %)

Company	Q1 '16 sales	Q4 '15 sales	Qtr.-qtr. chg.	Q1 '15 sales	Yr.-yr. chg.	Q1 '16 gross marg.	Q4 '15 gross marg.	Q1 '15 gross marg.	Q1 '16 oper. marg.	Q4 '15 oper. marg.	Q1 '15 oper. marg.	Q1 '16 net inc.	Q4 '15 net inc.	Q1 '15 net inc.
Stand-Alone EMS Providers														
Key Tronic	118.4	116.4	1.8	112.9	4.9	8.4%	8.6%	8.4%	2.3%	2.1%	2.3%	1.8	1.8	1.8
Sparton	102.2	103.5	-1.3	93.1	9.8	16.4%	15.5%	21.3%	2.6%	0.5%	5.3%	1.1	0.3	4.1
SMTC	41.9	60.7	-31.0	48.7	-13.9	11.6%	9.1%	7.4%	2.8%	2.2%	-0.1%	1.0	0.79	-0.4
SigmaTron	59.2	69.7	-15.1	53.7	10.2	9.6%	10.9%	10.6%	1.1%	3.0%	1.5%	0.2	1.2	0.6
IEC Electronics	33.1	32.9	0.7	32.9	0.8	17.3%	17.7%	7.8%	6.0%	5.6%	-14.8%	1.5	1.5	-5.5
Nortech Systems	29.0	31.4	-7.9	26.5	9.1	11.7%	12.3%	10.8%	0.3%	1.0%	-0.8%	0.06	0.1	-0.2
Kimball Electronics	214.1	207.1	3.4	185.7	15.3	8.0%	7.4%	9.2%	3.4%	3.1%	4.4%	7.5	4.7	6.4
Subtotal/avg.	**598.0**	**621.9**	**-3.8**	**553.5**	**8.0**	**12.8%**	**12.7%**	**12.8%**	**2.9%**	**2.4%**	**2.0%**	**13.1**	**10.4**	**6.7**
EMS Unit of Larger Public Company														
Ducommun**	78.1	95.6	-18.2	100.9	-22.5									
Total/avg.	**676.1**	**717.5**	**-5.8**	**654.4**	**3.3**									

**Financial Data for Ducommun LaBarge Technologies (DLT) segment of Ducommun Inc has been included.





10.2% growth year over year. Both **SMTC** and **Ducommun** recorded double-digit declines at 13.9% and 22.5%, respectively (Table 2, p. 3).

Versus the prior quarter, Q1 sales for the group of eight fell 5.8%. In this comparison, however, large US-traded counterparts together outperformed the mid-tier and smaller providers with sales sinking only 3.8% sequentially (Chart 2). It appears that the mid-tier and smaller providers, which have significant amounts of consumer and computing sales, are collectively more subject to seasonality than their smaller competitors.

Five out of the eight North American providers saw their Q1 sales drop from the prior quarter, with SMTC, SigmaTron, and Ducommun registering two-digit tumbles. The sequential declines at those five providers outweighed the gains at the other three players—**Key Tronic**, **IEC Electronics,** and Kimball Electronics (Table 2).

The group of eight mid-tier and smaller providers consists of seven companies in the EMS space, all publicly traded, and one EMS unit, which is **Ducommun LaBarge Technologies** (DLT, a.k.a. Electronic Systems division) within the larger publicly held corporation that is Ducommun. Together, the seven stand-alone providers produced a Q1 gross margin of 12.8%, up 17 basis points sequentially and up three basis points year over year. Four out of seven providers attained double-digit gross margins, with a high of 17.3% turned in by IEC Electronics.

In the aggregate, Q1 operating margin for the seven stand-alone providers stood at 2.9%, up 53 basis points sequentially and 87 basis points year over year. IEC Electronics, the gross margin leader, also achieved the highest Q1 operating margin at 6%, which was well above the results of the other stand-alone providers. All providers reported operating profits (Table 2 above). Except for SigmaTron and **Nortech Systems**, all other providers improved their operating margins from the prior quarter, and all but Sparton, SigmaTron, and Kimball Electronics raised their margins from a year ago.

For the seven stand-alone providers, net income in Q1 amounted to $13.7 million, up from a combined net income of $10.4 million in the prior quarter and up from net income of $6.7 million a year earlier. The year-over-year increase in net income occurred in tandem with 8% increase in sales versus a year ago. Q1 net margin came in at 2.3%, up 108 basis points year over year. Four of seven providers reported an increase in net income compared to a year ago.

A Brief Look at Each Provider

IEC Electronics Corp. (IEC). For the first quarter of fiscal 2016, the company recorded net sales of $33.1 million, a slight increase compared to net sales of $32.9 million during its second quarter of the last fiscal year. Gross profit margin for the first quarter grew to 17.3%, compared to 7.8% in the same quarter last year. The improved gross profit was related to higher production volume, changes in customer mix, improved labor efficiencies, and lower overhead cost. Selling and administrative expenses, excluding restatement and related expenses, decreased to $3.7 million or 11.2% of sales as compared with $6.3 million or 20.0% of sales in the second quarter of fiscal 2015. S&A in the second quarter of 2015 included $3.1 million in costs associated with the 2015 proxy contest and change in control.

Net income for the quarter was $1.5 million, or $0.14 per share, compared to a net loss of $5.5 million, or a loss of $0.55 per share, in the prior-year period. During the fourth quarter of 2015 the company reduced net inventory by $2.3 million compared with the first quarter of 2016 and decreased net debt by $4.4 million.

Its first-quarter results demonstrated continued momentum, wherein the company achieved moderate revenue growth, gross margin improvement, and enhanced profitability. It remains focused on capitalizing on opportunities within its high-growth verticals; revenue growth in the quarter was primarily driven by its Medical sector, which represented a higher portion of consolidated revenue.

Key Tronic Corporation (KTCC). For the third quarter of its fiscal year 2016, Key Tronic reported total revenue of $118.4 million, up 1.8% from $116.4

million in the previous quarter and up 4.9% from $112.9 million in the same period of fiscal year 2015. For the first nine months of fiscal year 2016, total revenue was $361.1 million, up 15% from $313.6 million in the same period of fiscal year 2015.

Net income for the third quarter of its fiscal year 2016 was $1.8 million or $0.16 per share, compared with $1.8 million or $0.16 per share for the third quarter of fiscal year 2015. The results for the third quarter of fiscal year 2016 reflect an extra week due to the company's 53-week fiscal calendar this year. For the first nine months of fiscal year 2016, net income was $4.4 million or $0.39 per share, up 123% from $2.0 million or $0.17 per share for the same period of fiscal year 2015.

For the fourth quarter of fiscal year 2016, the company expects to report revenue in the range of $117 million to $122 million, and earnings in the range of $0.16 to $0.21 per diluted share.

Nortech Systems, Incorporated (NSYS). The company reported net sales of $29.0 million for the first quarter ended March 31, 2016, a 9.1% increase over net sales of $26.5 million for the first quarter of 2015.

For the first quarter of 2016, operating income was $221,000, compared with an operating loss of $202,000 for the first quarter of 2015. First-quarter net income of $63,000, or $0.02 per diluted common share, compares with a net loss of $193,000, or $0.07 per diluted common share, in the prior year.

The overall revenue increase, higher gross margin, and fixed-cost leveraging accounted for the quarterly profit improvement. In addition, Nortech generated $1.3 million in operating cash flow.

SMTC Corporation (SMTX). Revenue for the first quarter was $41.9 million compared to $48.7 million in the first quarter of the prior year. The decreased revenue was due to reduced volumes from certain existing customers and delays in program ramps from new customers. This was partially offset by increased revenues from new and existing customers.

Despite the revenue decrease year over year, adjusted EBITDA was at $1.4 million for the first quarter.

Net income was $1.0 million for the quarter compared to a net loss of $0.4 million for the first quarter in the prior year. When excluding the impact of an unrealized foreign exchange gain of $1.0 million on unsettled forward exchange contracts in the first quarter, net income was nil. When excluding the impact of an unrealized foreign exchange loss of $0.3 million on unsettled forward exchange contracts in the first quarter of the prior year, net loss was $0.1 million.

The company anticipates sequential growth in revenue from its first quarter results and full-year 2016 revenue could decrease 3%–6% from 2015 revenue levels.

Sparton Corporation (SPA). The company reported its third fiscal quarter (March). The company reported adjusted EPS of $0.34 and sales of $102.2 million. The company gave Q4 guidance of $100–104 million in sales and a gross profit margin of 18.0–19.0%. Segment revenue and margins are expected to have similar relationship to Q3 operating results.

In the quarter, gross profit margin was 16.4% on $102.2 million in sales. The SG&A expenses were $13.7 million, or 13.4% of net sales ($12.7 million, or 12.4% on an adjusted basis). The operating margin was 2.6% (5.9% adjusted) and EBITDA was 6.4% (7.7% on an adjusted basis). Reported EPS were $0.12; adjusted, $0.34.

In the quarter, Sparton finalized the closure of the Lawrenceville and consolidation of the Irvine facilities. There were 77 Manufacturing & Design Service (MDS) new program wins, with expected annual revenue of $16 million when in full production. Trailing four-quarter MDS wins totaled $54 million. There was a $27.6 million award for the production of domestic sonobuoys. There was a $1.3 million award for the production of foreign sonobuoys. Backlog was $160 million in MDS and $112 million in the Engineered Components and Products (ECP) segment. The $112 million consisted of $80 million for domestic sonobuoys, $10 million for foreign sonobuoys, $17 million for ruggedized displays, and $5 million miscellaneous.

The board completed "exploring" a range of strategic alternatives, which had the goal of identifying the best way to enhance shareholder value. At the end of April, it decided to solicit interest in Sparton Corporation as a whole, and announced this to shareholders. After the board receives possible indications from parties interested in acquiring the entire company, it will determine if a sale of the entire company is the best value for shareholders or if other actions should be considered, such as selling individual segments. Taking this approach, the board believes it will have a better assessment of how to proceed.

Guidance for the fourth fiscal quarter is for revenue to be in a range of $100–104 million. Gross profit margin should be between 18% and 19%. The segment revenues and margins should have a similar relationship to those of the third fiscal quarter.

Robust Q1 Growth for European Group

First-quarter sales in euros for a group of five European EMS providers rose 33.3% year over year, well above comparable growth of the European Union's GDP. Revenue for the five mid-sized providers totaled €412.9 million, up from €309.7 million in the year-ago quarter. As a group, the five providers made a good start in 2016 with a healthy year-over-year increase in Q1. In 2015, **Scanfil Oyj** acquired **PartnerTech AB**. This transaction will provide both Scanfil and PartnerTech with opportunities to expand their operations and service offerings to the benefit of customers, investors, and employees.

Sales grew from a year earlier at all five providers, with Scanfil achieving triple-digit (184.1%) growth, which can be attributed to its acquisition of PartnerTech (Table 1A). As Scanfil will continue to optimize its footprint, it cannot be ruled out that certain locations and functions, whether Scanfil's or PartnerTech's, would be affected by the acquisition. For instance, PartnerTech's Metal Precision Division has already carried out restructuring efforts, as its profitability has been unsatisfactory.

At **Neways Electronics International**, Q1 sales came in at €98.3 million, an increase of 2.6% compared with the €95.8 million recorded in the same period of 2015. In the period under review, Neways focused on the continued rollout of the group-wide improvement program, "Up to the next level," which is aimed at the continued strengthening of Neways' position as a one-stop provider and Life Cycle Manager in the EMS market. The strong order book it had at the start of the year continued to grow in the first quarter. The order book had increased by 7% to €177.0 million at the end of March 2016 (€165.4 million at the end of March 2015).

LACROIX Electronics, the EMS unit of LACROIX Group, generated sales of €74.3 million euros, an increase of 21.4% compared with a year ago. The growth of its Polish and Tunisian sites allows for improvement of income despite the difficulties remaining in Germany and in the R&D centers.

Kitron reported revenue in the first quarter of NOK497 million, an increase from NOK471 million in the first quarter last year. Kitron's revenue in the first quarter was 6% (5.5% in euros) higher than last year. The Industry market sector performed particularly well, with revenue growth of 35%. As in preceding quarters, revenue within the Offshore/Marine segment continues to fall due to the general downturn in the oil service market.

The order backlog ended at NOK902 million, an increase from NOK855 million a year ago. Growth in the order backlog was especially strong in the Industry market sector, with an increase of 56%.

On 31 March it was announced that Kitron had been selected as an international source for manufacturing of a subassembly related to the JSF Radar system developed by **Northrop Grumman Corporation** for the F35 Lightning II. The contract has a potential value of more than NOK500 million over the serial production lifespan of the F35 program. For 2016, Kitron expects revenue of between NOK2,050 million and NOK2,250 million and an EBIT margin of 5.3% to 6.3%. The growth is driven by increased demand in the Industry and Defense/Aerospace sectors. The profitability increase is driven by cost-reduction activities and improved efficiency.

Finally, **Connect Group** reported that Q1 sales grew 0.5% from the same period last year, reflecting a generally improving economic climate. Jeroen Tuik was to take up the position of CEO as of 1 May 2016, allowing Flor Peersman to devote all his time and effort to his role as COO.

The restructuring in Poperinge, which started in 2014, and the move to the Ypres plant (owned by Connect Group) was completed in the first half of 2015. About 60 employees left the company and fixed costs of the production in Ypres were cut by more than €300K a year.

A customer of the Dutch subsidiary has informed the company that it will be ending its business relationship with Connect Group in the Netherlands in the course of 2016. This customer accounted for sales of €12 million in 2015. On the basis of its last-time buy order, sales in 2016 should still be €7 million. From 2017 onward, sales for this customer will drop to €0.

The order book at the end of financial year 2015 amounted to €86.6 million (€82.8 million at the end of 2014).

Table 1A: Q1 2016 Results for Five European EMS Providers (M euros or %)

Company (in order of Q1 '16 sales)	Head-quarters	Reports in euros	Q1 '16 sales	Q1 '15 sales	Yr.-yr. chg.
Neways Electronics International	Netherlands	Yes	98.3	95.8	2.6%
Scanfil	Finland	Yes	130.4	45.9	184.1%
LACROIX Electronics	France	Yes	74.3	61.2	21.4%
Kitron	Norway	No	53.4	50.6	5.5%
Connect Group	Belgium	Yes	56.5	56.2	0.5%
Total/avg.			**412.9**	**309.7**	**33.3%**

Results in non-euro currencies were converted to euros by applying a three-month average exchange rate for the corresponding quarter. Average exchange rates were obtained from OANDA.

Company News

Foxconn Subsidiary to Establish Research and Development Center in Skolkovo

Kunshan Nano New Material, a subsidiary of **Foxconn Group**, will establish a research and development center at Russia's Skolkovo innovative center.

The relevant agreement was signed by General Director of Kunshan Nano New Material, Lu Hung Tu, and the head of the cluster of nuclear and new industrial technologies and materials at Skolkovo, Igor Karavayev, as part of Startup Village.

Kunshan Nano Material specializes in glass manufacturing, polishing, and cutting. Its products are used in particular by **Apple**.

New product…. **Pegatron Technology** has claimed it started developing virtual reality (VR) backpacks much earlier than its competitors **Micro-Star International (MSI)** and **Zotac**, both of which showcased their VR backpacks at Computex 2016. Pegatron CTO and ASRock chairman Hsu-Tien Tung noted that Pegatron finished the VR backpack prototype in early 2015 and has demonstrated its functions to clients such as **ASUSTek Computer** and **Hewlett-Packard (HP)**. In addition, Pegatron has also begun developing other VR devices and drones. Tung noted that there are still many issues with VR's hardware/software integration and technology that need to be resolved. The most difficult part is the display latency.

MediaTek Reportedly Lobbying Officials for a Closer Tie with China Firm

MediaTek (Taiwan) has been lobbying officials at Taiwan's Ministry of Economic Affairs (MOEA) for approval of its recently announced cooperation with **NavInfo** (China), including plans to set up a joint venture with the China-based digital mapping service provider, as well as to lift a ban on China's investment in Taiwan's lC design houses, according to a Chinese-language *Liberty Times* report. The lobbying efforts have put pressure on some ministry officials.

MediaTek has not even submitted a written declaration for a planned sale of one of its China-based subsidiaries to NavInfo, which is part of the cooperation being announced, but the Taiwan-based company has already begun lobbying through different channels, the report said.

In May 2016 MediaTek announced the signing of a strategic cooperation framework agreement with NavInfo, under which NavInfo will acquire **AutoChips** for a total of US$600 million. MediaTek also plans to invest up to US$100 million in its strategic alliance with the China firm. The pair is looking to jointly explore business opportunities in the in-vehicle networking and car electronics markets.

IMI Forges Partnership with Macnica Europe

Philippine-based EMS provider **Integrated Micro-Electronics, Inc.** has entered into a value-added reseller partnership with **Macnica Europe GmbH.**

With this agreement, IMI is able to improve its customer base for its camera platforms, especially for the European electronics manufacturers in the industrial, automotive, and other key markets.

The camera platform is a design platform that can be customized for various automotive applications, such as an advanced driver assistance system (ADAS) and a parking assist system. IMI is currently collaborating with various suppliers and system developers in developing its automotive cameras for ADAS, the company states in a press release.

Cemtrex Completes Synergistic Acquisition of Periscope

US-based **Cemtrex, Inc.**, an industrial and manufacturing solutions company, has entered into an agreement to acquire all the assets of **Periscope**, located in northern Germany.

Periscope is focused on electronic manufacturing services, primarily for the major German automotive manufacturers, including Tier 1 suppliers in the industry, as well as for industries like telecommunications, industrial goods, luxury consumer products, display technology, and other industrial OEMs. Periscope has more than 35 years of industrial operating experience.

The company to be acquired projected annual revenues for the next twelve months of around €30 million and has a decades-long history in the electronics manufacturing industry.

From self-driving cars to fully electric vehicles, the automobile industry is undergoing a significant technological disruption and Cemtrex is positioning itself right in the middle of this transition. The automotive electronics market was valued at $185.05 billion in 2015 and is anticipated to be $352.92 billion by 2023, per a new research report by **Global Market Insights, Inc.** Cemtrex already has a German subsidiary in the electronics manufacturing sector and with this acquisition, it will secure a broader base and larger market share in the Eurozone.

Partnerships… Swedish EMS provider **Hanza** has signed a cooperation agreement with **Free2move** regarding industrialization and manufacturing of the company's current and future products. Hanza is now moving into a new future customer segment and will also evaluate the technology for use in its own modern and cost-effective manufacturing solutions. Free2move offers products and services in the industrial IoT area, such as intelligent sensor networks that wirelessly collect, analyze, monitor, and control different devices, reports *Evertiq*… **PKC Group** has signed a global partnership agreement with **Bombardier Transportation** related to electrical systems deliveries. The agreement makes PKC a strategic supplier partner to Bombardier Transportation with an opportunity to capture 40–70% of Bombardier Transportation's annual buy of electrical systems commodities. The agreement is a global extension to a previous local agreement with Bombardier Transportation in Europe.

Spectron Electronics Closes Shop

Canadian electronics assembly company **Spectron Electronics** has closed shop and will be auctioned off. A company representative told *Circuits Assembly* that the company—after about 20 years in the industry—closed shop on May 18. The company was founded in 1994 and based its operation in an 8,400-square-foot facility in Lindsay, Ontario.

New Facilities… **Salcomp** will expand its operations in China by establishing a second manufacturing plant in Guigang, which is Salcomp's sixth plant worldwide. The new plant will cover approximately 100,000 square meters and is expected to begin operating in 4Q2017, with the main building completed in 15–18 months from June 2016. Over the years, the overall investment by Salcomp, the Guigang government, and Salcomp's network of suppliers is estimated to have been RMB1.5 billion, and sales RMB6–7 billion. The agreement signifies Salcomp's commitment in China, and Shenzhen will continue to be the company's strategic location for its global functions.

Southeast Manufacturing Sees Double-Digit Drop in May, Reverses Previous Gains

Southeast manufacturers reversed a strong April report with sharp decreases in May, according to the *Southeast Purchasing Managers Index* (PMI) report released today by Kennesaw State University's Econometric Center in the Michael J. Coles College of Business.

Southeast manufacturing activity decreased 12.3 points to 48.8 in May, based on decreases for all five of its underlying components. This is the lowest Southeast reading since August 2015.

Highlights of the May Southeast PMI include:

- New orders decreased 19.7 points to 46.5, 12.1 points below its six-month average.
- Production decreased 21.2 points to 47.7, 12.3 points below its six-month average.
- Employment decreased 8.7 points to 53.5, 2.7 points below its six-month average.
- Supplier delivery time decreased 3.5 points to 54.7, 2.2 points above the six-month average.
- Finished inventory decreased 8.1 points to 41.9 points, 11.1 points below its six-month average.
- Commodity prices decreased 0.3 points to 60.5 points, 13.4 points above its six-month average.

Nokia Completes Acquisition of Withings

Nokia has announced plans to acquire **Withings**—a French consumer electronics company focused on digital health—for €170 million ($191 million) in cash. The acquisition will significantly boost Nokia's portfolio of wearables and fitness devices, bringing 200 Withings employees and products—including the Activité smart watch, E-ink fitness tracker, and Bluetooth thermometer—into Nokia's advanced technologies division.

The acquisition is the latest bit of course correction from Nokia, as the company continues to reorganize itself after selling its mobile phone division to **Microsoft** two years ago. Marshaling its disparate businesses, Nokia strengthened its position in the networking equipment industry last April by buying **Alcatel-Lucent** before jettisoning its maps business for $3 billion to a consortium of German carmakers.

The acquisition of Withings will likely spur further forays into the consumer tech market, but Nokia's CEO has said the company is happy to take its time reestablishing its brand, as reported in *The Verge*.

Acquisitions… **Foxconn** will purchase **Smart Technologies** in an all-cash deal worth $200 million.

Last fall Calgary-based Smart said it would undertake a review, given slower-than-anticipated sales growth and a weaker-than-expected fiscal outlook for 2016, and has been seeking potential buyers since, according to *Circuit Assembly*.

The company designs and builds a patented interactive whiteboard for students. It has more than 600 employees globally, 400 in Calgary.

Publisher: Randall Sherman

Editor: Anna Reynolds

Research Analyst: Vivek Sharma

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E-mail: rsherman@mfgmkt.com

Website: www.newventureresearch.com