

# Manufacturing Market™ INSIDER

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## Overall Growth of Nearly 20% for First Half

Buoyed by growth of Asia-based EMS providers and ODMs, a group of 32 large outsourcing providers produced an overall sales increase of 19.9% in the first-half of 2007 versus the year-earlier period. This news is both good and bad. On the positive side, it shows that the secular trend in outsourcing remains robust years after the trend went global. But there is a darker message here as well. These 32 large providers represent by far the bulk of the business in outsourced manufacturing; their 19.9% growth rate can be used as a proxy for the outsourcing market at large. Outsourcing providers that grew at below that rate in the first half did not keep up with the overall market.

Consisting of 21 EMS providers and 11 ODMs, this group of 32 publicly held companies together accounted for first-half sales of \$109.5 billion, up from \$91.3 billion in the same period a year ago. The resulting 19.9% growth rate is well above long-term growth forecasts, which typically are below 15%. What's more, growth of the outsourcing business (EMS + ODM) has been running ahead of long-range projections for some time now, *MMI* believes. Growth of last year's Top 25 providers in outsourcing amounted to 21.6% (May, p. 1-2), which followed a 22.4% increase for the 2005 Top 25.

Perhaps the best news of all, group net profit increased at an even faster rate than did sales. In the first half of

2007, the group of 32 outsourcing providers together generated net profit of \$2.8 billion, which represented a 34.7% increase year over year. (Results in non-U.S. currencies were converted to U.S. dollars by using six-month averages for 2007 and 2006 based

Chart 1: First-Half 2007 Growth (%)

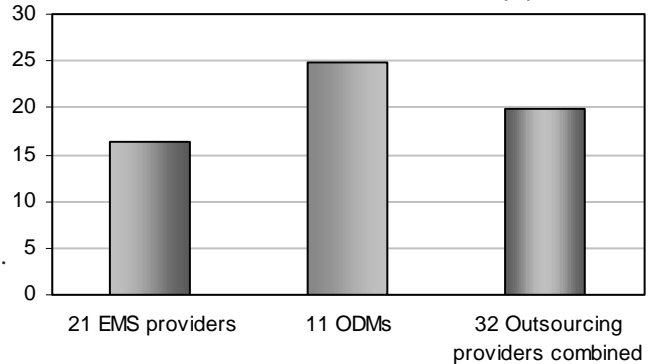


Table 1: First-Half Results by Outsourcing Groups in M US\$

EMS Group	No. of cos.	Q1-2 '07 sales	Q1-2 '06 sales	% chg.	Q1-2 '07 net profit	Q1-2 '06 net profit	% chg.	Net margin
Asia-listed	7	25,635	20,464	25.3	1,136	877	29.5	4.4
Europe-listed	6	3,374	3,195	5.6	(55)	27	-303	-1.6
US-listed	8	33,175	29,791	11.4	335	283	18.5	1.0
Combined EMS	21	62,184	53,450	16.3	1,416	1,187	19.3	2.3
ODM Group	11	47,309	37,883	24.9	1,411	912	54.6	3.0
<b>Total/avg.</b>	<b>32</b>	<b>109,493</b>	<b>91,333</b>	<b>19.9</b>	<b>2,827</b>	<b>2,099</b>	<b>34.7</b>	<b>2.6</b>

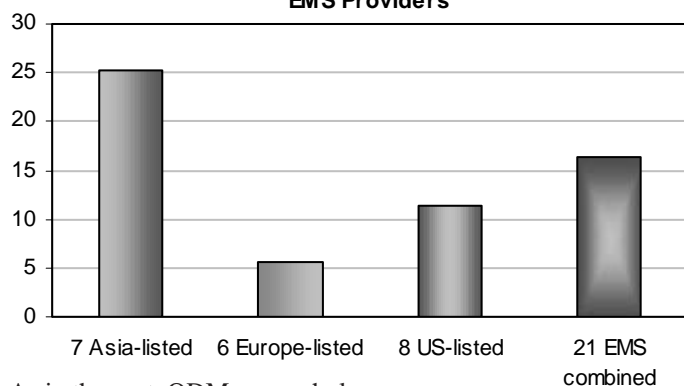
on monthly data from the U.S. Federal Reserve.) This net profit equated to a net margin of 2.6% (Table 1). It shows

that profits in the outsourcing space may not be fat, but they are far from negligible.

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**Chart 2: First-Half 2007 Growth (%) for Large Public EMS Providers**



As in the past, ODMs as a whole outpaced their EMS counterparts when it came to revenue growth. In the first half of 2007, aggregate growth of the 11 ODMs in the group exceeded that of the 21 EMS providers by 8.6 percentage points, a significant margin. ODMs combined for 24.9% growth (in U.S. dollars) in the first half, compared with a 16.3% increase for the EMS companies (Chart 1, p. 1). ODM growth is a direct reflection of the PC, display and other products in which ODMs specialize.

With sales totaling \$62.2 billion, EMS providers still represented a majority of sales for the group of 32. But within the EMS subset, growth varied widely. Led by **Hon Hai Precision Industry**, the world's largest EMS provider, the seven Asia-listed providers chalked up a 25.3% growth rate for the first six months. This performance left U.S.- and Europe-listed providers playing catch-up as their first-half growth rates came in at 11.4% and 5.6% respectively (Table 1, p. 1 and Chart 2).

First-half results for the eight U.S.-traded providers in this analysis appeared in last month's issue (Aug., p. 5). Table 2 reprises these results. While sales grew at a below-average 11.4% in the first half, GAAP net income rose at 18.5% year over year, some seven percentage points higher than sales growth and less than one point below overall margin growth for the 21 EMS providers in this analysis

(Table 1, p. 1). On the other hand, net margin for the U.S.-traded providers amounted to 1.0%, or 130 basis points below the combined margin of the 21 providers. Despite the increase in net income for the U.S.-traded providers, their combined net margin still has much room for improvement if the benchmark to shoot for is the 2.3% combined margin of the 21 EMS providers analyzed here.

Anchored by Hon Hai, the seven Asia-listed providers in the EMS group easily outgrew their U.S. and European counterparts on a combined basis. Collectively, these Asia-listed companies also led their counterparts with respect to net profit gain (29.5%) and net margin (4.4%) in the first half (Table 1).

Hon Hai's growth continues to defy the law of large numbers to some degree, but not as much as in the past. For the first half, the mammoth provider reported consolidated sales of \$21.5 billion, an increase of 25.6% in U.S.-dollar terms (28.8% in NT dollars) from a year earlier (Table 3 at right and Table 4, p. 3). By comparison, the company's consolidated revenue increases for 2006 and 2005 were 38% and

**Table 2: Six-Month 2007 GAAP Results for Eight Large EMS Providers, US Traded (M\$ or %)**

Company (in order of 6-mo. sales)	Q1-2 '07 sales	Q1-2 '06 sales	Yr.-yr. chg.	Q1-2 '07 net inc.	Q1-2 '06 net inc.
Flextronics	9,833.8	7,590.0	29.6	227.6	127.4
Jabil	5,936.8	4,907.5	21.0	20.1	133.2
Solectron	5,887.2	5,202.2	13.2	27.4	72.4
Sanmina-SCI	5,100.1	5,376.3	-5.1	(53.7)	(130.9)
Celestica	3,779.3	4,157.5	-9.1	(9.4)	(47.7)
Benchmark	1,508.8	1,400.4	7.7	50.4	54.0
Plexus	739.8	735.3	0.6	25.7	43.6
Nam Tai	389.4	422.0	-7.7	47.2	31.0
<b>Total/avg.</b>	<b>33,175.2</b>	<b>29,791.2</b>	<b>11.4</b>	<b>335.3</b>	<b>283.0</b>

75% respectively.

On a consolidated basis, the provider's net income attributable to shareholders more than kept pace with sales. (Note that Hon Hai reports consolidated results only twice a year.) Net income in the first half amounted to \$947 million, up 28.3% year over year (31.6% in NT dollars). But gross margin decreased by 35 basis points to 9.87%, and operating margin was down 26 basis points to 5.60%. Attributable net margin increased by 9 basis points to 4.39%, which included a 39-basis point reduction in income tax expense as a percentage of sales.

Hon Hai's consolidated results include those of its majority-owned handset subsidiary, **Foxconn International Holdings** (FIH), which is a major EMS provider in its own right. Unlike in 2006, FIH's performance in the first half of 2007 did not contribute to the growth of its parent company in

**Table 3: First-Half Results for Seven Asia-Based EMS Providers in M US\$**

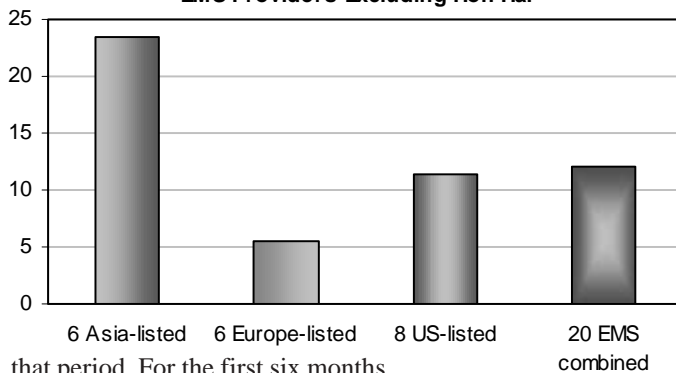
Company	Q1-2 '07 sales	Q1-2 '06 sales	Yr.- yr. %	Q1-2 '07 net profit	Q1-2 '06 net profit
Hon Hai	21,538	17,144	25.6	947	738
Venture	1,291	923	39.9	98	63
Cal-Comp	1,236	854	44.7	40	24
USI	891	792	12.6	27	18
Jurong	271	341	-20.5	17	21
Wong's Intl.	211	239	-11.6	3	7
SMT	196	172	13.8	4	6
<b>Total/avg.</b>	<b>25,635</b>	<b>20,464</b>	<b>25.3</b>	<b>1,136</b>	<b>877</b>

Currencies converted to US\$ using 6-month averages based on monthly 2006 and 2007 data from the US Federal Reserve.

**Table 4: Q2 2007 and Six-Month Results for Seven Asia-Based EMS Providers**

Company	Home base	Currency	Q2 '07 sales	Q2 '06 sales	Yr.-yr. chg.	Q2 '07 net profit	Q2 '06 net profit	Q1-2 '07 sales	Q1-2 '06 sales	Yr.-yr. chg.	Q1-2 '07 net profit	Q1-2 '06 net profit	Yr.-yr. chg.
Hon Hai	Taiwan	M NT\$						711,257	552,249	28.8	31,261	23,759	31.6
Venture	Singapore	K S\$	1,004,653	750,589	33.8	78,662	52,555	1,973,555	1,484,454	32.9	149,374	101,918	46.6
Cal-Comp	Thailand	M Baht	19,815	19,381	2.2	618	595	41,042	33,023	24.3	1,328	944	40.7
USI	Taiwan	M NT\$						29,439	25,499	15.5	905	571	58.7
Jurong	Singapore	K S\$	195,968	249,293	-21.4	13,895	17,503	414,284	548,001	-24.4	26,673	33,968	-21.5
Wong's Intl.	Hong Kong	K HK\$						1,648,864	1,852,874	-11.0	24,851	50,550	-50.8
SMT	Hong Kong	K HK\$	816,843	703,309	16.1	15,410	21,120	1,533,372	1,337,915	14.6	29,646	49,418	-40.0

**Chart 3: First-Half 2007 Growth (%) for Large Public EMS Providers Excluding Hon Hai**



that period. For the first six months, FIH recorded sales of \$4.6 billion, an increase of 4.9% year over year. In contrast, FIH's revenue went up by 63.1% in 2006. First-half net profit (attributable to shareholders) rose by 7.4% from the year-ago period to \$324.0 million, equivalent to an impressive net margin of 7.1%.

Because of Hon Hai's massive size, the company is in a position to skew overall results. As mentioned earlier, the 21 EMS providers grew sales at a combined rate of 16.3% in the first half. Without Hon Hai, aggregate growth would decrease by 4.3 percentage points to 12.0% (Chart 3). This Hon Hai effect was less pronounced than in last year's first-half analysis (Sept. 2006, p. 2 and 3).

But in the Asia-traded group of EMS providers, the absence of Hon Hai would have had a small effect – less than two percentage points – on aggregate growth, expressed as U.S. dollars. Besides Hon Hai, four other Asian providers reported double-digit growth in the first half (Table 3, p. 2 and Table 4). However, currency ef-

fects did come into play here. In U.S. dollar terms, **Cal-Comp Electronics** (Thailand) and **Venture** (Singapore) increased sales by 44.7% and 39.9% respectively (Table 3). But when growth

is calculated from the companies' reporting currencies, the numbers drop to 24.3% and 32.9% (Table 4). In the former case, appreciation of Thailand's baht against the dollar inflated Cal-Comp's first-half growth expressed in U.S. dollars by some 20 percentage points. By comparing Tables 3 and 4, one can gauge the currency effect on each Asian provider.

Asian providers clearly benefited on the bottom line as well as on the top line from the continuing popularity of outsourcing to low-cost countries in the region. First-half net profits for the Asian EMS group, which increased 29.5% year over year in U.S. dollars, improved faster than did sales (Table 3). Four out of seven companies achieved high growth rates for net profits.

But not all boats rose with this outsourcing tide. **Ju-**

**rong Technologies'** first-half sales fell 20.5% year over year in U.S. dollars (24.4% in Singapore dollars), and the provider attributed its Q2 sales decline (Table 4) to a delay in a major customer's execution plan. **Wong's International** also posted a first-half decrease in revenue from a year earlier. What's more, these two companies plus a third, **Surface Mount Technology (Holdings) Limited**, saw first-half earnings go down year over year.

Like the Asian group, the six Europe-traded providers are dominated by a single EMS provider, in this case **Elcoteq**. This European EMS group collectively increased first-half sales by 5.6% (in U.S. dollars) from a year earlier, largely as a result of Elcoteq's 3.3% revenue gain in the period (Table 5). Again, currency effects were present. In this European group, appreciation of European currencies against the dollar caused significant inflation of sales and earnings when converted to U.S. dollars.

Despite these effects, it is clear that both **Neways** and **Kitron** produced

**Table 5: First-Half Results for Six European EMS Providers in M US\$**

Company	Q1-2 '07 sales	Q1-2 '06 sales	Yr.-yr. % chg.	Q1-2 '07 net profit	Q1-2 '06 net profit
Elcoteq	2,554	2,473	3.3	(90)	8
PartnerTech	197	196	0.3	5	8
Scanfil	148	151	-2.0	8	(1)
Neways	184	137	34.1	10	6
Kitron	163	128	26.8	6	3
NOTE	129	110	17.7	6	4
<b>Total/avg.</b>	<b>3,374</b>	<b>3,195</b>	<b>5.6</b>	<b>(55)</b>	<b>27</b>

Currencies converted to US\$ using 6-month averages based on monthly 2006 and 2007 data from the US Federal Reserve.

## First Half

**Table 6: Q2 2007 and Six-Month Results for Six European EMS Providers**

Company	Home base	Currency	Q2 '07 sales	Q2 '06 sales	Yr.-yr. chg.	Q2 '07 net profit	Q2 '06 net profit	Q1-2 '07 sales	Q1-2 '06 sales	Yr.-yr. chg.	Q1-2 '07 net profit	Q1-2 '06 net profit
Elcoteq	Finland	M EUR	968.3	1,029.6	-6.0	(20.6)	4.4	1,920.8	2,010.7	-4.5	(67.5)	6.5
PartnerTech	Sweden	M SEK	683.1	847.6	-19.4	16.0	40.3	1,365.3	1,487.8	-8.2	34.3	62.0
Scanfil	Finland	M EUR	58.9	62.4	-5.6	3.2	3.7	111.1	122.5	-9.3	6.3	(0.9)
Neways	Netherlands	M EUR						138.6	111.7	24.1	7.8	4.7
Kitron	Norway	M NOK	510.5	395.2	29.2	19.7	0.5	996.2	828.4	20.3	34.5	16.4
NOTE	Sweden	M SEK	470.2	433.1	8.6	22.4	15.8	895.2	831.6	7.6	38.4	27.9

first-half revenue gains above 20% no matter how they're measured. Three European providers – Elcoteq, **PartnerTech** and **Scanfil** – recorded sales declines in their native currencies, while just one (Scanfil) appears with a decrease expressed in U.S. dollars (Table 5, p. 3 and Table 6).

Although Elcoteq's net loss in the first half put the European group in the red, the other European providers made money in the period. What's more, first-half net profits improved year over year at four out of six European companies. On a U.S.-dollar basis, the provider that made the greatest gain in profits was Scanfil.

MMI's analysis also includes 11 Taiwan-based ODMs, of which ten reported consolidated results in NT (New Taiwan) dollars. These ten ODMs appear in Table 7. The remaining company, **TPV Technology**, is Hong Kong-listed and records its results in U.S. dollars. TPV has been

added to Table 8, which presents results in U.S. dollars.

For the ten ODMs in Table 7, combined gross margin in the first half of 2007 did not budge from the 7.9% of a year earlier, but overall operating margin went up 60 basis points year over year to 3.5%. This increase in operating margin sent more profits to the bottom line. First-half earnings (in NT dollars) for the ten ODMs grew more than twice as fast as sales. Net profit growth year over year amounted 64.2% compared with an overall revenue increase of 28.8% (Table 7).

The largest ODM by sales, **Asustek Computer**, also had

the highest first-half growth rate, followed by **Innolux Display**. Growth rates varied widely with two ODMs, **MiTAC International** and **Inventec Appliances**, showing sales declines in NT dollars.

**Table 8: First-Half Results for 11 ODMs in M US\$**

Company	Q1-2 '07 sales	Q1-2 '06 sales	Yr.-yr. %	Q1-2 '07 net profit	Q1-2 '06 net profit
Asustek	11,204	6,541	71.3	411	221
Quanta	9,579	7,974	20.1	232	151
Compal	6,882	4,924	39.8	177	121
TPV*	3,798	3,251	16.8	68	74
Inventec	3,500	3,578	-2.2	76	73
Lite-On	3,489	3,413	2.2	118	124
Wistron	3,327	3,067	8.5	74	88
Innolux	2,076	1,346	54.2	136	(5)
MiTAC	1,308	1,429	-8.5	73	73
Inventec Appliances	1,200	1,501	-20.1	48	39
FIC Global	945	859	10.1	(3)	(46)
<b>Total/avg.</b>	<b>47,309</b>	<b>37,883</b>	<b>24.9</b>	<b>1,411</b>	<b>912</b>

Currency converted to US\$ using 6-month averages based on monthly 2006 and 2007 data from the US Federal Reserve.  
\*Hong Kong-listed company reports results in US\$.

**Table 7: Consolidated First-Half Results for Ten Large ODMs in Millions of NT\$ (or %)**

Company	Q1-2 '07 sales	Q1-2 '06 sales	Yr.-yr. chg.	Q1-2 '07 gross profit	Q1-2 '07 gross marg.	Q1-2 '06 gross profit	Q1-2 '06 gross marg.	Q1-2 '07 oper. profit	Q1-2 '07 oper. marg.	Q1-2 '06 oper. profit	Q1-2 '06 oper. marg.	Q1-2 '07 net profit	Q1-2 '06 net profit
Asustek	370,003	210,717	75.6	33,326	9.0	20,949	9.9	14,490	3.9	7,592	3.6	13,577	7,117
Quanta	316,349	256,861	23.2	17,638	5.6	14,178	5.5	8,499	2.7	3,979	1.5	7,646	4,866
Compal	227,278	158,631	43.3	15,068	6.6	11,100	7.0	9,837	4.3	6,894	4.3	5,852	3,890
Inventec	115,592	115,254	0.3	6,122	5.3	7,186	6.2	1,523	1.3	1,613	1.4	2,524	2,351
Lite-On	115,220	109,940	4.8	14,007	12.2	13,824	12.6	4,005	3.5	5,040	4.6	3,895	3,994
Wistron	109,882	98,807	11.2	7,346	6.7	7,196	7.3	2,934	2.7	3,544	3.6	2,451	2,819
Innolux	68,542	43,346	58.1	7,734	11.3	2,431	5.6	5,358	7.8	663	1.5	4,500	(170)
MiTAC	43,203	46,035	-6.2	6,399	14.8	5,187	11.3	2,348	5.4	2,431	5.3	2,413	2,364
Inventec Appliances	39,613	48,363	-18.1	4,336	10.9	3,808	7.9	1,946	4.9	1,200	2.5	1,581	1,244
FIC Global	31,221	27,657	12.9	2,092	6.7	1,864	6.7	(359)	-1.1	(1,103)	-4.0	(92)	(1,466)
<b>Total/avg.</b>	<b>1,436,903</b>	<b>1,115,611</b>	<b>28.8</b>	<b>114,068</b>	<b>7.9</b>	<b>87,723</b>	<b>7.9</b>	<b>50,581</b>	<b>3.5</b>	<b>31,853</b>	<b>2.9</b>	<b>44,347</b>	<b>27,009</b>

Net profit represents consolidated net income attributable to the parent company.

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With TPV added, the 11 ODMs in this analysis combined for \$47.3 billion in first-half sales, up 24.9% from a year earlier (Table 8, p. 4). While first-half profits for the larger ODM group increased at 54.6%, again more than double the rate of sales growth, earnings declined from a year earlier at three ODMs. All ODMs but one, **FIC Global**, were profitable in the first half.

Net margin for the ODM group stood at 3.0% for the first half, 70 basis points above that of the EMS group (Table 1, p. 1). Yes, ODMs on the whole remain more profitable than their EMS counterparts, but the edge in profitability is not what it once was.

If there is one takeaway from this analysis, it is that the outsourcing business overall is growing at around 20%, not 10 to 15% as is often assumed. The challenge for EMS companies, in particular, is to ensure that they gain a full share of this overall growth.

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## News

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### **Flextronics To Make ODM Move**

**Arima Computer** (Taipei, Taiwan) has signed a binding letter of intent to sell its notebook and server related operations to **Flextronics** (Singapore). The deal will extend Flextronics' ODM activities into the notebook space and bolster its server capabilities.

Flextronics will pay \$191.5 million, including a premium of \$59.5 million, for the Arima business, according to a statement from Arima. Among the assets of this business are a plant and four dormitories in WuJiang, China; products; technology; customer lists; and inventories. In addition, the proposed transaction includes the sale of wholly owned Arima subsidiaries in the UK, Texas, California and Japan. A definitive purchase and sale agreement is expected to be executed within 45 days of the deal's announcement on

Sept. 20.

This acquisition can also be viewed as a way to outflank arch rival **Hon Hai Precision Industry** (also known as Foxconn), which has held back from entering the notebook ODM business. The Hon Hai group is a major supplier of casings to notebook ODMs.

In June, an Arima official told *Reuters* that Arima was shooting for about 1 million notebook computers in 2007, an increase from 630,000 units last year. Arima estimated that its notebook sales this year, part of which comes from a clone notebook business, will amount to NT\$20 billion (\$605 million), *Digitimes* reported.

According to *iSuppli*, Arima manufactured 52.7% of **Gateway's** notebooks in 2006. Last month, **Acer** announced its intention to acquire Gateway. If the deal goes through, it will combine the notebook supply bases of the two companies. In that event, the question will be whether or not Acer will consolidate the combined supply base.

On the server side, Arima and Flextronics have introduced platforms that appear to be complementary. This month, Arima brought out motherboard and barebones products based on the Quad-Core **AMD** Opteron processor. Earlier this year, Flextronics unveiled a server motherboard based on the Quad-Core **Intel** Xeon processor (April, p. 4).

According to Arima, Flextronics intends to offer jobs to substantially all of Arima's employees in its notebook and server business. The business employs 3,500 people outside of Taiwan, *Digitimes* reported.

After the purchase and sale agreement is signed, Arima will convene a shareholders meeting to seek approval of the transaction. Flextronics must also gain approval from Taiwan's Investment Commission.

For the first half of 2007, Arima reported a loss of NT\$1.22 billion

(\$37 million at current exchange rates) on consolidated sales of NT\$10.59 billion (\$322 million).

### **Flextronics said to be pursuing purchase of ECI Telecom plants**

An Israeli newspaper, *Yedioth Ahr-onoth*, reported that Flextronics is working on a deal to buy **ECI Telecom's** three plants, all in Israel, for about \$270 million, according to *Reuters*. Reportedly, the deal includes a five-year supply agreement.

When contacted by *MMI*, neither Flextronics nor ECI Telecom would comment on the deal.

ECI is a publicly held provider of networking infrastructure equipment. Last month, the company's shareholders approved the acquisition of ECI by private investment entities.

### **Nokia Siemens Aims To Sell Plants to Jabil**

Responding to an *MMI* inquiry, **Nokia Siemens Networks** has confirmed that it intends to divest two plants in Italy to **Jabil Circuit** (St. Petersburg, FL). One is a microwave facility in Cassina de Pecchi near Milan, and the other is a radio access equipment facility in Marcianise near Naples. A preliminary agreement with Jabil calls for the transfer of some 600 Nokia Siemens employees to Jabil. Nokia Siemens expects the deal to close in the next few months.

The company told *MMI* that the reason for this move is to increase flexibility when it comes to manufacturing. Nokia Siemens has also said that it will look at business transfers like this when meeting headcount synergy goals.

The European Commission has set a provisional deadline of Oct. 17 for its review of this divestiture.

Note that Jabil already operates two sites in Italy, one of which is in Marcianise.

## Two Consolidation Deals in Europe

Besides North America, Europe provides some of the most fertile ground for EMS industry consolidation. Two deals in Europe, one completed and one announced, illustrate this point.

In the first instance, **AWS Electronics Group** based in Newcastle-under-Lyme, UK, has acquired another UK provider, **Instem Technologies** in Stone, Staffordshire, creating, said AWS, the UK's largest independent EMS provider. AWS's annual sales now exceed £40 million (\$81 million), the company reported.

"The acquisition is strategic, as it allows us to provide flexibility and capacity for the sales growth being created within both businesses," stated Paul Deehan, AWS Group CEO. With the company's growth forecasts and current order book, Deehan said he needs the extra capacity that Instem brings both in terms of people skills and facility production.

Located some eight miles from AWS's Newcastle-under-Lyme operation, Instem specializes in high-complexity box build and has customers in a wide range of industry sectors including mining, scientific and medical. AWS plans to manage both sites as one entity to gain flexibility and reduce overhead costs.

The company said it is reversing the downsizing trend in electronic manufacturing that is prevalent in the UK and specifically in the Northwest region of England.

This deal is AWS's second acquisition this year and its third in the UK (March, p. 5-6).

In another European deal, **Enics** (Baden, Switzerland) has entered into an agreement to purchase certain assets of **ZTS Elektronika**, a company engaged in EMS and other activities in Nová Dubnica, the Slovak Republic. The transaction is expected to be com-

pleted after the necessary approvals from authorities are obtained.

This acquisition will give Enics quick access to its second production facility in Eastern Europe.

"Due to our rapid growth and increasing customer demand, we have been looking for a suitable place to expand our Eastern European presence. Slovak Republic is an ideal solution to us because it is centrally located, close to the large markets of Central Europe, and provides excellent connections also to Western and Southern Europe," stated Reijo Itkonen, president and CEO of Enics.

In the new location, the company can also tap into a large pool of competent workers, according to Enics.

## NOTE Gains Capacity in China

In the first phase of a strategic alliance with **Ionics EMS** of the Philippines, **NOTE** (Danderyd, Sweden) will acquire 50% of Ionics' facility in Tangxia, Guangdong Province, China.

"The facility is new (2005) and currently has trained, skilled staff on site and new machines. Our intention is to utilize the unit for existing and new customers. We already have customers in the telecom and industrial segments that need production in China and Asia," said Arne Forslund, NOTE's CEO and president. "This initiative also means...consolidating our role as a long-term partner for our major customers."

The facility has annual production capacity equivalent to about SEK 500 million (\$76.8 million), and current capacity utilization is less than SEK 100 million (\$15.4 million).

*Another investment...* EMS provider **Cal-Comp Electronics** (Bangkok, Thailand), a member of Taiwan's **Kinpo Group**, has approved a \$500,000 investment in **A-Ten Technology**, a Taiwanese company that will strength-

en Cal-Comp's R&D capability for telecom products. The investment will also create a sales channel in China and elsewhere. A Cal-Comp subsidiary will end up with a 55% stake in A-Ten.

*Deal done...* **Stadium Group** (Hartlepool, UK), a publicly held EMS company with a branded plastics business, has acquired **Ferrus Power Limited** (Peterborough, UK), a manufacturer of custom power converters and power supplies.

*New business...* Jabil's new factory in Ho Chi Minh City, Vietnam, will serve as an inkjet printer plant for **HP** (May, p. 6). The facility will start volume manufacturing for HP next month, and about one million units will be made for export during the first year of production. Eventually, HP production will also be expanded to cater to the domestic market. In addition, a report on the *San Jose Mercury News* website states that Jabil and **Polk Audio** (Baltimore, MD), a brand of publicly held **Directed Electronics**, are developing high-definition radios that would allow users to select music for purchase later on.... **Teradyne** has extended its manufacturing contract with **Solectron** to include additional requirements in the areas of final assembly, configuration and test for most of Teradyne's Flex family of semiconductor test products, according to a Form 8-K filed by Teradyne. Solectron will perform this new work in Suzhou, China. The agreement will expire in 2010.... Under a newly signed contract, Flextronics will manufacture a full line of wafer probes for **Electroglas** (San Jose, CA). This work will take place in Malu, China, where Flextronics manufactures semiconductor equipment sold by other companies. ...Top 50 EMS provider **VIDEOTON Holding** (Székesfehérvár, Hungary) has started to supply new epilator (hair removal) subassemblies to **Braun Germany** from the provider's site in

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Stara Zagora, Bulgaria....**Pimatronics** (Hong Kong), an EMS provider with a volume production facility in China, will fabricate a line of RFID tags for **Intellex** (Santa Clara, CA)...**Scivanta Medical** (Spring Lake, NJ) has entered into a development agreement with **Sparton Medical Systems**, a unit of a subsidiary owned by **Sparton** (Jackson, MI). Sparton Medical will provide Scivanta with engineering and development support for the hardware component of the Hickey Cardiac Monitoring System.

## ***New Approach to Medical Market***

It's not exactly a secret that the medical sector is an emerging EMS market segment with largely untapped outsourcing potential. EMS providers targeting medical business are now commonplace. The challenge then becomes: How do they actually win medical customers? A key part of one company's answer is to offer an unusual licensing plan for medical OEMs with legacy products.

This year, **Suntron** (Phoenix, AZ) introduced a licensing program that encourages a medical OEM to outsource both production and engineering required to sustain products with long life cycles. As the EMS world knows, supporting such products through their sunset phase often means dealing with component obsolescence and the associated sourcing problems. Suntron will take on the obsolescence issues of a legacy medical product as part of a licensing agreement to continue production of the product. The provider will sustain the engineering necessary to continue manufacturing.

Suntron pays the OEM a negotiated royalty based on the licensing agreement.

The licensing effort has been responsible for winning some amount of new business for Suntron. "The licensing plan continues to excite many new

customers," says Martin Smith, director of marketing and intellectual property licensing at Suntron. Smith, a registered license executive, developed the licensing strategy for Suntron.

Suntron recently earned the 2007 North American **Frost & Sullivan** Competitive Strategy Leadership Award in the medical EMS market.

### **Fastest growing segment at GEM**

Suntron is not the only EMS provider below the top tier to report success in the medical market. According to **Genesis Electronics Manufacturing** (Tampa, FL), the medical device market has become GEM's fastest growing business segment since 2003. That's when the company attained ISO 13485 certification for quality management in the supply of medical devices.

"Today, medical device customers account for about 28% of our manufacturing business," states Scott Mauldin, president of GEM. "By year end, we anticipate our medical customers will make up 30% of our manufacturing revenue, which is in line with our market strategy."

This month, GEM announced that it added another medical device customer to its growing base of EMS clients.

*New facilities...* Vietnamese news sources are reporting that Taiwan's **Hon Hai group** plans to invest in yet another location in Vietnam. The latest area for investment is said to be the northern province of Vinh Phuc, for which Hon Hai has reportedly earmarked \$1.1 billion for an industrial park and urban area, where wireless fixed-line and mobile phones will be produced. Four other locations have been reported here as part of Hon Hai's \$5-billion investment in Vietnam. They are Ho Chi Minh City and the provinces of Bac Ninh, Bac Giang and Binh Dinh (August, p. 7-8; July, p. 7). What's more, Hon Hai has also signed an agreement with another city,

Hai Phong, according to online reports posted by *Viet Nam News*. Hon Hai group continues to invest in China as well. Parent company Hon Hai Precision Industry has committed to building an LED manufacturing center at Wuhan in China's Hubei Province, according to a *Digitimes* report based on other news sources. In addition, *CENS.com* is reporting that Hon Hai's handset subsidiary, **Foxconn International Holdings**, aims to set up a base in Guangxi Province, recently targeted for development by the parent company. This report cited *Xinhua News Agency* and a local newspaper....Also in China, **Surface Mount Technology (Holdings) Limited** (Hong Kong), a Top 50 EMS provider, recently opened a factory in Changchun and a second factory at Tangxia, Dongguan. SMT has also completed construction of a plant in Suzhou and is preparing the inside. Another project is underway in Tianjin, where the company is building a factory scheduled to start operations in mid 2008....This month, NOTE will open what is described as its most advanced factory at Norrtälje, near Stockholm, Sweden....EMS provider **Team Precision** of Bangkok, Thailand, has established a presence in Sønderborg, Denmark, the company's first facility outside Thailand, according to a website of Denmark's Ministry of Foreign Affairs....**The Morey Corporation** (Woodridge, IL), which presents itself as an ODM, has unveiled a 27,500-ft<sup>2</sup> advanced engineering and development center.

*Promotions at Plexus...* **Plexus** (Neenah, WI) has appointed Ginger Jones VP and CFO to succeed Gordon Bitter who is retiring. The provider has also named Mike Buseman senior VP, global manufacturing operations; Steve Frisch senior VP, global engineering services; Todd Kelsey senior VP, global customer services; and YJ Lim regional president – Plexus Asia Pacific.

## EMS Redefined?

Though the price sensitivity and high volumes of consumer electronics programs do not appeal to smaller players and some others in the industry, most people in the EMS business would still consider consumer electronics as part of this business. But **Jabil Circuit** is now sending a different message. As of Sept. 1, Jabil split off its consumer electronics business into a division apart from the rest of its EMS activities. At Jabil, there is now a Consumer Electronics division and an EMS division. This move is not only an operational change; it's also a shift in nomenclature. In effect, the company is saying that consumer electronics no longer belong within its definition of EMS.

As Jabil explains it, its consumer electronics customers, who sell mobile products, TVs, set-top boxes and peripheral products to a mass market, have different needs. These customers look for suppliers with in-depth product knowledge and expertise. According to Jabil, such customers also favor vertical integration of certain technologies and capabilities.

Vertical integration of the supply base is certainly underway in the mobile-phone space (Aug., p. 1). Plastics appear to be a must-have for outsourcing providers offering a vertically inte-

grated solution in that space. Why plastics? At least part of the reason has to do with a cell phone's casing, which often contributes to the phone's brand identity in the marketplace. With cell phones and other consumer electronics, physical packaging can be as important as functionality in making a sale. So any supplier offering a design-and-build solution in the handset space must be able to handle development of not only the product's electronics but also its mechanical aspects.

For an EMS provider or ODM, vertical integration is a defense against the pricing pressures of the consumer electronics sector. By supplying components internally, the supplier can potentially hold the line on pricing while capturing component margins.

Assembling a vertically integrated supply chain for a cell phone, for example, is beyond the reach of most companies in the EMS business. Only the largest suppliers need apply. *MMI* believes that as more vertically integrated supply chains arise for mobile phones and potentially other consumer products, this outsourcing model will be hard to beat. Purveyors of conventional EMS solutions will likely find a wall going up around the high-volume consumer space.

Inside the wall, mega-vertical suppliers (Aug., p. 1) will hold sway. Outside, EMS providers will continue to

supply customers with conventional outsourcing solutions that don't depend on vertical integration and lots of product knowledge. The real question is which products will end up inside this wall. Will it mostly surround mobile phones and other handhelds or will other products be sucked in? Either way, mega-vertical suppliers will create a consumer electronics space of their own.

In the past, many providers avoided consumer electronics territory. Now there are real barriers to entering at least some of that terrain.

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