Manufacturing Market™
INSIDER
inside the contract manufacturing industry
Vol. 22, No. 6 June 2012

Q1 Growth for North American Group

Q1 sales for a group of eight mid-tier and smaller EMS providers based in North America grew both sequentially and year over year. Although Q1 is often considered a seasonally weak quarter, the providers' combined Q1 sales of $631 million rose 2.6% sequentially. Contrast this increase with a 7.5% sequential drop in Q1 revenue computed for the six largest US-traded providers (May, p. 2-3). Sometimes bigger is not always better.

On an adjusted basis, Q1 revenue for the eight mid-tier and smaller providers showed a slight year-over-year gain of 1.2%. But this result was still 3.9 percentage points better than what their large US-traded competitors managed to achieve (May, p. 2-3).

Without the adjustment, GAAP sales for the group of eight providers look surprisingly strong in the year-over-year comparison. The group's GAAP sales in Q1 grew 16.8% from the year-earlier period (Table 1, p. 2). However, this growth was essentially driven by a 302% increase from one provider, **Ducommun LaBarge Technologies** (DLT), which was formed when Ducommun acquired LaBarge last year. While DLT's Q1 2012 sales include revenue from the LaBarge acquisition, DLT's sales for the year-earlier quarter do not. When LaBarge's Q1 2011 sales of $83.2 million (for the quarter ended April 3, 2011) are added to DLT's sales of $27.3 million (for the quarter ended April 2, 2011), the group's adjusted growth for Q1 becomes the aforementioned 1.2%, a more realistic measure of the group's performance (Table 2, p. 2).

Besides DLT, two other providers, **Key Tronic** and **SMTC**, also boosted their Q1 sales by double-digit percentages from a year earlier. On the other hand, sales from **CTS Electronics Manufacturing Solutions** and **Kimball Electronics Group** showed double-digit declines in that comparison. For the group of eight, Q1 was a quarter of great variation in year-over-year sales performance (Table 1).

On a sequential basis, there was far less variation, as one would expect. In all, four providers increased their sales from the prior quarter, while four others endured revenue declines (Table 1). The revenue gains carried more weight than the revenue reductions, and the net result was a sequential increase of 2.6%. Two providers, Key Tronic and **IEC Electronics**, led the pack with double-digit increases from the prior quarter.

The group of eight mid-tier and smaller providers consists of five companies in the EMS space, all publicly traded, and three EMS units within larger publicly held corporations. Together, the five stand-alone providers produced a Q1 gross margin of 12.7%, up 90 basis points sequentially and 70 basis points year over year. Four out of five providers attained double-digit gross margins, with a high of 21.7% turned in by IEC Electronics.

Aggregate operating margin for Q1 made even greater strides. As a group, the five stand-alone providers achieved a Q1 operating margin of 5.5%, up 160 basis points sequentially and 190 basis points year over year. It should come as no surprise that IEC's 11.8% operating margin took first place in light of its un-EMS like gross margin. All five providers improved their operating margins from a year earlier, while three out of five made

Some articles in this issue

Cover story.....1
No sales slump for this North American group.

European Group Sales Hold Up.....4
Double-Digit Start for Large CM Group.....5
RIM Revamping Supply Chain.....7
Last Word: Low Volumes on Campus?.....8

Table 1: Q1 2012 GAAP Results for Eight Mid-tier and Smaller EMS Providers Based in North America (M$ or %)														
Organization	Q1 '12 sales	Q4 '11 sales	Qtr.-qtr. chg.	Q1 '11 sales	Yr.-yr. chg.	Q1 '12 gross marg.	Q4 '11 gross marg.	Q1 '11 gross marg.	Q1 '12 oper. marg.	Q4 '11 oper. marg.	Q1 '11 oper. marg.	Q1 '12 net inc.	Q4 '11 net inc.	Q1 '11 net inc.
Stand-Alone EMS Providers														
Key Tronic	95.5	84.5	13.1	63.4	50.6	9.1	8.1	6.7	4.9	3.3	1.5	3.4	3.2	0.7
SMTC	72.5	71.1	1.9	56.3	28.6	10.4	10.9	9.1	4.3	5.1	2.2	2.4	2.9	0.7
Sparton	55.0	55.4	-0.6	50.4	9.3	16.6	15.8	16.3	5.8	5.3	5.3	2.0	1.9	2.5
IEC Electronics	38.0	33.9	12.3	35.1	8.4	21.7	16.2	21.0	11.8	2.8	9.5	2.6	0.9	1.7
Nortech Systems	28.4	29.1	-2.6	29.0	-2.2	10.6	12.4	11.0	1.2	1.6	1.0	0.1	0.2	0.6
Subtotal/avg.	**289.4**	**273.9**	**5.7**	**234.2**	**23.6**	**12.7**	**11.8**	**12.0**	**5.5**	**3.9**	**3.6**	**10.6**	**9.2**	**6.4**
EMS Units of Larger Public Companies														
Kimball Electronics Group [1]	161.0	148.1	8.7	199.0	-19.1				3.1	0.2	2.3	3.3	0.3	3.2
Ducommun LaBarge Technologies	110.1	119.4	-7.8	27.3	302.4				7.5 [2]	-38.1 [2]	7.8 [2]			
CTS Electronics Manufacturing Solutions	70.6	73.3	-3.8	79.5	-11.2				-1.5	4.2 [3]	0.0			
Total/avg.	**631.0**	**614.7**	**2.6**	**540.0**	**16.8**									

[1] Operating and net income do not correspond to GAAP results on a stand-alone basis. [2] Segment operating income did not include corporate general and administrative expenses. [3] Segment operating income did not include restructuring and related charges of $2.4 million that were not allocated to business segments.

sequential gains.

Among the three EMS units, two raised their Q1 operating margins from the prior quarter, while one unit increased its margin both sequentially and year-over-year (Table 1).

Combined Q1 net income for the five stand-alone providers grew faster than their sales did. Net income totaled $10.6 million, up 15.4% from the prior quarter and 66% from the year-ago period. Their aggregate net margin for Q1 came in at 3.7% versus 3.3% in the prior period and 2.7% a year earlier.

Table 2: Adjusted* Q1 2012 Sales Results for Eight Mid-tier and Smaller EMS Providers Based in North America (M$ or %)					
Organization	Q1 '12 sales	Q4 '11 sales	Qtr.-qtr. chg.	Q1 '11 sales	Yr.-yr. chg.
Stand-Alone EMS Providers					
Subtotal/avg.	289.4	273.9	5.7	234.2	23.6
EMS Units of Larger Public Companies					
Kimball Electronics Group	161.0	148.1	8.7	199.0	-19.1
Ducommun LaBarge Technologies + LaBarge	**110.1**	**119.4**	**-7.8**	**110.6 [1]**	**-0.5**
CTS Electronics Manufacturing Solutions	70.6	73.3	-3.8	79.5	-11.2
Total/avg.	**631.0**	**614.7**	**2.6**	**623.2**	**1.2***

*The group's year-over-year sales growth for Q1 2012 was adjusted to include the Q1 2011 sales of LaBarge, which was acquired by Ducommun in June 2011. [1] Represents Ducommun Technologies' $27.3 million in sales for the quarter ended April 2, 2011 plus LaBarge's $83.2 million in sales for the quarter ended April 3, 2011.

A look at each provider

CTS Electronics Manufacturing Solutions. CTS's EMS unit saw its Q1 sales drop 11% year over year primarily due to the impact from the Thailand floods. Sales fell in communications and computer markets, partially offset by increases in the industrial sector. The unit's operating income before corporate and shared services charges amounted to $0.5 million, which was $1.4 million lower than a year earlier primarily as a result of lower sales and flood-related costs incurred in Q1 in excess of insurance recoveries.

Compared with the prior quarter, sales decreased in the defense and aerospace and communications markets, partially offset by gains in the industrial and medical markets. EMS operating income in Q1 before corporate and shared services charges declined by $3.3 million from the prior quarter primarily because of lower sales, less favorable product mix and the timing of insurance recoveries.

Ducommun LaBarge Technologies. The DLT segment reported Q1 sales of $110.1 million, which included $84.4 million from the acquisition of LaBarge. In comparison, sales for the year-earlier period were $27.3 million, but this figure did not reflect the LaBarge deal because it closed later on in 2011. On a sequential basis, DLT's sales declined by 7.8%.

DLT's operating income for Q1, which did not include corporate general and administrative expenses, amounted to $8.3 million, or 7.5% of revenue, compared with an operating loss of $45.5 million in Q4 2011 and operating income of $2.1 million, or 7.8% of sales, in Q1 2011. The prior quarter's loss included goodwill impairment of $54.3 million and mergerrelated costs of $1.4 million. Adjusted EBITDA for Q1 was 12% of sales, compared with 10.9% of sales in the year-ago period.

IEC Electronics. Q1 sales grew 8.4% year over year, while net income increased 49.2% over the same interval. Gross profit margin in Q1 reached 21.7%, and operating margin came in at 11.8%. The company said these results are some of the best in its history and are particularly strong for the EMS industry. A shift to higher margin product mix in combination with operational improvement in all of IEC's business segments produced these results. IEC singled out the progress made by its **Southern California Braiding** unit, a supplier of cables and wire harnesses.

While operating margin increased sharply to 11.8% from 2.8% in the prior quarter, IEC expects operating margins to move closer to 10% over the next six quarters. That's still well ahead of average operating margin for the last two years of about 8.0%.

Key Tronic. For its fiscal Q3 ended March 31, the company reported revenue of $95.5 million, up 13% sequentially and 51% year over year. EPS amounted to $0.32, up from $0.30 for the prior quarter and $0.07 for the same period a year earlier.

The year-over-year growth in revenue and earnings was driven primarily by a rapid production ramp up for new customer programs. Revenue for the March quarter reached a new high. Gross margin came in at 9.1%, up 100 basis points sequentially and 240 basis points year over year, while operating margin was 4.9%, 160 basis points above the prior quarter's level and 340 basis points higher than a year ago.

For the June quarter, Key Tronic expects revenue of $93 million to $98 million and EPS of $0.31 to $0.37, excluding any tax benefits that may be recognized in the period.

Kimball Electronics Group. Fiscal Q3, or March quarter, sales for this EMS unit of Kimball International dropped 19% from the year-earlier quarter as lower sales to customers in the medical, industrial and public safety industries more than offset an increase in sales to customers in the automotive industry, with the US automotive market remaining healthy. The decline in sales to the medical industry resulted from the expiration of a contract with **Bayer** in fiscal 2011, which accounted for a $45.7-million reduction in sales in the March quarter versus a year earlier. Excluding sales to this customer, EMS sales for the March quarter would have increased 5% year over year.

Gross margin improved 190 basis points from the year-ago quarter primarily as a result of a mix shift to higher margin products and benefits from restructuring activities in which two facilities were closed during the prior quarter. Adjusted net income grew 21% year over year.

Nortech Systems. Although Q1 sales declined 2% year over year, operating income rose 15% year over year. Revenue results across the company remain mixed in the sluggish economic environment. Nortech is seeing encouraging signs from certain industrial and medical customers, evidenced by backlog positions in these markets registering modest single-digit increases since year-end.

Operating margin in Q1 was 1.2%, down 40 basis points sequentially but up 20 basis points year over year. The company earned net income of $122,805 for the quarter, compared with last year's $98,181, which excludes a non-operating gain (after tax) of $528,007 from the acquisition of **Winland Electronics'** EMS operations.

During the quarter, Nortech was awarded significant design engineering projects from customers in both the industrial and medical markets. The company cited these wins as examples of how its internal realignment, implemented in January, improves its ability to target business opportunities across the industrial, medical and defense markets.

SMTC. Q1 revenue of $72.5 million grew 29% year over year and 2% sequentially due to increased demand from both existing and new customers. Revenue for the quarter reached its highest level since Q4 2006. Excluding one-time costs of integrating the **ZF Array Technology** acquisition, adjusted Q1 EPS was $0.18, while GAAP EPS equaled $0.15. Note that GAAP EPS was $0.18 for the prior quarter and $0.05 for the year-ago period. Adjusted EBITDA of $4.3 million was flat versus the prior quarter but up from $2.3 million a year earlier.

Gross margin stood at 10.4% including unrealized gains from currency forward contracts of $462,000. This result was down 50 basis points sequentially but up 130 basis points year over year.

For the balance of 2012, the company anticipates continued strong top and bottom line performance in line with 2012 guidance of $14 million to $16 million for adjusted EBITDA, $250 million to $270 million in revenue and $0.53 to $0.65 EPS.

Sparton. For its fiscal Q3 ended Mar. 31, sales totaled $55.0 million, down slightly from the prior quarter but up 9% from a year earlier. After adjusting for the effect of the company's March 2011 acquisition of **Byers Peak**, sales grew 6% year over year. Adjusted net income of $1.9 million increased 6% sequentially and 20% year over year. Sparton reported adjusted EBITDA of $3.6 million, up 6% sequentially and 19% year over year.

Medical business, which represented 49% of sales, rose 7% year over year. The company achieved this growth despite a $4.8-million reduction in sales to **Siemens** due to its dual sourcing decision. Revenue from Complex Systems, including intercompany sales, and Defense & Security

Systems rose 4% and 18% respectively from a year earlier. (The latter would not be considered traditional EMS business.)

Adjusted gross margin for the March quarter came in at 16.4%, up 10 basis points year over year.

European Group Sales Hold Up

Although the debt crisis in Europe has thrown a monkey wrench into Europe's growth engine, combined Q1 revenue for a group of six European EMS providers held up pretty well versus the year-earlier total. Aggregate sales of 332.5 million euros were down just 1.1% year over year. What's more, the sales decline was slightly less than the 1.7% drop in US dollars collectively generated by the six largest US-traded providers (May, p. 3), who depend far less on European sales. With all the gloom and doom coming out of Europe, it is somewhat surprising that these six European providers would essentially match the sales performance of a group of much larger competitors who are not beholden to the European market.

Furthermore, the European numbers take on a different look when just one company, **Scanfil**, is removed from the analysis. Without Scanfil, whose Q1 sales went down 27.6% year over year, the other five providers produced an aggregate sales gain of 4.5%, a not-too-shabby result in a downtrodden European economy.

Indeed, four out of the six European providers achieved year-over-year growth in their Q1 sales (table). **LACROIX Electronics**, the EMS unit of LACROIX Group, led the way with a 14.1% increase. Referring to its fiscal 2012 first half that ended in March, the Group noted that its Electronics unit has shown a significant increase in revenue (7.8%), especially in Germany, despite a difficult environment. However, "rate margins" were penalized.

At **Kitron**, whose sales rose 4.8% in its NOK reporting currency (8.1% in euros), market development was better than expected, and overall the company saw a strong demand from customers. Kitron reported that quoting activity for both existing and new customers continued to be high. The risk of a negative impact from the recession in Europe had diminished somewhat, said Kitron, and the company was cautiously optimistic about the market outlook.

Q1 2012 Results for Six European EMS Providers (M euros or %)

Company (in order of Q1 '12 sales)	Headquarters	Reports in euros	Q1 '12 sales	Q1 '11 sales	Yr.-yr. chg.
Neways Electronics International	Netherlands	Yes	73.3	72.3	1.4
PartnerTech	Sweden	No	69.0	66.2	4.3
Kitron	Norway	No	59.4	54.9	8.1
LACROIX Electronics	France	Yes	46.6	40.8	14.1
Scanfil	Finland	Yes	42.6	58.8*	-27.6
Connect Group	Belgium	Yes	41.6	43.1	-3.5
Total/avg.			**332.5**	**336.1**	**-1.1**

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. *Represents sales of Scanfil EMS, which was demerged into Scanfil, a new public company, on Jan. 1, 2012.

Year-over-year revenue growth occurred in three out of Kitron's five market segments. Offshore/marine sales increased at the highest rate, 74.3%, while the defense/aerospace and industry segments showed growth of 13.5% and 27.5% respectively.

Q1 gross margin for the provider amounted to an eye-opening 38.8%. Operating profit (EBIT) was NOK 21.5 million, up from NOK 11.1 million for the same period last year.

PartnerTech's Q1 sales increased 5% year over year in local currency (4.1% in SEK, its reporting currency, and 4.3% in euros). Operating profit for the quarter totaled SEK 21.1 million, or 3.5% of sales, versus SEK 3.1 million, or 0.5% of sales, in the year-earlier period.

Excluding currency effects at consolidation, Q1 sales went up by 69% and 9% year over year in the company's machining and electronics segments respectively, while they dropped by 8% in system integration and enclosures. Sales in four out of six market areas fell from a year earlier, yet defense and maritime business surged 155%, followed by clean tech with a 28% increase, more than offsetting declines in the other segments. The company said it is difficult to predict how global uncertainty might affect its market areas going forward.

Neways also recorded a revenue increase for Q1, albeit a small one. The company said profit developed in line with expectations. Its order portfolio was up slightly from year-end 2011.

Demand from the medical sector remained strong, and while demand from the semiconductor sector was still volatile, there were signs of uplift in the first months of the year.

According to Neways, the current sentiment regarding financial markets and persistent uncertainties about the European economy are resulting in greater fluctuations in the demand for electronic components and systems. Customers are postponing orders more quickly and more readily, but are also reordering again more quickly. This situation has led to more sudden and temporary gaps in capacity utilization at Neways. The company considers greater fluctuations in demand as a new reality.

At **Scanfil**, Q1 sales of 42.6 million euros were low due to the weak demand for telecom products. On the other hand, demand for professional electronics products was strong, but not enough to compensate for the decrease in demand for telecom products. In spite of the low revenue, the company's operating profit excluding non-recurring items remained positive at 1.0 million euros, representing 2.3% of sales. The company attributed this result to successful and well-timed adjustments in operations. Net profit for Q1 amounted to 1.2 million euros.

Scanfil expects full-year sales and operating profit to be below 2011 results of Scanfil EMS, which was demerged into Scanfil at the beginning of 2012. Operating profit, however, is expected to be "clearly positive." Still, the company was unable to provide a reliable outlook for the year.

Connect Group also experienced a Q1 sales decline from the year-ago level. Sales of 41.6 million euros went down 3.5% year over year, but operating income of 1.7 million euros rose 31%. The company noted that Q1 2011 was an exceptionally good quarter. Net profit totaled 1.3 million euros, up from 1.0 million euros in the year-ago quarter.

Included in Q1 revenue were 4.5 million euros from the company's acquisition of Dutch subcontractor **Halin**, which went into effect Jan. 1.

Like Neways, Connect Group also reported that the economic climate and uncertainty of financial markets in Europe are affecting the demand for electronic components and systems. Customers are deferring orders but are also asking for faster production starts.

Based on Connect Group's order book, the company remains positive for the rest of the year.

Double-Digit Start for Large CM Group

Given the shaky state of economies in the developed world and the slowdown in places like China and India, one would not have expected the outsourcing space to produce healthy double-digit growth for combined Q1 sales of 20 of the largest contract manufacturers. But the numbers are in for this group of 11 EMS providers and nine ODMs, and the CMs' aggregate sales for Q1 rose by 15.1% year over year in US dollars. With this group representing well over 80% of total contract manufacturing sales, one can conclude that in Q1 the outsourcing business enjoyed double-digit growth from a year earlier.

But that would be a somewhat misleading conclusion if left at face value because a large part of the group's growth came from a single company, the EMS colossus **Hon Hai Precision Industry** better known by its Foxconn trade name. Without Hon Hai, the group's revenue would have increased by 4.3% year over year, a result more in tune with the global economy. Hon Hai can exert such a large effect, a swing of 10.8 percentage point, because its Q1 sales grew by 35.5% year over year, and they represented 40.5% of the group total.

The numbers also say that EMS providers in the group achieved higher year-over-year growth in the quarter than their ODM counterparts did, extending a trend that ran through 2010 and 2011. EMS provider revenue went up 19.8% year over year, compared with an ODM increase of 8.1% (Chart 1). That's a winning margin of 11.7 percentage points. However, if Hon Hai were excluded from the analysis, combined sales for the other 10 EMS providers would show a drop of -1.9%, and the ODMs would then take a 10-point lead (Chart 2). So Hon Hai made the difference between the EMS side winning hands down in Q1 and losing by almost the same margin.

ODM **Pegatron** took top honors for Q1 in the year-over-year sales comparisons with a 72% gain. Four CMs grew their Q1 sales (in US dollars) by over 20% from a year earlier, and three were ODMs. Yet 12 out of

Chart 1: Q1 Sales Growth Percentage (Year Over Year)

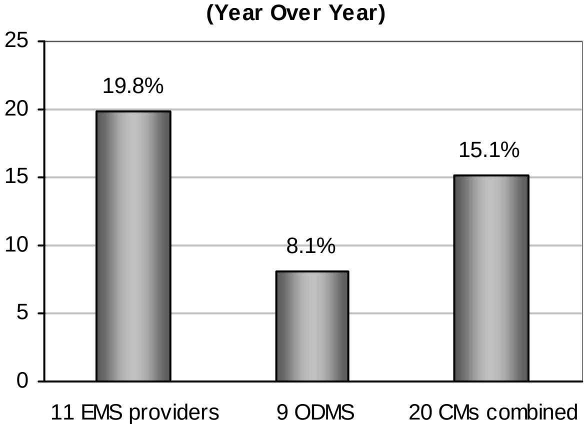
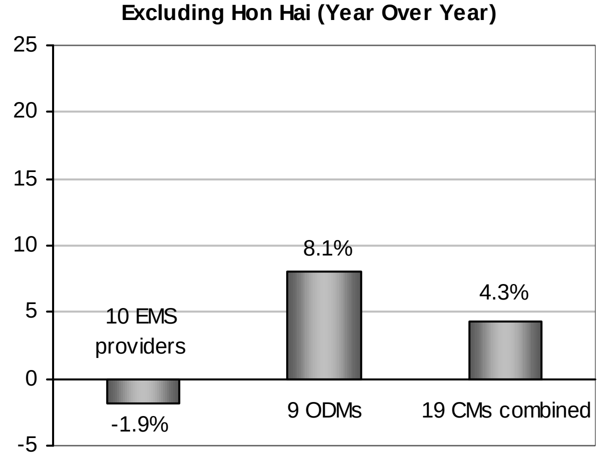


Chart 2: Q1 Sales Growth Percentage Excluding Hon Hai (Year Over Year)



Company (in order of Q1 sales)	Primary busi-ness	Head-quarters	Reports in US$	Q1 '12 sales	Q4 '11 sales	Qtr.-qtr. chg.	Q1 '11 sales	Yr.-yr. chg.	Q1 '12 net inc.	Q4 '11 net inc.	Q1 '11 net inc.
Hon Hai (Foxconn)	EMS	Taiwan	No	33,736	35,518	-5.0	24,895	35.5	503	1,158	492
Quanta Computer	ODM	Taiwan	No	7,959	9,933	-19.9	8,589	-7.3	172	216	195
Flextronics	EMS	Singapore	Yes	6,382	7,480	-14.7	6,789	-6.0	157 [1]	102 [1]	135 [1]
Wistron	ODM	Taiwan	No	5,963	6,456	-7.6	4,687	27.2	63	78	69
Compal Electronics	ODM	Taiwan	No	5,435	5,716	-4.9	5,840	-6.9	63	70	119
Pegatron [2]	ODM	Taiwan	No	5,028	5,094	-1.3	2,923	72.0	43	32	(19)
Jabil [3]	EMS	Florida	Yes	4,236	4,327	-2.1	3,929	7.8	98	113	55
Inventec	ODM	Taiwan	No	3,455	3,607	-4.2	2,848	21.3	14	30	22
TPV Technology	ODM	Taiwan	No	2,340	2,888	-19.0	2,691	-13.0	20	40	42
Celestica	EMS	Canada	Yes	1,691	1,753	-3.6	1,800	-6.1	43	69	30
Sanmina-SCI	EMS	California	Yes	1,463	1,502	-2.6	1,569	-6.8	(1)	9	13
Cal-Comp Electronics	EMS	Thailand	No	1,093	993	10.0	1,009	8.3	8	(6)	25
Qisda	ODM	Taiwan	No	984	1,017	-3.3	1,107	-11.2	17	(67) [1]	(40) [1]
Shenzhen Kaifa Technology	EMS	China	No	640	688	-6.9	758	-15.5	7	11	7
Benchmark Electronics	EMS	Texas	Yes	593	559	6.1	538	10.2	6	3	15
Plexus	EMS	Wisconsin	Yes	574	530	8.3	568	1.0	20	18	24
AmTRAN Technology	ODM	Taiwan	No	475	648	-26.7	528	-10.2	14	18	11
Universal Scien-tific Industrial	EMS	Taiwan	No	466	478	-2.5	515	-9.6	18	20	12
Venture	EMS	Singapore	No	455	492	-7.5	460	-1.3	28	30	32
Ability Enterprise	ODM	Taiwan	No	338	424	-20.2	363	-6.8	11	9	7
Total/avg.				**83,306**	**90,102**	**-7.5**	**72,406**	**15.1**	**~1,302**	**~1,954**	**~1,245**
Total/avg. with-out Hon Hai				**49,569**	**54,584**	**-9.2**	**47,511**	**4.3**	**~800**	**~795**	**~753**

Q1 2012 Results for 20 of the Largest Contract Manufacturers (M US$ or %)

Results in non-US currencies were converted to US dollars by applying a three-month average exhange rate for the corresponding quarter. Average exchange rates were based on monthly 2011 and 2012 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. [1] Includes income from discontinued operations. [2] Results correspond to Pegatron's core DMS business. [3] For Jabil, Q1 '12 corresponds to the quarter ended Feb. 29.

20 companies saw their sales decline year over year (table). Although there was aggregate growth even without Hon Hai, Q1 was not a growth quarter for a majority of CMs.

Group sales of $83.3 billion fell 7.5% sequentially – no shock given the seasonal weakness associated with Q1. Only **Benchmark Electronics**, **Cal-Comp Electronics** and **Plexus** – all EMS providers – raised their sales from the prior quarter. Affected by the seasonal swing of the PC industry, ODMs' Q1 sales of $32.0 billion dropped 10.6% sequentially, while EMS providers' sales of $51.3 billion represented much smaller decline of 5.5%.

Combined Q1 operating margin for eight out of nine ODMs worked out to 1.2%. (**TPV Technology** was not included because its financials are not consistent with those of the other ODMs.) Contrast this ODM result with a 2.9% aggregate margin produced by five of the largest US-traded EMS providers in Q1 (May, p. 3).

Q1 net income for the 20 large CMs totaled about $1.3 billion for a net margin of about 1.6%. (The total is approximate because not all companies follow the same accounting rules.) On a year-over-year basis, group net income did not increase as fast as sales did. Net income rose by around 4.6%, compared with revenue growth of 15.1%. But with Hon Hai out of the comparison, net income would have risen by approximately 6.1%, in line with a sales increase of 4.3%. In Q1, the EMS providers earned net income of around $886 million for growth about 5.6% from a year earlier, while net income on the ODM side amounted to some $417 million, up approximately 2.7%. In the aggregate, net margin for the EMS providers was about 1.7% versus the ODMs' margin of about 1.3%.

News

RIM Revamping Supply Chain

After disclosing earlier that **RIM** intends to consolidate its supply chain into fewer locations (April, p. 8), **Celestica** (Toronto, Canada) will wind down its manufacturing services for the RIM over the next three to six months. Celestica estimates that prior to any recoveries, restructuring charges will not exceed $35 million. RIM accounted for about 19% of Celestica's Q1 sales.

Jabil (St. Petersburg, FL) is another EMS supplier to RIM. Without naming RIM, Jabil said during this month's earnings call that it will continue as a supplier for its mobility customer that's under duress, a description that fits RIM. Jabil expects to consolidate production for this customer regionally in Mexico and Hungary, where the provider is already manufacturing for the customer.

Then there's **Flextronics** (Singapore), which also supplies RIM. Last month, Flextronics told investors that it expects to move away from manufacturing on four continents for RIM and to end up with less business from the customer (May, p. 4).

According to Taiwan's *Digitimes*, ODMs **Wistron** and **Quanta Computer** serve RIM as well.

Deals done…**SMTC** (Markham, Ontario, Canada) has bought out its Chinese joint venture partner, **Alco Electronics**, and expanded capabilities at SMTC's Dongguan, China, factory. These moves are part of SMTC's plan to strengthen its global footprint, enhance manufacturing capabilities in China, and support the growth of new business in the region….**SigmaTron International** (Elk Grove Village, IL) has acquired assets of **Spitfire Control** (Carpentersville, IL), an electronic controls OEM with a focus on the major appliance industry and manufacturing sites in Chihuahua, Mexico, and suburban Ho Chi Minh City, Vietnam. In addition to augmenting SigmaTron's international footprint, the deal will allow SigmaTron to offer design services for the first time in specific markets….**PartnerTech** (Vellinge, Sweden) has acquired **Aerodyn AB**, which is focused on contract manufacturing of heavy components for ship propulsion based on propeller systems or water jets. PartnerTech aims to broaden the customer base within its machining business as well as expand its defense and maritime offering.

*Alliances…*Jabil has signed a cooperation agreement with **R.H. Technologies Ltd**, described as the largest hi-tech manufacturing company in Israel. The company's plant in Nazareth Illit will serve as Jabil's manufacturing arm in Israel, where the company is establishing a presence to focus on partnering with start-up and emerging companies….**Hon Hai Precision Industry** (Tucheng City, Taiwan) will form an alliance with **BMW** for development of automotive electronics, reported Taiwan-based *CENS*.

Investing in Chengdu…Jabil has broken ground on a new site in Chengdu, the capital of Sichuan province in Southwest China. With the potential to ultimately expand to 2 million ft^2 of capacity, the new site is expected to start production by the end of the year. It is intended for the company's Specialized Services business and other areas within Jabil.

Last Word

Low Volumes on Campus?

With the likes of **Flextronics** and **Jabil** placing more and more emphasis on low-volume, high-mix business, there should be more and more talk about what this means for manufacturing infrastructure. But little has been said, at least in public. Why? *MMI* believes that some of the providers who are pursuing this business are carrying manufacturing networks that were built, at least in part, for a different era.

During that era, which probably lasted through most of the last decade, high-velocity business was more in vogue than it is today. (Yes, there are still some large EMS providers, most notably **Hon Hai**, who still hitch their wagons to the high-volume model, but their numbers are shrinking.) High volumes were made to order for a manufacturing campus with the size to accommodate them. Better yet, campuses were typically located in low-cost geographies, which allowed OEM customers to get immediate cost reductions. So starting in the 1990s with Flextronics, the campus model became *de rigueur*.

As time wore on, campuses attracted suppliers who located in the same industrial park or near by. Having suppliers close by streamlined logistics, added flexibility, saved on transportation costs and facilitated vendor-managed inventory. Vertically integrated providers could also bring on site capabilities such as injection molding and metal forming. Sourcing internally produced plastics on site, for example, eliminated freight charges and packaging, while speeding up response times.

If the campus model was designed with high-volume business in mind, does it still apply to the low-volume, high-mix programs that are so sought after these days? This is an important question for those providers who have invested in campuses.

Low-volume programs by their nature do not require the floor space or capacity available in a large-scale campus facility. What's more, an OEM operations VP might be leery of putting a low-volume program in such a large facility for fear that it might not receive enough attention amid all the other work flowing through that plant. Then there's the question of suppliers. Low-volume, high-mix programs generally require a lot more part numbers than when running high volumes of the same product. Hence, a local supply base set up for high-volume work may not cover a large portion of the parts in a series of low-volume programs.

Nevertheless, large OEM customers with lower volumes in sectors such as communications infrastructure can be sure that their programs will not get lost in the shuffle of a large facility. Providers cannot afford to let that happen, and they have a track record of serving such customers from large facilities. These customers also have the clout to assure adequate parts coverage from the local supply base.

Selling a smaller OEM with a low-volume program of, say, under $10 million on the virtues of a campus facility might not be so easy. Is the campus model now outmoded for a large share of the high-mix, low-volume programs coming down the pike? Not necessarily if combined with other approaches, *MMI* believes. To overcome the objection that modest-sized programs could get lost in a large centralized facility, smaller gateway plants have been used to start such programs in a more comfortable setting for the OEM, and the gateway is often located near the OEM. If volumes pick up or the OEM decides to opt for more aggressive cost reduction, the program can then be moved to a campus facility in a lower-cost country. Of course, this strategy is not new.

But some savvy providers are adding another wrinkle to entice OEMs with high-mix, low-volume work. Offer a design center near the OEM's engineers. By "getting in bed" with the OEM at an early stage, the EMS provider can become more of an equal partner in the decision about where to manufacture the OEM's product. In this scenario, the provider has more leverage in recommending campus production when warranted.

Another strategy for getting more mileage of a campus facility is to set up smaller units within it that specialize in high-mix, low-volume work. Offering a smaller factory within a factory may allay OEM concerns about receiving enough attention. In addition, such internal units can be configured for specific markets such as medical or aerospace that require manufacturing to their own standards.

To address the supply base needs of low-volume, high-mix work, providers can call upon distributors to broaden the range of parts that are locally available to a campus facility.

Finally, on-site vertical integration may be attractive to some smaller OEMs who want to one-stop shop.

Campus facilities are probably not in jeopardy despite the growth of low-volume, high-mix business. EMS providers are nothing if not resourceful, and they'll find ways, such as those described here, to ensure that their campus investments do not languish.

Editor and Publisher: John Tuck
Circulation Director: Ann Connors

Manufacturing Market Insider is a monthly newsletter published by JBT Communications, 43 Summit Ridge, Burlington, VT 05401-3911. Phone (802) 651-9334. Fax (802) 651-9336.
 ISSN 1072-8651

E-mail: jbt@mfgmkt.com
Web site: www.mfgmkt.com