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inside the contract manufacturing industry

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Is Foxconn Becoming a Hybrid?

The former editor of this newsletter for over 24 years. John Tuck, watched the industry grow from a mere \$20 million in sales in 1990 to over \$280 billion in 2014. During that time he came to define the industry by type of supplier: First EMS, later ODM, and in the last few years by what he termed a "hybrid" supplier. The hybrid supplier was both EMS and ODM, with the difference being that hybrids mainly engaged in the design, manufacture, and branding of their customers' products, not their own. Although often hard to distinguish, most ODMs today are close to being hybrids in that they manufacture less of their own products in vertical niches, which typically serve a domestic market. Because those of us in the West don't commonly see these products, these firms tended to be called ODMs because they offered original design and manufacturing services to Western OEMs in the areas where they had specific expertise, such as computer motherboards, mobile phones, consumer audio and video electronics, and office automation items (copiers, fax machines, watches, calculators, etc.). Yet, these ODM suppliers also offered privatelabel manufacturing services and advanced designs that were invisible to anyone except the branded OEM and its subcontractor. The Japanese were some of the first to engage Chinese OEMs in ODM manufacturing services, then later in design improvement for commodity products like office automation machines, audio/video, and VCRs, and ultimately achieving dominance in computer motherboards, which far exceeded any other product in terms of volume and total revenue.

Some of the largest and best known ODMs include Quanta Computer, Inventec, Compal Electronics, Wistron, and New Kinpo Group. All of these suppliers had ODM sales of between 25% and 50%, although a few smaller ODMs were found to have even higher percentages. When the percentage of private-label branding sales exceeded 50%, the concept of the hybrid supplier was born; EMS manufacturing service sales were greater than a company's original design manufacturing of its own products. The best example of a hybrid supplier today is Pegatron. John Tuck switched it from the ODM list to the EMS list in 2013 when it reported that over 90% of its sales were from EMS production activities according to its annual report.

In 2014, the largest EMS company in the industry, Foxconn (trade name for Hon Hai Precision Industry), is in the process of reversing this trend by first becoming a hybrid supplier and migrating more toward ODM, and ultimately, OEM services. The company has done this by investing in many new technologies and acquiring companies with intellectual property value to

develop new products under its branded name or through a partially or wholly owned subsidiary.

Examples include investment in such entities as InFocus (smart phones and possibly tablets), solar energy panels for data centers (in conjunction with Applied Materials), and the most significant of all, investments in sapphire production to produce smart phone displays for Apple's next generation of iPhones. Yet, nothing is stopping Foxconn from selling these displays to any of a dozen or more suppliers of other OEM smart phones. Another example is a Hon Hai subsidiary INNOLUX Display, which acquired flat panel display manufacturer Chi Mei Optoelectronics through a share swap in 2010 (creating a company called Chimei Innolux), and in November 2014 announced that it would invest \$2.8 billion in a panelproducing plant in Taiwan. Through Chimei Innolux, Hon Hai will compete with big display makers in South Korea and Taiwan, which currently dominate the market.

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Back in 2012, Hon Hai Precision Industry attempted to acquire a 50 percent stake in Sharp's Sakai, Japan flat panel operations, in addition to purchasing a 10 percent stake in the electronics maker for \$664 million. However, once financial estimates for future earnings began to plunge and shareholders reacted, Foxconn pulled out of the proceedings.

Whereas these investments look to be logical and strategic, they are in fact setting up the acquired companies to be suppliers to Foxconn's leading customers. So we are beginning to see signs that the so-called "pure-play" EMS suppliers (such as Flextronics, Jabil, and Sanmina-SCI, which purportedly do not manufacture ODM products) are beginning to migrate into an OEM space of supplying components and subsystems to any taker wishing to pay the price.

In a way, you can't fault Foxconn or any other EMS company for investing in new business opportunities. Hon Hai began its business in components specifically connectors, switches, cable assemblies, and enclosures. Once getting a grip on the OEM customer, it expanded into flat panel displays, game consoles, motherboards, servers, and televisions. Subsequently, Hon Hai also provided design engineering and mechanical tooling services, and has bridged into biotechnology, nanotechnology, and the budding automotive market in China. The company is investing about \$1 billion to build a new manufacturing facility in Guizhou, China in July, 2014, that is part of its environmental protection technology initiative. The plant will develop and make products for the alternative energy market, including LED (lightemitting diode) backlights and LCD display modules. Finally, although this is largely unknown, Hon Hai has already reportedly captured 80% of the e-book reader market worldwide, including production of the Amazon Kindle reader.

Hon Hai/Foxconn must surely be sensitive to the relationship between its supply operations and its new business enterprises that potentially might compete with its customers. Asian business ethics rarely become an issue until they hit a company in the face. This often comes as a surprise, with realization after the fact that a proprietary line has been crossed. The customer then becomes angry, and what to do? Disasters of the past include flawed relationships between HP and Legend (laser printers) and Huawei and Cisco (routers), where the ODM relationship led to new pirated products under the ODM's own brand name. When MMI approached Foxconn for comment on the subject of this article, a spokesman declined, stating that it relates to commercially sensitive information and that spokespeople are not at liberty to comment. Fortunately, Foxconn hasn't exhibited behavior that is so out of control that it lacks awareness of the internal working supply of parts and the potential conflicts of interest with its customers. Many of Foxconn's investments appear benign or to be just good business and not necessarily in the interest of capturing customerconflicting new products. Examples include Terry Gou's \$200 million investment in action camera company Go-Pro (an assembly contract it never won), and a \$30 million investment in Pennsylvania for the development of production robots for advanced manufacturing in the US. Yet, while careful not to pursue branded OEM businesses, many of Foxconn's investments can appear to be a hedge on manufacturing contracts, such as when the company bought an approximately 15% stake in Asia Pacific Telecom. Taiwans fourth-largest mobile operator, for \$390 million. This was followed by an investment when the company

paid \$312 million in 2014 for two 4G licenses in the lower 700-MHz and 900-MHz bands in Taiwan's telco spectrum auction. This investment was certified in the company's most recent shareholders' meeting when Mr. Gou expressed that the model will be expanded worldwide. This means that the telecom service in Taiwan is only a pilot program. In the July 2014 shareholder's meeting, Gou indicated that "business transition is the key to the future development of Foxconn in the following 10 years. Although some of the plans may fail, learning from failure is still much cheaper than purchasing successful companies." Without further disclosure, the company's business ambitions are anyone's guess. Perhaps Foxconn is only trying to become a "foundry" for the component needs of its customers, but as new product opportunities emerge, it may find it hard to resist grabbing new markets ahead of its customers, thereby exploiting the inherent conflict of interest between making products for others and making them for itself. In contrast, certain smaller companies, more commonly in developing countries, do not recognize this business ethic "red line" and commonly engage in both OEM and EMS activities. Larger, more mature companies in developed and developing countries are aware that such conflicts of interest exist and respect the natural and ethical boundaries of business and usually prosper as a result. Foxconn has come a long way since 1974 and has evolved into a truly world-class company, so it seems likely that it will behave professionally despite the temptation to do otherwise. Doing so will ensure the company's continued and long-term success.

Nine-Month Sales Increase for Large CMs

Based on nine-month sales of 20 of the largest contract manufacturers, the outsourced manufacturing space is having a good year. Nine-month revenue for the 20 CMs totaled \$235.6 billion, up by 2% year over year. Sales in US dollars were up at 12 companies, with decline at eight companies, under which four companies posted double-digit declines (Table 1, p. 4).

The 20 CMs consist of nine EMS providers, eight ODMs, and three hybrid providers. *MMI* recently began using the hybrid category to identify companies that do substantial amounts of both ODM and EMS work and separate them for the purposes of analysis from those whose sales put them in the traditional EMS or ODM groups. *MMI* believes that this threeway system, though far from perfect, will yield a clearer picture of EMS versus ODM performance while acknowledging the rise of the hybrid model.

Nine-month sales were up collectively for the nine EMS providers and the eight ODMs, but ODM performance was better by 1.2 percentage points. Combined sales for the EMS group increased 2.3% year over year versus 3.5% for the ODMs. In stark contrast with these increases, aggregate sales of the three hybrid providers declined 4.1%, largely due to **Pegatron's** 5.9% decrease (Chart 1). For now at least, the ODM group is gaining share and poses a competitive threat to both the EMS and hybrid sides.

EMS providers generated the majority of the 20 CMs' sales for the period. Revenue in the EMS category amounted to \$138.9 billion, or 58.9% of overall sales. ODMs contributed \$72.1 billion, or 30.6% of sales, while the hybrid group accounted for \$24.5 billion, or 10.4% of sales.

Upon further review, *MMI* has made two changes to the hybrid group. **Universal Scientific Industrial** has been added to the

hybrid group. **Wistron**, which had been placed in the hybrid category, has been reclassified as an ODM. Although Wistron has done EMS work in the past, *MMI* can find no evidence that EMS revenue currently makes up a substantial portion of Wistron's sales (Table 1).

Of the 12 CMs that grew their nine-month revenue, two were hybrid providers, four were ODMs, and six were EMS providers (Table 1). Out of four ODM providers, Compal, Qisda, and Kinpo Electronics achieved double-digit gains, as did hybrid provider USI.

Hon Hai Precision Industry, the EMS giant, had a minimal effect on the combined nine-month sales of the 20 CMs. Without Hon Hai, combined sales were up 2.2% from a year earlier, versus 1.1% with Hon Hai.

While nine-month sales were up overall for the 20 CMs, third-quarter results present a brighter picture. Totaling \$82.3 billion, Q3 sales for the entire group rose 5.7% sequentially and 1.1% year over year. US-dollar increases at 13 CMs carried the day, and seven of those gains were of the two-digit variety.

In the year-on-year comparison, 11 companies achieved sales growth in Q3, more than offsetting the declines at the nine other CMs. Kinpo Electronics, Compal, Cal-Comp, Benchmark Electronics, Shenzhen Kaifa, Qisda, and Sanmina all achieved double-digit increases. On the other hand, sales fell by double-digit percentages

at **AmTRAN**, **Inventec**, and **Jabil** (Table 1).

Third-quarter sales results varied widely among the three CM groups.
On a year-over-year

On a year-over-year basis, Q3 sales in the hybrid category decreased 6.5%, compared with 5.8% growth for ODMs and 0.2% growth for the EMS providers. When

compared with the prior quarter, the ODM group led with a 7.6% gain, followed by the hybrid group with a 7.2% increase and the EMS providers at 4.4% growth (Table 2, p. 4). When combined, O3 income for the 20 CMs was approximately \$2.0 billion, up from about \$1.6 billion in the prior quarter and about \$1.6 billion a year earlier. (Net income was approximate because not all companies follow the same accounting rules.) Net profit climbed about 21.5% year over year, with a corresponding sales increase of 1.1%. At seven companies, Q3 net income decreased versus a year ago, overwhelming the gains made at 13 others. Only Jabil Circuit reported net losses for Q3. Hon Hai represented about 53% of Q3 net income, yet accounted for 37.5% of sales.

For the first nine months, the 20 CMs together earned net income of approximately \$4.7 billion. Net income increased at a faster rate than sales: Net income was up about 22% year over year, compared with a 2% drop in sales for the period. Net margin overall came in at about 2% for the first nine months. Aggregate net margin for the EMS providers stood at about 2.4%, above the CM average, while the net margins for the ODM and hybrid groups were below average, at about 1.3% and 1.8%, respectively.

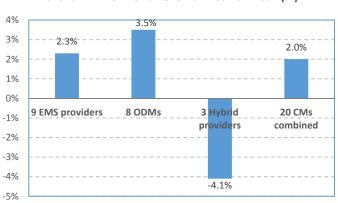


Chart 1: Nine-Month Growth Year on Year (%)

	Table 2: Comparing Results Where Companies Are Grouped by Primary Business (M US\$ or %)													
Company (in order of 9-mo. sales)	Primary business	Q3 '14 sales	Q2 '14 sales	Qtr qtr. chg.	Q3 '13 sales	Yryr. chg.	Q3 '14 net profit	Q2 '14 net profit	Q3 '13 net profit	Q1-3 '14 sales	Q1-3 '13 sales	Yryr. chg.	Q1-3 '14 net profit	Q1-3 '13 net profit
10	EMS	47851	45842	4.4	47744	0.2	1452	1161	1447	138982	135795	2.3	3368	2900
7	ODM	25803	23985	7.6	24381	5.8	412	368	49	72141	69689	3.5	963	680
3	EMS/ODM	8735	8148	7.2	9343	-6.5	207	103	129	24570	25615	-4.1	453	335
20		82389	77975	5.7	81468	1.1	2071	1632	1625	235692	231098	2.0	4784	3914
Net profit totals are approximate because not all companies follow the same accounting standard.														

	Table 1: Q3 and Nine-Month 2014 Results for 20 of the Largest Contract Manufacturers (M US\$ or %)															
Company (in order of 9-mo. sales)	Primary business	Head- quarters	Report s in US\$	Q3 '14 sales	Q2 '14 sales	Qtr qtr. chg.	Q3 '13 sales	Yryr. chg.	Q3 '14 net profit	Q2 '14 net profit	Q3 '13 net profit	Q1-3 '14 sales	Q1-3 '13 sales	Yryr. chg.	Q1-3 '14 net profit	Q1-3 '13 net profit
Hon Hai (Foxconn)	EMS	Taiwan	No	30900	29442	5.0	31092	-0.6	1100	676	1040	89744	88029	1.9	2447	2153
Pegatron	EMS/ODM	Taiwan	No	7600	7112	6.9	8224	-7.6	153	50	80	21234	22565	-5.9	294	204
Quanta Computer	ODM	Taiwan	No	8032	7182.95	11.8	7451	7.8	155.57	136	157	22304	20430	9.2	445	441
Flextronics	EMS	Singapore	Yes	6529	6643	-1.7	6410	1.8	139	174	118	19895	17497	13.7	356	151
Compal	ODM	Taiwan	No	7456	6761	10.3	5575	33.7	85	79	-92	19820	16747	18.3	90	-0.4
Wistron	ODM	Taiwan	No	5120	4551	12.5	5408	-5.3	48	41	50	13803	16135	-14.5	99	162
Jabil	EMS	Florida	Yes	4056	3786	7.1	4514	-10.1	-26	188	127	11419	12876	-11.3	124	265
Inventec	ODM	Taiwan	No	3331	3513	-5.2	4142	-19.6	60	50	64	10677	10956	-2.5	172	178
Sanmina	EMS	California	Yes	1686	1605	5.1	1505	12.0	133	21	39	4768	4422	7.8	174	79
Celestica	EMS	Canada	Yes	1423	1472	-3.3	1492	-4.6	34	41	63	4207	4359	-3.5	113	102
Cal-Comp	EMS	Thailand	No	1205	1042	15.6	971	24.2	6.4	3	7.0	3199	3370	-5.1	14	18
Qisda	ODM	Taiwan	No	1147	1117	2.7	1016	12.9	34	28	12	3244	2914	11.3	71	2
Benchmark Electronics	EMS	Texas	Yes	731	717	2.0	600	22.0	17	22	24	2088	1750	19.3	58	44
Shenzhen Kaifa	EMS	China	No	700	579	21.0	593	18.1	24	17	5	1950	1794	8.7	22	24
Universal Scientific Industrial	EMS/ODM	China	No	673	565	19.2	655	2.8	26.6	25.7	21.3	1921	1,686	13.9	79.3	57
Kinpo Electronics	ODM	Taiwan	No	426	490	-13.1	309	37.7	19	28	-158	1276	1,130	12.9	63.3	-143
AmTRAN	ODM	Taiwan	No	94	145	-35.1	261	-63.9	4	6	10	428	702	-39.0	21	27
Ability	ODM	Taiwan	No	196	224	-12.4	218	-9.9	6	0.5	6	589	675	-12.7	0.3	13
Plexus	EMS	Wisconsin	Yes	621	558	11.3	568	9.3	25	18	24	1712	1698	0.9	61	66
Venture	EMS/ODM	Singapore	No	462	471	-2.0	464	-0.5	27.8	26.9	28	1415	1364	3.7	80	74
Total/avg.				82389	77975	5.7	81468	1.1	2071	1632	1625	235692	231098	2.0	4784	3914
Total/avg. without Hon Hai				51489	48533	6.1	50376	2.2	971	956	585	145948	143069	2.0	2337	1761

Results in non-US currencies were converted to US dollars by applying a three-month average exchange rate for the corresponding quarter. Average exchange rates were based on monthly 2013 and 2014 data from the US Federal Reserve. Company net profits shown here are attributable to shareholders. Net profit totals are approximate because not all companies follow the same accounting standard.

Mixed Results for North American Group

For a group of eight mid-tier and smaller EMS providers based in North America, combined Q3 sales were not bad or were rather disappointing, depending on how they are compared.

On a year-over-year basis, the group's revenue was up 3.5%, and the prior quarter revenue was up 0.6%.

Q3 sales for the group of eight North America-based providers totaled \$729 million, representing modest growth from the group's year-earlier revenue of \$705 million. Among the group, year-over-year sales performance varied greatly, ranging from –23.8% for **SMTC** to 16% for **Kimball Electronics**.

Sales increases at five providers outweighed declines at the remaining three (Table 1A, p. 5). The group's 3.5% growth from a year earlier was significantly higher than the –0.3% collective gain of the six largest providers in the US-traded sector (*MMI* 24/11, p. 4).

In the sequential comparison, Q3 sales increased at five out of eight providers. As a result, the group's revenue growth was positive. Both **Key Tronic** and **IEC Electronics** raised their revenue from the year-earlier quarter in healthy fashion. On a sequential basis, the North American group's 0.6% increase in Q3 was more than 12 percentage points behind a 1.8% gain achieved by the six largest US-traded providers.

However, for the first nine months of 2014, the eight mid-tier and smaller EMS providers underperformed their larger counterparts in the sales department. Nine-month sales for the eight mid-tier and smaller providers grew -3.0% year over year, compared with a 3.5% increase for their larger competitors (Chart 1A). Collectively, the eight mid-tier and smaller providers generated sales of \$2.15 billion for the first nine months, up from \$2.12 billion in the year-ago period. Sales increases at three providers—Sparton, Kimball Electronics Group, and Ducommun were enough to give combined sales a modest lift. Only Sparton turned in doubledigit gains, with 14.9% growth.

The group of eight mid-tier and smaller providers consists of six companies in the EMS space, all publicly traded, and two EMS units within larger publicly held corporations. Together, the six stand-alone providers produced a Q3 gross margin of 11.4%, down 390 basis points from the prior quarter and down 160 basis points

from a year earlier. Sparton turned in a high of 16.6%.

Combined operating margin for the six stand-alone providers in O3 came in at 0.3%, increased due to IEC's better operating income of \$1.5 million. Two providers increased their margins sequentially, and three raised their margins year over year (Table 1A). IEC Electronics achieved the highest operating margin, at 4.3%.

As for the EMS units, Kimball Electronic's Q3 operating margin declined both sequentially and year over year, as did operating margins at **Ducommun LaBarge Technologies**, down from both the prior quarter and a year earlier.

The six stand-alone providers combined had a Q3 net loss of \$2.0 million, compared with net income of \$5.1 million and net loss of \$2.9 million in Q2 and the year-ago period, respectively. Key Tronic, which recorded a net loss of \$1.5 million in O3, was responsible for the aggregate net loss.

For the first nine months, net income for the stand-alone providers amounted to \$7.9 million, an increase of 31.6% from a year earlier, a far cry from their drop in sales of 1.2%. Two providers, SMTC and IEC, showed a net loss for the period (Table 1A). Nine-month net income improved due to overall increases in net income for Sparton,

SigmaTron, Nortech, and Key Tronic, which achieved year-on-year gains in their bottom-line results.

A Brief Look at Each Provider

Ducommun LaBarge Technologies.

Ducommun's DLT segment generated Q3 sales of \$106.8 million, compared to \$103.5 million for the third quarter of 2013. The higher revenue reflected a 43.7% increase in commercial aerospace electronics revenue.

DLT's operating income for the third guarter of 2014 was \$8.3 million, or 7.8% of revenue, compared to \$7.6 million, or 7.3% of revenue, for the third quarter of 2013, primarily due to an increase in revenue, a favorable product mix, and improved operations. EBITDA was \$12.7 million for the current quarter, or 11.9% of revenue, compared to \$12.1 million, or 11.7% of revenue, in the comparable quarter of the prior year.

Chart 1A: Nine-Month Sales Growth (%)



	Table 1A: Q3 and Nine-Month 2014 GAAP Results for Eight Mid-Tier and Smaller EMS Providers Based in North America (M\$ or %)																		
Company	Q3 '14 sales	Q2 '14 sales	Qtr qtr. chg.	Q3 '13 sales	Yr yr. chg.	Q3 '14 gross marg.	Q2 '14 gross marg.	Q3 '13 gross marg.	Q3 '14 oper. marg.	Q2 '14 oper. marg.	Q3 '13 oper. marg.	Q3 '14 net inc.	Q2 '14 net inc.	Q3 '13 net inc.	Q1-3 '14 sales	Q1-3 '13 sales	Yryr. chg.	Q1-3 '14 net inc.	Q1-3 '13 net inc.
Key Tronic	86.3	72.1	19.7	78.0	10.7	4.3%	9.3%	9.6%	3.2%	3.2%	2.2%	-1.5	1.4	1.7	236.0	247.0	-4.5	1.3	7.0
Sparton	77.0	93.4	-17.6	74.3	3.7	16.6%	21.3%	18%	1.1%	5.3%	4.9%	0.2	3.0	2.3	254.0	221.0	14.9	7.4	10.0
SMTC	55.5	58.0	-4.2	72.9	-23.8	8.5%	9.4%	9.1%	0.5%	1.6%	1.8%	-0.6	0.03	0.6	172.0	203.2	-15.4	-1.7	-4.2
SigmaTron	54.9	55.6	-1.1	56.2	-2.2	8.6%	10.3%	13.3%	0.4%	1.7%	2.6%	0.0	0.4	1.0	165.0	164.0	0.6	1.2	2.1
IEC Electronics Nortech Systems	35.7 28.0	33.0 27.4						13.9% 11.0%					0.0	-8.7 0.2					-9.4 0.5
Subtotal/avg.	337.6	339.5	-0.6	347.8	-3.0	11.4%	15.3%	13.0%	0.3%	3.0%	3.0%	-2.0	5.1	-2.9	1013.0	1025.2	-1.2	7.9	6.0
	EMS Units of Larger Public Companies																		
Kimball Electronics	203.8	198.9	2.4	175.6	16.1	8.7%	9.2%	7.0%	3.7%	4.0%	5.3%	5.3	5.4	7.6	588.4	550.4	6.9	17.0	21.5
Ducommun	188.2	186.5	0.9	181.3	3.8	17.7%	20.1%	17.8%	5.5%	8.9%	6.6%	2.6	6.5	4.6	554.4	549.0	1.0	13.7	13.8
Total/avg.	729.5	725.0	0.6	704.7	3.5										2155.8	2124.6	1.5		
2 2 3 4 2 2 6 1	Operating and net income are not necessarily equivalent to GAAP results on a stand-alone basis																		

Operating and net income are not necessarily equivalent to GAAP results on a stand-alone basis. Segment operating income did not include corporate general and administrative expenses.

The DLT segment reported net revenue for the nine months ended September 27, 2014 of \$312.8 million, compared with\$314.2 million for the nine months ended September 28, 2013. The slight decline in year-over-year net revenue was primarily due to a 5.7% decline in defense technologies revenue, partially offset by 23.4% higher commercial aerospace revenue and 3.6% higher non-A&D revenue.

IEC Electronics. For its fiscal Q4 ended Sept. 30, IEC generated revenue of \$35.7 million, operating income of \$1.5 million, and a net loss of approximately \$446,000 or (\$0.05) per diluted share. This compares with revenue of \$39.1 million, an operating loss of \$13 million, and a net loss of \$8.7 million or (\$0.89) per diluted share for the prior

(\$0.89) per diluted share for the prior year.

During the fourth quarter of fiscal 2014, the company recorded a write-off of \$1.1 million of its New York state deferred tax asset due to a change in the state's income tax legislation. During the fourth quarter of fiscal 2013, the company recorded impairment charges of \$14.2 million related to its Southern California Braiding (SCB) operation.

On September 16, the New York court dismissed the pending shareholder class action suit against IEC in its entirety, without the right to replead; while the ruling can be appealed, this action should end the costly legal proceeding.

The company is increasing its fiscal 2015 estimate by \$0.05 per share to \$0.17, as it has removed \$800,000 of legal expenses from its model; the ending of the case may further increase fiscal 2015 earnings due to insurance refunds.

Key Tronic. Revenue for its fiscal 1Q15 ended Sept. 27 ended up at \$86.3 million, up 11% from \$78.0 million in the same period of fiscal year 2014. Results for the first quarter of fiscal year 2015 include approximately \$11 million in revenue contribution from CDR Manufacturing, Inc. (dba Ayrshire Electronics), which was acquired on September 3, 2014.

During the first quarter of fiscal year 2015, the company had an unfavorable product mix that caused higher material costs and had inefficiencies associated

with the unusually fast ramping of production of a new product that resulted in higher than expected operating expenses. These items had an impact on earnings of approximately (\$1.8 million) or (\$0.17) per share. In addition, transaction and integration costs related to the Ayrshire acquisition had an impact on earnings of approximately (\$0.7 million) or (\$0.06) per share.

As a result, the company reported its first quarterly net loss since 2004. The net loss for the first quarter of fiscal year 2015 was (\$1.5 million) or (\$0.14) per share, compared to net income of \$1.7 million or \$0.15 per share for the same period of fiscal year 2014.

The acquisition of Ayrshire is making a significant contribution to Key Tronic's progress by expanding its printed circuit board assembly capabilities. Including 104 Ayrshire customers and 61 Key Tronic customers, the company generated revenue from 165 distinct customers at the end of the first quarter of fiscal year 2015, up from 57 Key Tronic customers a year ago. During the second quarter, it already had two Ayrshire customers awarding it additional business because of the companies' combined capabilities and global logistics.

For 2Q15, Key Tronic expects to report revenue in the range of \$105 million to \$115 million, and earnings in the range of \$0.08 to \$0.12 per diluted share. These expected results include a full three-month contribution from the recently acquired Ayrshire operations and assumes an effective tax rate of 35%.

Kimball Electronics Group. For fiscal Q1 ended Sept. 30, sales of \$203.8 million increased 16% from the prior year first quarter. Sales related to the exit of JCI were down \$11.3 million compared to the same quarter last year. Gross profit as a percent of net sales increased 1.7 percentage points from the prior year first quarter.

Adjusted operating income (non-GAAP), excluding spin-off costs, was \$8.8 million (4.3% of net sales), an increase of 87% from the first quarter of fiscal year 2014.

This excludes the lawsuit income and restructuring costs.

Adjusted net income (non-GAAP) of \$6.4 million compares to adjusted net income of \$4.8 million in the prior year first quarter. Adjusted earnings per basic and diluted share (non-GAAP) of \$0.22 compares to adjusted basic and diluted EPS of \$0.16 in the first quarter of fiscal year 2014.

Days sales outstanding, calculated as accounts receivable divided by one day's average net sales, was 57.4 days at September 30, 2014, compared with 56.6 days at September 30, 2013. Double-digit growth in all four endmarket verticals helped it set a new quarterly sales record in the first quarter of the new fiscal year. Strong growth with existing customers as well as sales from new program wins helped Kimball overcome the previously announced decline in sales to JCI (Johnson Controls, Inc.).

Nortech Systems. Q3 sales were \$28.0 million for the third quarter ended Sept. 30, 2014, compared with net sales of \$27.4 million for the third quarter of 2013. Operating income for the third quarter of 2014 was \$473,000, a 26% increase over the third quarter of 2013.

The company's net income for the third quarter of 2014 was \$333,000, or \$0.12 per diluted common share. This compares to \$218,000, or \$0.08 per diluted common share, for the third quarter of 2013.

For the nine months ended Sept. 30, 2014, Nortech Systems reported net sales of \$81.6 million, compared with \$81.8 million for the same period in 2013. Net income for the nine-month period ended Sept. 30, 2014 was \$666,000, or \$0.24 per diluted common share, compared with \$546,000, or \$0.20 per diluted common share, for the same period in 2013.

SigmaTron International. For its fiscal Q2 ended Oct. 31, sales totaled \$61.5 million for the second quarter of fiscal 2015 from \$56.6 million for the same quarter in the prior year. Net income decreased to \$146,429 in the second fiscal quarter compared with \$784,654 for the same period in the

prior year. Basic and diluted earnings per share were each \$0.04 for the quarter ended October 31, 2014, compared to basic and diluted earnings per share of \$0.20 and \$0.19, respectively, for the same quarter in fiscal 2014.

For the six months ended October 31, 2014, revenues increased to \$116.5 million compared to \$112.7 million for the same period ended October 31, 2013. Net income for the period ended October 31, 2014 was \$163,239, compared to \$1,752,121 for the same period in the prior year. Basic and diluted earnings per share for the six months ended October 31, 2014 were each \$0.04, compared to basic and diluted earnings per share of \$0.44 and \$0.43, respectively, for the six months ended October 31, 2013.

SMTC. The provider recorded Q3 revenue of \$55.5 million compared to \$58.0 million in the second quarter. The decrease in revenue was mainly attributable to lower demand from one customer.

Gross profit was 8.5% compared to 10.0% in the second quarter. Excluding unrealized foreign exchange impacts, gross profit was 9.9% compared to 8.6% in the prior quarter. A net loss of \$0.6 million was reported, compared to net earnings of \$0.03 million in the prior quarter.

During the quarter, a new three-year extension to the revolving credit facility was signed with PNC.

Sparton. For its fiscal Q1 ended Sept. 30, revenues increased 3.8% to \$77.0 million, compared with \$74.2 million reported in 4Q13.

Gross and operating margins of 16.6% and 1.1% were below estimates of 16.9% and 4.4% due to MDS revenue weakness and higher general and operational costs. EPS declined to \$0.02 from \$0.24 and was below the estimate of \$0.22.

During 1Q15, Sparton reconfigured its three former business units to two reporting units to align the businesses with how they are internally reported and managed. Manufacturing & Design Services (MDS) represents the company's contract manufacturing and design services where the customer owns the related intellectual property and consists of the prior Medical and

Complex Systems business units. Engineered Components & Products (ECP) consists of the former Defense and Security Systems (DSS) business unit and represents manufacturing and design services where Sparton owns the related intellectual property.

Acquisitions continue to be a primary growth vehicle. In July 2014, the company acquired Electronic

Manufacturing Technology, LLC
(EMT) for \$20 million. EMT is a manufacturer of electromechanical controls and electronic assemblies and is expected to add approximately \$25 million in estimated annualized revenue. The acquisition of EMT follows the fiscal 2014 acquisitions of Aydin

Displays, Beckwood Services, and Aubrey Group.

Modest Growth in Q3 for European Providers

Third-quarter sales for a group of six European EMS providers was modest compared with the year-earlier period. Revenue for the six providers totaled 363.3 million euros versus 338.9 million euros in the year-ago quarter. To be precise, sales in Q3 rose by a discernible 7.2%.

Revenue growth at three providers, **Neways Electronics, Scanfil,** and **LACROIX Electronics,** offset eurobased declines at the three other providers (Table 1B).

Neways Electronics and Scanfil were the only EMS providers to achieve double-digit growth. Neways Electronics and Scanfil accomplished Q3 sales increases of 31.4% and 12.5% year over year, respectively. Neways published its Q3 trading update. Total revenues increased 31%, completely driven by the contribution of acquired BuS in Germany. Revenues were down 15% organically, largely due to the semiconductor segment. The acquisition of BuS is a major expansion of the company's position in Germany and makes Neways a top-five player in the European EMS market.

At Scanfil, Q3 sales grew 12.6%, while operating profit was up

22.4%. Profit was 3.8 million euros, up by 25.9%. Due to better-than-expected profitability development in Q3, Scanfil plc revised its operating profit guidance for 2014 on 15 September 2014. The company estimates that its operating profit will be 14.5–16.0 million euros. Turnover is expected to increase by 11–18%, in line with the previous guidance.

PartnerTech's sales were up 0.4% in its SEK reporting currency. The operating loss of SEK –6 million was affected by continued lower volumes both in the Systems Integration and Metal Precision divisions. During the third quarter the Electronics division reported strong growth of 14% but ramp-up costs for operations in China affected operating profit negatively. Electronics Technology increased 14%, Metal Precision Technology was down 9%, and

Systems Integration was down 8%.

Kitron saw its revenue increase by 10.2% compared to the same period last year. Revenue in the Defence/Aerospace market sector increased by 38.0%, Energy/Telecoms was up 6.5%, Industry increased by 24.4%, Medical Equipment increased by 3.1%, and Offshore/Marine was down 25.8% compared to 3Q2013.

Connect Group saw its 3Q2014 revenue decline by 7.4%. Lower-than-expected sales and implementation of a number of restructuring measures that have been decided impacted the result. The group expects to end the year with a small net loss.

Tabl	Table 1B: 3Q2014 Results for Six European EMS Providers (M euros or %)								
Company (in order of Q3 '14 sales)	Head- quarters	Reports in euros	Q3 '14 sales	Q3 '13 sales	Yryr. chg.				
Neways Electronics International	Netherlands	Yes	89.9	68.4	31.4%				
PartnerTech	Sweden	No	56.9	60.8	-6.4%				
Scanfil	Finland	Yes	56.7	50.4	12.5%				
LACROIX Electronics	France	Yes	89	85.9	3.6%				
Kitron	Norway	No	43.3	43.7	-0.9%				
Connect Group	Belgium	Yes	27.5	29.7	-7.4%				
Total/avg.			363.3	338.9	7.2%				

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

Latest acquisitions... Sparton Corp. (Schaumburg, IL) announced that its wholly owned subsidiary, Sparton IED, LLC completed the acquisition of certain assets of Industrial Electronic Devices, Inc. (IED) (Flemington, NJ) on December 3, 2014 in an all-cash transaction.

According to Sparton, the addition of IED meets the criteria of its growth strategy by growing its ruggedized electronics platform with additional ruggedized display and touch screen offerings in the harsh and demanding sectors of the Industrial and Marine markets. IED will be consolidated into Aydin Displays, located in Birdsboro, PA... Inventec (France) acquired AMTECH maker SMT International (Deep River, CT). The merged companies will operate as Inventec Performance Chemicals (Inventec USA), a division of the Dehon Group. Inventec's global managing director noted that the Inventec/AMTECH merger is a critical step in expanding its presence across North America.

Benchmark Board Authorizes \$100M Share Repurchase

Benchmark Electronics (Angleton, TX) announced that its Board of Directors approved the repurchase of up to \$100 million of the company's outstanding shares of common stock.

During 2014, the company has repurchased 1.7 million shares, totaling \$40.1 million, and has \$6.8 million remaining under the 2012 repurchase program. Considerable insider trading has been reported.

People on the move... Pat O'Brien, vice president/general manager of ITW Thermal Processing, will be taking the helm at Speedline **Technologies** effective January 1, 2015... MC Assembly has recently appointed Alex Sanchez as the new vice president of Supply Chain. In this position, Sanchez is responsible for integrating all aspects of the supply chain, inventory management, and replenishment. Sanchez previously worked at Raytheon Company (RTN), where he served as senior manager of Global Sourcing... Peter Whitley joins Stadium iEMS with over 20 years' experience in the EMS market, including senior commercial and operational roles at Plexus Corp, Jabil Circuit, Inc., and SVI.

Facilities expansion... Zollner
Elektronik AG (Germany) has started a new production plant at Cartago,
Costa Rica. Zollner's high-tech facility in the La Lima Free Zone & Business
Park has been established to serve customers throughout the Americas and Canada, as well as support existing production facilities, particularly in the

US... Salcomp (Finland) is planning to expand its manufacturing operations in Chennai to meet growing demand from local and export markets. Following Laird Technologies' decision to suspend production in Chennai, Salcomp is in the process of acquiring the former Laird factory in the Nokia Special Economic Zone. The new facility will increase Salcomp Chennai's factory space by 17,000 square meters and will be used for the expansion of charger, adapter, and component production.

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