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Hon Hai Boosts Top-11 Numbers

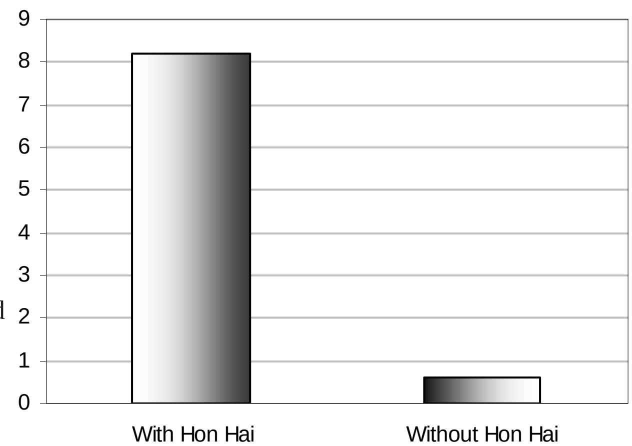
As a group, the 11 largest EMS providers pulled off a healthy sequential increase in Q2 sales, possibly indicating that business overall had begun to turn around in the quarter. These 11 companies generated combined sales of $27.3 billion in Q2, up 8.2% from the prior quarter. On closer examination, however, most of the sequential gain can be attributed to **Hon Hai Precision Industry**, by far the largest EMS provider. Without Hon Hai's contribution, the group's sequential revenue growth in Q2 drops to 0.6%, offering evidence of stabilization, not a nascent recovery (Chart 1).

Stabilization or the onset of recovery, which is it? The answer depends on how much weight should be given to Hon Hai's Q2 sales, which amounted to $13.1 billion and increased 17.7% in U.S. dollars (14.7% in NT dollars) quarter to quarter.

But about one thing there can be no debate: Hon Hai continues to gain market share based on its consolidated sales. Take first-half metrics. For the first six months of 2008, the Taiwan-based provider accounted for 40.3% of the top-11 group's revenue. A year later, Hon Hai's first-half share had grown to 46.1%. (Note that this is a nominal figure because some undisclosed portion of Hon Hai's business would not be considered EMS.)

First-half 2009 sales for the top 11 totaled $52.5 billion, down 19.2% year over year. When expressed in U.S. dollars, first-half sales of all 11 companies showed decreases from a year earlier (Table 1, p. 2). Along with Hon Hai, **Jabil Circuit**, **Cal-Comp Electronics** and **Plexus** all had below-average declines for the first half. Although math would lead to the conclusion that Jabil, Cal-Comp and Plexus also picked up first-half share from a year earlier, only Jabil's gain was significant at about one percentage point. If Hon Hai's results were excluded, the remaining 10 companies would have been saddled with a collective first-half decline of 27.1%.

Chart 1: Q2 Sequential Growth of Top 11



Six out of the 11 providers reported sequential sales increases in the second quarter, with four companies sporting double-digit gains (Table 1). All four of these providers – Hon Hai, Cal-Comp, **Venture** and **Universal Scientific Industrial** – are based in Asia. But as one would expect, there is little to feel good about when Q2 sales results are compared year-over-year. Expressed in U.S. dollars, Q2 revenue for the top 11 collectively dropped by 16.9% from the year-ago period. Nine of the top 11 saw their revenue decline by double digits year over year. Cal-Comp's Q2 sales dipped slightly in U.S.-dollar terms (up 4.5% in baht), while Hon Hai's revenue in U.S. dol-

Some articles in this issue

Company (in order of 6-mo. sales)	Head-quarters	Reports in US$	Q2 '09 sales	Q1 '09 sales	Qtr.-qtr. chg.	Q2 '08 sales	Yr.-yr. chg.	Q2 '09 net profit	Q2 '08 net profit	Q1-2 '09 sales	Q1-2 '08 sales	Yr.-yr. chg.	Q1-2 '09 net profit	Q1-2 '08 net profit
Hon Hai (Foxconn)	Tucheng City, Taiwan	No	13,113	11,137	17.7	13,005	0.8	454	392	24,223	26,182	-7.5	846	904
Flextronics	Singapore	Yes	5,783	5,583	3.6	8,350	-30.7	(154)	130	11,365	16,126	-29.5	(403)	38
Jabil Circuit	St. Petersburg, FL	Yes	2,615	2,887	-9.4	3,088	-15.3	(29)	38	5,503	6,147	-10.5	(895)	14
Celestica	Toronto, Canada	Yes	1,402	1,469	-4.6	1,876	-25.3	5	40	2,872	3,712	-22.6	25	70
Sanmina-SCI	San Jose, CA	Yes	1,209	1,195	1.2	1,903	-36.5	(41)	15	2,404	3,721	-35.4	(79)	(9)
Cal-Comp Electronics	Bangkok, Thailand	No	797	687	16.0	821	-2.9	13	19	1,483	1,578	-6.1	16	39
Elcoteq	Luxembourg	No	594	612	-3.0	1,414	-58.0	(30)	(20)	1,207	2,777	-56.5	(91)	(37)
Venture	Singapore	No	575	480	19.9	712	-19.3	41	48	1,053	1,378	-23.6	59	88
Benchmark Electronics	Angleton, TX	Yes	482	497	-3.0	682	-29.4	12	22	979	1,367	-28.4	21	45
Plexus	Neenah, WI	Yes	379	389	-2.6	456	-17.0	9	17	768	907	-15.4	14	40
Universal Scientific Industrial	Nantou, Taiwan	No	362	314	15.1	548	-34.0	11	9	676	1,127	-40.0	18	29
Total/avg.			**27,310**	**25,250**	**8.2**	**32,856**	**-16.9**	**292**	**712**	**52,532**	**65,021**	**-19.2**	**(468)**	**1,220**

Table 1: Q2 and Six-Month 2009 Results for the 11 Largest EMS Providers (M US$ or %)

Results in non-U.S. currencies were converted to U.S. dollars by applying a three- or six-month average exchange rate for the corresponding period. Average exchange rates were based on monthly 2008 and 2009 data from the U.S. Federal Reserve.

lars was flat (up 9.6% in NT dollars).

Still, the group managed to eke out a combined net profit of $292 million in Q2, thanks to Hon Hai's contribution of $454 million. Without Hon Hai, the group would have sustained a loss of $162 million. Seven providers earned net profits in the quarter (Table 1). Group net profit in Q2 declined by 59% year over year.

As a standard practice, *MMI* converts results for a particular period to U.S. dollars by using an average exchange rate corresponding to that period. The idea is to calculate approximately what those results would have been in U.S. dollars given the exchange rates that were in effect during that period. Where the U.S. dollar strengthened in 2009 against other currencies versus a year earlier, growth rates in U.S.-dollar terms are lower than what was reported in those other currencies. *MMI* believes that this method is valid where business is conducted in U.S. dollars, but introduces distortion where this is not the case. For results reported in non-U.S. currencies, see Table 2.

The Hon Hai machine rolls on

For the first half of 2009. Hon Hai's consolidated sales of $24.2 billion were off 7.5% year over year in U.S. dollar terms (flat in NT dollars). Despite Hon Hai's size, the company still managed to come in with a sales decline only slightly below that of first place winner Cal-Comp. How does Hon Hai, given it size, continue to outpace most of the largest providers? Certainly, blue-chip customers such as **Apple** are part of the answer.

But Hon Hai's sales results can be examined another way. A breakdown of Hon Hai's sales reveals that high first-half growth among certain Hon Hai subsidiaries helped cushion Hon Hai's revenue from the downturn. *MMI's* analysis has found that first-half sales at these units climbed by 122.8% (in U.S. dollars) from a year earlier (Table 3, p. 3). In contrast, revenue of **Foxconn International Holdings**, Hon Hai's publicly listed handset subsidiary, dropped by 34.0%. FIH's sales for the first half amounted to

Table 2: Q2 2009 and Six-Month Results for Top-11 Providers Reporting in Non-U.S. Currencies

Company	Cur-rency	Q2 '09 sales	Q1 '09 sales	Qtr.-qtr. chg.	Q2 '08 sales	Yr.-yr. chg.	Q2 '09 net profit	Q2 '08 net profit	Q1-2 '09 sales	Q1-2 '08 sales	Yr.-yr. chg.	Q1-2 '09 net profit	Q1-2 '08 net profit
Hon Hai (Foxconn)	M NT$	433,773	378,330	14.7	395,838	9.6	15,031	11,934	812,103	811,033	0.1	28,378	28,008
Cal-Comp	M Baht	27,658	24,242	14.1	26,466	4.5	460	622	51,900	49,879	4.1	563	1,239
Elcoteq	M EUR	436.0	470.0	-7.2	904.8	-51.8	(21.8)	(12.8)	906.0	1,813.6	-50.0	(68.0)	(24.1)
Venture	K S$	846,033	725,519	16.6	972,506	-13.0	60,947	65,635	1,571,552	1,911,644	-17.8	88,675	121,969
USI	M NT$	11,978	10,684	12.1	16,694	-28.3	349	288	22,661	34,900	-35.1	613	895

Table 3: Components of Hon Hai's Consolidated Sales			
Sales Component	Q1-2 '09 sales (M US$)	Q1-2 '08 sales (M US$)	Yr.-yr. chg. (%)
Hon Hai non-consolidated	17,661	19,866	-11.1
Foxconn International Holdings	3,162	4,790	-34.0
Other units	3,401	1,526	122.8
Hon Hai consolidated	24,223	26,182	-7.5

$3.2 billion, compared with $3.4 billion from the other units. Sales growth at the other units more than offset FIH's revenue decline. Without the contribution from these other units, Hon Hai's sales decrease for the first half would have been 15.5% instead of 7.5% (in U.S. dollars).

Revenue from Hon Hai's other units was obtained by subtracting non-consolidated and FIH sales from consolidated sales. Hon Hai does not provide a list of its subsidiaries and their sales.

A look at Hon Hai's consolidated results shows some ways in which the company has contradicted conventional thinking. During times of excess capacity, margins are supposed to go down. Yet Hon Hai's gross margin for the first half actually increased by 64 basis points from a year earlier to 9.34%. What's more, a downturn usually means cutting expenses wherever possible. Yet Hon Hai's SG&A expenses rose to $952 million in the first half of 2009 from $921 million in the year-ago period. Despite higher operating expenses including R&D, the company raised its first-half operating margin slightly (8 basis points from a year ago) to 4.02%.

Another way Hon Hai departs from the norm is its strategy to diversify well beyond the bounds of EMS industry. The company recently entered the notebook ODM business, but this branching out goes well past the ODM space. Of course, Hon Hai, which started out making components, has never been a pure-play EMS company. But now, in addition to its own-brand channel business, Hon Hai has ventured into such areas as software and retail. As these different businesses grow, Hon Hai will become more of a conglomerate and less like its EMS competitors.

Smaller Decline for ODM Sales

Economic conditions in the first half of the year took their toll on group results for 11 large ODMs, but the group sales decline in U.S. dollars for the period was less than what was exhibited by the top-11 EMS providers. First-half sales of these Taiwan-based ODMs totaled $41.2 billion, down 9.9% year over year. This decrease was 9.3 percentage points above the 19.2% drop calculated for the top-11 EMS providers. Based on this data, the ODM sector continues to outperform the EMS side when it comes to revenue.

All but three ODMs posted first-half revenue declines versus the year-ago period. As seen in Table 1, **Inventec** and **Wistron** led the group with growth rates of 27.0% and 23.8% respectively in U.S. dollars (37.5% and 34.0% in NT dollars).

Together, the 11 EMS providers and 11 ODMs produced first-half sales of $93.7 billion, 15.4% below the year-earlier figure.

Table 1: First-Half 2009 Results for 11 Large Taiwan-Based ODMs

Company	Q1-2 '09 sales (M NT$)	Q1-2 '08 sales (M NT$)	% chg.	Q1-2 '09 % oper. marg.	Q1-2 '08 % oper. marg.	Q1-2 '09 net. inc. (M NT$)	Q1-2 '08 net. inc. (M NT$)	Q1-2 '09 sales (M US$)	Q1-2 '08 sales (M US$)	% chg.	Q1-2 '09 net. inc. (M US$)	Q1-2 '08 net. inc. (M US$)
Quanta	347,167	417,370	-16.8	3.0	2.0	9,280	9,038	10,355	13,473	-23.1	277	292
Compal	253,547	226,763	11.8	3.2	3.6	6,038	6,424	7,563	7,320	3.3	180	207
Wistron	239,765	178,894	34.0	1.7	2.0	3,300	3,107	7,152	5,775	23.8	98	100
Inventec	205,713	149,633	37.5	1.0	0.9	2,347	1,964	6,136	4,830	27.0	70	63
TPV								3,096	4,916	-37.0	55	97
Innolux	70,342	86,097	-18.3	-5.9	8.3	(4,052)	6,770	2,098	2,779	-24.5	(121)	219
Qisda	70,129	82,411	-14.9	-0.7	-2.4	(2,587)	2,320	2,092	2,660	-21.4	(77)	75
AmTRAN	32,319	35,265	-8.4	5.1	1.4	933	522	964	1,138	-15.3	28	17
MiTAC	29,148	32,508	-10.3	-4.1	2.4	(504)	1,204	869	1,049	-17.2	(15)	39
Inventec Appliances	15,632	39,057	-60.0	-2.8	3.6	186	1,420	466	1,261	-63.0	6	46
Ability Enterprise	12,723	15,474	-17.8	4.9	4.2	828	700	380	500	-24.0	25	23
Total/avg.	**1,276,485**	**1,263,472**	**1.0**	**1.6**	**2.4**	**15,769**	**33,469**	**41,171**	**45,703**	**-9.9**	**525**	**1,177**

Results in NT dollars were converted to U.S. dollars by applying a six-month average exchange rate for the corresponding year.
Average exchange rates were based on monthly 2008 and 2009 data from the U.S. Federal Reserve.
Combined results in NT dollars represent 10 out of the 11 ODMs.

Combined Results for 13 Mid-Tier Providers

The largest providers tend to attract the most attention, but other segments of the EMS industry are not to be ignored. Within the industry's middle tier, there are a more than a dozen EMS providers that are publicly traded or whose parent company is publicly listed. *MMI* identified 13 such providers whose first-half 2009 results have been made public. *MMI's* analysis showed that combined first-half revenue for this mid-tier group fell by at least 20% or more, depending on how currencies were converted to U.S. dollars.

First-half sales for the 13 providers totaled $2.17 billion, when results in Asian or European currencies were converted into U.S. dollars by applying a six-month average exchange rate for 2009. Combined sales for the same period in 2008 were $2.87 billion when a six month-average rate for 2008 was used for each result in a non-U.S. currency under *MMI's* standard method for currency conversion. This method then yielded a first-half decline of 24.7%, 5.5 percentage points below the 19.2% decrease computed for the top 11 (Table 1).

However, providers that conduct a substantial amount of their business in non-U.S. currencies could complain that this method unfairly depresses their first-half growth rate. A generally stronger U.S. dollar in 2009 versus 2008 resulted in lower than reported growth rates in all but one currency (HK dollar). Indeed, growth rates of European providers were lowered by as much as 21 percentage points when their results were converted into U.S. dollars. Therefore, *MMI* has decided to also present an alternate approach for currency conversion that preserves reported growth rates of European and Asian providers. In this approach, a constant exchange rate equal to the six-month average for 2009 was used for all 2008 and 2009 results in each non-U.S. currency. The alternate method yielded a composite growth rate of -19.9% (Table 2, p. 5).

The only mid-tier provider to post a first-half sales increase in its reporting currency was **Kinpo Electronics** (Table 3, p. 5).

Three out of the 13 mid-tier providers do not report quarterly results. For the remaining 10, combined Q2 sales declined sequentially by 6.5% or 8.2% in U.S. dollars, depending on the conversion method. As indicated by either result, overall stabilization was not evident within this mid-tier subset. That's in contrast with what was found in the top-11 group. Only three providers – **Kimball Electronics Group**, **Sparton** and **Surface Mount Technology (Holdings)** – had discernible quarter-to-quarter growth in their re-

Table 1: Q2 and Six-Month 2009 Results for 13 Mid-Tier EMS Providers (M US$ or %) at Average Exchange Rates

Organization (in order of 6-mo. sales)	Head-quarters	Reports in US$	Q2 '09 sales	Q1 '09 sales	Qtr.-qtr. chg.	Q2 '08 sales	Yr.-yr. chg.	Q2 '09 net profit*	Q2 '08 net profit*	Q1-2 '09 sales	Q1-2 '08 sales	Yr.-yr. chg.	Q1-2 '09 net profit*	Q1-2 '08 net profit*
Kinpo Electronics	Taipei, Taiwan	No	167	216	-22.7	200	-16.4	(18)	17	383	394	-2.6	(16)	23
Kimball Electronics Group**	Jasper, IN	Yes	152	141	8.3	191	-20.1	(0.7)[1]	(12)[1]	293	372	-21.2	(10)[1]	(14)[1]
Nam Tai Electronics	Macao	Yes	102	102	-0.4	146	-30.3	0.6	12	204	293	-30.5	(3)	40
Kitron	Billingstad, Norway	No	66	83	-21.0	113	-41.6	(3)	8	147	198	-25.8	(0.6)	11
CTS Electronics Manufacturing Solutions**	Blooming-dale, IL	Yes	71	76	-6.6	102	-30.6	1[2]	4[2]	147	197	-25.6	4[2]	6[2]
Wong's International	Hong Kong	No								139	203	-31.7	2	3
LaBarge	St. Louis, MO	Yes	65	72	-10.3	78	-16.8	3	5	137	153	-10.6	6	9
PartnerTech	Malmö, Sweden	No	66	71	-7.2	116	-43.5	(2)	0.6	136	213	-36.0	(2)	(1)
Scanfil	Sievi, Finland	No	68	65	5.2	92	-25.9	9	10	133	166	-20.3	11	15
Neways Electronics International	Son, The Netherlands	No								124	199	-37.5	(6)	3
Sparton	Schaumburg, IL	Yes	59	55	7.6	58	1.6	(9)	(10)	113	116	-2.3	(10)	(10)
Surface Mount Technology (Holdings)	Hong Kong	No	56	51	9.5	111	-49.5	(2)	(0.6)	107	210	-48.7	(5)	(3)
WKK Technology**	Hong Kong	No								101	160	-37.0	(1)[3]	5[3]
Total/avg.			**871**	**931**	**-6.5**	**1,206**	**-27.8**			**2,165**	**2,874**	**-24.7**		

Results in non-U.S. currencies were converted to U.S. dollars by applying a three- or six-month average exchange rate for the corresponding period. Average exchange rates were based on monthly 2008 and 2009 data from the U.S. Federal Reserve. Aggregate Q2 '09, Q1 '09 and Q2 '08 results are based on 10 companies. *Net profit unless otherwise stated. **EMS division of a larger public company. [1]Loss from continuing operations. [2]Segment operating earnings excluding expenses not allocated to business segments. [3]Contribution to (loss)/profit before income tax.

Table 2: Q2 and Six-Month 2009 Results for 13 Mid-Tier EMS Providers (M US$ or %) at a Constant Exchange Rate														
Organization (in order of 6-mo. sales)	Head-quarters	Reports in US$	Q2 '09 sales	Q1 '09 sales	Qtr.-qtr. chg.	Q2 '08 sales	Yr.-yr. chg.	Q2 '09 net profit*	Q2 '08 net profit*	Q1-2 '09 sales	Q1-2 '08 sales	Yr.-yr. chg.	Q1-2 '09 net profit*	Q1-2 '08 net profit*
Kinpo Electronics	Taipei, Taiwan	No	165	219	-24.8	181	-9.1	(18)	15	383	364	5.4	(16)	21
Kimball Electronics Group**	Jasper, IN	Yes	152	141	8.3	191	-20.1	(0.7)[1]	(12)[1]	293	372	-21.2	(10)[1]	(14)[1]
Nam Tai Electronics	Macao	Yes	102	102	-0.4	146	-30.3	0.6	12	204	293	-30.5	(3)	40
Kitron	Billingstad, Norway	No	64	85	-25.3	86	-25.4	(3)	6	147	154	-4.5	(0.6)	8
CTS Electronics Manufacturing Solutions**	Blooming-dale, IL	Yes	71	76	-6.6	102	-30.6	1[2]	4[2]	147	197	-25.6	4[2]	6[2]
Wong's International	Hong Kong	No								139	204	-32.1	2	3
LaBarge	St. Louis, MO	Yes	65	72	-10.3	78	-16.8	3	5	137	153	-10.6	6	9
PartnerTech	Malmö, Sweden	No	64	73	-12.6	85	-25.2	(2)	0.5	136	160	-14.8	(2)	(0.7)
Scanfil	Sievi, Finland	No	66	66	0.6	78	-15.0	9	8	133	145	-8.5	11	13
Neways Electronics International	Son, The Netherlands	No								124	173	-28.2	(6)	3
Sparton	Schaumburg, IL	Yes	59	55	7.6	58	1.6	(9)	(10)	113	116	-2.3	(10)	(10)
Surface Mount Tech-nology (Holdings)	Hong Kong	No	56	51	9.5	112	-49.8	(2)	(0.6)	107	211	-49.0	(5)	(3)
WKK Technology**	Hong Kong	No								101	161	-37.4	(1)[3]	5[3]
Total/avg.			**863**	**940**	**-8.2**	**1,116**	**-22.7**			**2,165**	**2,703**	**-19.9**		

Results in non-U.S. currencies were converted to U.S. dollars by applying one exchange rate per currency equal to an average over the first six months of 2009. This constant exchange rate was based on an average of monthly 2009 data from the U.S. Federal Reserve. Aggregate Q2 '09, Q1 '09 and Q2 '08 results are based on 10 companies. *Net profit unless otherwise stated. **EMS division of a larger public company. [1]Loss from continuing operations. [2]Segment operating earnings excluding expenses not allocated to business segments. [3]Contribution to (loss)/profit before income tax.

porting currencies.

Note that in this mid-tier analysis providers needed at least $100 million in first-half sales to be considered.

North American group tabulated

Also presented here are Q2 and first-half results of six North America-based providers whose first-half sales were below $100 million (Table 4, p. 6). Four of these consist of independent EMS providers, and two are units doing EMS work within a larger parent company.

Together, the six providers rang up first-half sales of $345.6 million, down 7.4% year over, a better result than found in the top-11 and mid-tier statistics presented earlier in this edition. Three providers had first-half and Q2 sales increases above 20% year over year. One of them, **IEC Electronics**, benefited from an acquisition made in 2008. At another, **Sypris Solutions'** Aerospace & Defense segment, the Q2 sales growth primarily resulted from PCBA shipments for the Bradley Combat System. The third provider, **Raven Industries'** Electronic Systems Division, saw particularly strong deliveries of secure communications systems and avionics in the quarter ended July 31.

Table 3: Q2 2009 and Six-Month Results for Mid-Tier Providers Reporting in Non-U.S. Currencies													
Company	Cur-rency	Q2 '09 sales	Q1 '09 sales	Qtr.-qtr. chg.	Q2 '08 sales	Yr.-yr. chg.	Q2 '09 net profit	Q2 '08 net profit	Q1-2 '09 sales	Q1-2 '08 sales	Yr.-yr. chg.	Q1-2 '09 net profit	Q1-2 '08 net profit
Kinpo Electronics	M NT$	5,519	7,335	-24.8	6,073	-9.1	(604)	517	12,853	12,194	5.4	(520)	708
Kitron	M NOK	427.0	571.2	-25.3	572.1	-25.4	(19.2)	41.2	983.0	1,029.3	-4.5	(4.1)	55.7
Wong's International	K HK$								1,075,370	1,584,063	-32.1	19,197	25,722
PartnerTech	M SEK	519.5	594.2	-12.6	694.7	-25.2	(13.8)	3.7	1,113.7	1,306.7	-14.8	(13.2)	(6.1)
Scanfil	M EUR	49.9	49.6	0.6	58.7	-15.0	6.6	6.2	99.5	108.7	-8.5	7.9	9.8
Neways Electron-ics Internatinal	M EUR								93.4	130.0	-28.2	(4.2)	1.9
SMT (Holdings)	K HK$	435,284	397,697	9.5	867,045	-49.8	(16,373)	(4,799)	832,981	1,634,323	-49.0	(38,253)	(26,613)
WKK Technology	K HK$								780,117	1,246,034	-37.4	(8,654)	42,557

Table 4: Q2 and Six-Month 2009 GAAP Results for Six Smaller EMS Providers Based in North America (M$ or %)

Company (in order of 6-mo. sales)	Q2 '09 sales	Q1 '09 sales	Qtr.-qtr. chg.	Q2 '08 sales	Yr.-yr. chg.	Q2 '09 gross marg.	Q2 '08 gross marg.	Q2 '09 oper. marg.	Q2 '08 oper. marg.	Q2 '09 net inc.	Q1 '09 net inc.	Q2 '08 net inc.	Q1-2 '09 sales	Q1-2 '08 sales	Yr.-yr. chg.	Q1-2 '09 net inc.	Q1-2 '08 net inc.
Key Tronic	45.5	44.2	2.8	57.3	-20.6	5.8	10.5	0.7	5.1	0.3	0.3	2.6	89.7	108.7	-17.5	0.5	3.8
SMTC	39.2	44.9	-12.9	54.3	-27.9	10.2	8.2	2.4	0.1	(3.5)*	(2.5)*	(6.3)*	84.1	99.0	-15.0	(5.9)*	(5.9)*
Nortech Systems	19.9	21.6	-7.7	32.0	-37.8	5.5	14.0	-11.2	3.5	(1.5)	(1.3)	0.6	41.4	63.2	-34.5	(2.8)	1.2
IEC Electronics	17.3	16.3	6.2	11.9	45.9	16.1	11.9	7.7	4.9	0.9	2.6	0.9	33.7	23.8	41.4	3.5	1.5
Subtotal/avg.	**121.9**	**127.1**	**-4.1**	**155.4**	**-21.6**	**8.6**	**10.6**	**0.3**	**3.0**	**(3.8)**	**(0.9)**	**(2.3)**	**248.9**	**294.8**	**-15.6**	**(4.7)**	**0.6**
Sypris Solutions' Aerospace & Defense segment	32.4	30.2	7.4	27.0	20.1	18.7	8.7						62.6	50.4	24.2		
Raven Industries' Electronic Systems Division**	17.9	16.2	10.9	14.7	21.5								34.1	28.0	21.6		
Total/avg	**172.2**	**173.4**	**-0.7**	**197.2**	**-12.7**								**345.6**	**373.2**	**-7.4**		

*Includes results of discontinued operations. ** Q2 results are for the quarter ended July 31.

Environment

REACH Postscript

Last month's article on the EU chemicals regulation REACH reported that out of the seven providers contacted by *MMI* for that article only one company responded to questions about complying with REACH. After last month's issue went to press, *MMI* received a second response regarding compliance, indicating that the reluctance to talk about REACH may not be as widespread as originally implied by the article.

Hungary-based **VIDEOTON** (VT) was the second provider to discuss its approach to REACH. The company said it invested significant resources to be able to satisfy REACH requirements. Part of this effort involved identifying both internal suppliers (VT subsidiaries) and external suppliers who might use SVHC (substance of very high concern) materials and switching to non-SVHC alternatives if possible. VT requested all the necessary documents from its suppliers. But VT had to do more in satisfying REACH than a typical EMS provider would. At a few VT subsidiaries producing plastic components or using some other technologies, VT had to preregister certain materials for waste management reasons. This requirement did not apply to VT's other companies as they purchased components from suppliers who had already registered their materials. Also, VT pointed out that usually the products it manufactures either do not contain SVHCs or bear them at levels below the minimum threshold.

In 2007 when REACH was new to many of VT's suppliers, the company needed to educate them, especially those who supplied VT through distributors or did business with VT only once. Over the last two years or so, "most suppliers have become well prepared concerning REACH and capable of updating us about their REACH status in case we request it," said Mihály Tunkli, vice president of business development at VIDEOTON.

Hungary set up a dedicated organization to administer REACH through a government agency already responsible for chemicals. The organization "is working well by now, but at the beginning it was difficult to find the right answers and details related to REACH. So the implementation of REACH was really very difficult," Tunkli reported.

Today, most VT subsidiaries employ one person or entity responsible for identifying tasks to cover all REACH-related issues, changes and news. This REACH expert must follow up on any changes and support all teams and projects.

News

Hon Hai To Buy TV Assets from Sony

Hon Hai Precision Industry (Tucheng City, Taiwan) will buy certain manufacturing assets related to **Sony's** Tijuana, Mexico, site, which mainly manufactures LCD TVs for the Americas region. The asset purchase stems from an agreement between the two companies to form a strategic alliance for production of LCD TVs for the Americas. Translation: Sony is outsourcing this production to Hon Hai, which will assume employment of workers at the Tijuana site.

Following the sale, Hon Hai will hold a 90% stake in Sony Baja California, the Mexican entity that has direct ownership of the site. Sony will retain a 10% share.

The agreement between Sony and Hon Hai supports the premise, advanced by last month's cover story, that the LCD-TV space is heating up for outsourcing. For that article, Sony was unwilling to comment specifically on a report that the Tijuana plant was being sold to Hon Hai.

According to a Sony press release, the Tijuana site will remain a key manufacturing facility for Sony LCD TVs supplied to the Americas. As of July 31, the site employed 3,300 people. Besides LCD TVs, the site's other key product areas are tuners, home audio and car audio.

Sony is concentrating the internal resources of its LCD-TV business towards activities that contribute to product differentiation, such as R&D, engineering and design. By leveraging external manufacturing resources, Sony will seek to reduce fixed costs, drive other cost reductions, improve profitability and achieve business expansion. In January, the company said it would pursue an "asset-light" strategy for its LCD-TV business.

Hon Hai is not known as one of the major contract manufacturers of LCD TVs (July, p. 4). Taking over Sony's LCD-TV manufacturing operation in Tijuana will boost Hon Hai's position in the LCD-TV space. This asset deal is reminiscent of Hon Hai's acquisition of a **Motorola** handset operation in Mexico in 2004, when Hon Hai was building up its cell phone business.

Completion of the transaction is subject to regulatory approvals in several countries. Hon Hai expects closing to occur by the end of September, according to a filing on the Taiwan Stock Exchange.

Toshiba is said to be another participant in this outsourcing trend. The company recently tapped four Taiwan-based companies – **Compal**, **TPV**, **Unihan** and **Wistron** – to supply LCD TVs in 2010, reported *Digitimes*, a Taiwan-based website.

French Provider Makes Deal

Recently, EMS provider **éolane** (Le Fresne sur Loire, France) acquired a French firm, **Martec**, in a move to bolster éolane's ODM position. Martec, a former subsidiary of the **Eryma group**, specializes in electronics and communication for severe environments and focuses on two main areas: physical and electronic security and critical systems for such fields as defense and transportation.

The acquisition doubles éolane's R&D staff, which now totals 200 people. Martec employed 150 people and had annual sales of 22 million euros.

Annual turnover of éolane is 160 million euros, of which 60 million euros comes from ODM services. The company's ODM goal is to have 50% of its business generated by R&D.

*Change of ownership…***Alliance Holdings**, a 100% employee-owned holding company, acquired **Spectral Response**, an EMS provider based in Duluth, GA. Started in 1987 by Chris Lewis, Spectral specializes in highly complex assemblies for OEMs in several end markets, including satellite communication, logistics and medical equipment. The provider was 67% ESOP owned. Described as one of the largest ESOP holding companies in the U.S., Alliance invests in market-leading manufacturers of industrial, commercial and construction products.

*New business…*According to a *Digitimes* report, Hon Hai is producing a Tegra-based smartbook designed by Taiwan-based **Mobinnova**, said to be an affiliate of Hon Hai. Reportedly, the smartbook has gained telecom customers in Europe and North America. …**Better Place** (Palo Alto, CA), an electric vehicle services provider, has awarded **Flextronics** (Singapore) a contract for production of battery charge spots. The two companies will jointly engineer, develop and stress-test 1,000 next-generation charge spots in the field before taking the next planned step, which is to scale up volume to 100,000 production-grade charge spots by 2011.…**Thales**, a major defense and aerospace company, has selected **CTS's** Electronics Manufacturing Solutions business (Bloomingdale, IL) as a global manufacturing partner. CTS has won an initial design and manufacturing award with total expected revenue of about $5 million over the three- to five-year program life. The company will manufacture multiple PCBAs for harsh environment systems at its Scotland facility and provide Thales UK with on-site engineering support.…Under a new manufacturing services agreement, **Catch the Wind** (Manassas, VA) will outsource the production and assembly of its laser wind sensor to EMS provider **BreconRidge** (Kanata, Ontario, Canada). The provider will also furnish engineering, design and other professional services related to the manufacture of the sensor, which is primarily intended for improving the performance of wind turbines.…**Endicott Interconnect Technologies** (Endicott, NY) has landed a supercomputing contract from **IBM** to supply all of the printed circuit boards, board-level assemblies, and associated functional testing for a next-generation program. …**Sypris Electronics** (Tampa, FL), a subsidiary of **Sypris Solutions**, has received about $5.5 million in follow-on orders to produce electronic assemblies for multiple satellite systems. For years, Sypris Electronics has supplied several of the largest space prime contractors. Also, the U.S. Navy's Space and Naval Warfare Systems Center Atlantic has awarded Sypris Electronics a contract for data recorders used in antisubmarine warfare analysis systems. The three-year contract is worth up to about $10.5 million.

*Financial news…*Flextronics has received $255 million in cash from the sale of its equity investment and note receivable in **Aricent**, a company formed in 2006 when Flextronics sold 85% of its equity in its then software development and solutions business.

EMS and ODM Convergence?

In recent years, some industry observers have predicted a merger of the EMS and ODM sectors of the electronics outsourcing space. This scenario gained some exposure in July when *Digitimes*, a Taiwan-based website, reported **Acer** founder Stan Shih as saying that the distinction between EMS providers and ODMs will eventually fade away. Shih reportedly foresees that the two types of outsourcing providers will blend into a new category called design manufacturing services, or DMS. *MMI* believes that this view has some validity but overstates the case for sector convergence.

There is no question that overlap between the EMS and ODM sectors is taking place within the two largest companies in the EMS industry. Both **Hon Hai** and **Flextronics** have made well-publicized thrusts into the ODM notebook space. On the ODM side, companies continue to diversify into product areas that EMS providers also pursue. Furthermore, the service offerings in the two sectors become blurred when joint design projects are considered.

But *MMI* continues to believe that a full-scale merger of the two sectors is not in the cards for the foreseeable future even though some providers have embraced both models (Jan. 2008, p. 5). For one thing, only the largest EMS providers can afford to invest in ODM platform designs on spec. For another, there are past cases of providers putting together an ODM product offering, only to withdraw it later on. It is questionable whether these providers would do so again.

For convergence to occur, both sides must move toward a new norm. But, other than in a few pre-existing cases, there is little evidence that ODMs are interested in moving in the EMS direction. If they were, the time to do it would have been during the last 12 months when EMS valuations were bottoming out and the cost to acquire an EMS provider was at a low point. Not a single ODM took this opportunity to snap up an EMS company. Why? *MMI* believes that ODMs for the most part want to avoid the EMS model, which involves managing more customers, products and parts than a typical ODM has and at potentially lower profit margins. What's more, ODM growth rates in recent years have outpaced those of the EMS industry. This fact gives ODMs another reason to stay out of the EMS business.

While the ODM model works for high-volume, commodity-like products, applying it to high-mix products of lower volumes is problematic. That's because the volumes of these products are often not large enough to amortize ODM design and development costs. Still, in the high-mix arena there are EMS providers who will take on full product design projects, but only when paid upfront for their efforts.

Although the two largest EMS providers have expanded into the ODM space, ODMs have not returned the favor. And large numbers of EMS companies have good reasons not to follow their leaders into the ODM business.

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