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inside the contract manufacturing industry

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Hon Hai Hikes Wages in China

A series of suicides puts company on the defensive

Hon Hai Precision Industry,

which became the world's largest EMS provider largely by offering low prices, has done the unthinkable: it is more than doubling wages at its operations in Shenzhen, China. This is a watershed event, both for Hon Hai and the EMS industry.

At the beginning of the month, the company announced a pay increase of 30% for its workers in China. The action brought base pay at Hon Hai's Shenzhen operations to 1,200 yuan a month from about 900 yuan. Foxconn **International Holdings,** Hon Hai's handset subsidiary, explained that the increase was part of an annual pay review. Then less a week later, Hon Hai said it would raise monthly wages of its production line workers and supervisors in Shenzhen to 2,000 yuan as early as Oct.1. But this was no ordinary pay increase when you consider its magnitude, 67%, and the circumstances surrounding it.

As the EMS world is now well aware, Hon Hai has been reeling from a series of suicide attempts, most of which, unfortunately, resulted in death. So far this year, ten of its Shenzhen employees have ended their lives, reportedly by jumping off buildings, while another three have survived suicide attempts. For the mighty Hon Hai, which has enjoyed arguably unparalleled success in the EMS industry, the

rash of suicides has led to one of the company's darkest hours.

The secretive company, which has a history of taking offense at negative publicity, has been subject to a blizzard of media coverage, some of it unfavorable. But Hon Hai's PR problems are not just its own. They also reflect on customers such as Apple, which, according to its website, "is committed to ensuring the highest standards of social responsibility wherever our products are made." As Apple and other customers launched their own inquiries into the suicides, Hon Hai took steps in damage control. In an effort to show off its modern facilities and worker amenities. Hon Hai led a media tour inside its Shenzhen production base. The Shenzhen operations had previously been off-limits to the press. During this event, Hon Hai chairman Terry Gou apologized for the deaths and said the company was

taking actions to prevent more suicides. Measures include installing nets on buildings and adding counselors. Also, it has been reported that Hon Hai will no longer offer condolence payments to families of those who commit suicide.

The suicide cluster at Hon Hai in Shenzhen has yet to be explained, although it can be pointed out that the ten suicides this year among Hon Hai's work force of some 400,000 to 430,000 in Shenzhen fall below the national suicide rate for China. Labor rights groups and others have taken this opportunity to criticize Hon Hai for its management practices, but Hon Hai insists that it has done nothing illegal. The company said the suicides likely resulted from personal troubles with condolence payments to victims' families providing an incentive, according to a *Bloomberg* report. Chinese government authorities are

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investigating the deaths and will make their report public, news services reported. A vice minister of Human Resources and Social Security said the suicides had "multiple causes," reported *Reuters*, citing a Beijing newspaper.

One criticism that is leveled at Hon Hai and other manufacturers in China is the amount of time that employees spending working. Many, if not most, production-line workers feel the need to work overtime in order to make ends meet. But routinely working 60 hours a week, which is permitted by Apple's Supplier Code of Conduct, significantly reduces the hours available for life outside of work. Hon Hai's wage increase to 2,000 yuan in Shenzhen seems to be a response to this criticism. "While overtime work was always voluntary, this wage increase will reduce overtime work as a personal necessity for some employees and make it a personal choice for many workers," Hon Hai said in a statement posted on the Taiwan Stock Exchange.

The wage increase, which for now applies to all line workers and their line leaders and supervisors, will not go into effect until Oct. 1 at the earliest. Workers must pass a performance evaluation lasting three months. Also, new employees must undergo a probationary period of three months during which they will receive a monthly salary of 1,200 yuan. Hon Hai will announce further salary raises for line leaders and supervisors before Aug. 1. Wage increases for manufacturing plants in other areas of China will be calculated based on local consumer price indices and social security requirements, Hon Hai stated, and will be announced starting on July 1.

MMI's take

Wages and other costs have been going up steadily in China in recent years, with the possible exception of 2009 when wage freezes were in ef-

fect. After wages are raised, EMS providers typically absorb the increased costs until contracts can be renegotiated and pricing adjusted to reflect the higher labor costs. According to *Reuters*, Foxconn International Holdings will try to get its customers to agree to price increases. But with the prospect of base wages more than doubling for Shenzhen workers, it's not clear how much of this increase OEMs will be willing to swallow.

Despite the magnitude of the increase, it could be argued that the increase will not upset the outsourcing apple cart in southern China because direct labor is typically well under 10% of the cost of goods in the EMS model and is often 5% or less. Say direct labor is 5% of COGs; then doubling direct labor wages would result in a 5% increase in COGS, not necessarily a deal-breaking result from an outsourcing perspective. But what is perhaps more troubling to EMS providers and their customers is the effect that such a large wage increase might have on their supply base in China and other costs of doing business there. If materials suppliers, their suppliers and supply-chain support activities such as logistics companies and utilities are forced to rapidly increase their employees' wages in order to keep up with Hon Hai, then any cost advantage of outsourcing to southern China will erode further. On top of that, China just decided to again allow its currency to float against the dollar. It is likely that this move will also add to the cost of outsourced manufacturing in China.

With Hon Hai's wage increase, the EMS industry can no longer assume that wage and other cost increases in China will be gradual. EMS providers and their customers will be looking closely at how much their costs of manufacturing in coastal China go up this year. As a corollary, OEMs will place more emphasis on wage stability when looking at manufacturing in various parts of the world. Take **Dell**. The

company will look at moving production from its facilities in Xiamen, China, to central and western regions of the country if wage increases persist along the coast, reported the Communist Party's *People's Daily Online*, which attributed the information to a Dell executive.

Hon Hai's wage hike in Shenzhen plays into a geographic diversification strategy for China that the provider has been pursuing in recent years. The company's latest move is into southwestern China, where costs are lower than in coastal cities and labor is more plentiful (April, p. 1). According to published reports, Hon Hai said it is committed to China for the long term. *AFP* quoted a Hon Hai statement, which read: "We will be expanding extensively in China, both in existing and new locations, in line with the specific requirements of our customers."

When direct and indirect effects are considered, Hon Hai's wage increase could add significantly to the cost of manufacturing in southern China. With that possibility in mind, providers and their customers will increasingly explore options for inland manufacturing as well as other locations in Asia.

Market Data

High Q1 Growth for Top 20 CMs

The 20 largest contract manufactures worldwide combined for Q1 sales growth of 38.7% year over year. This result, at least for the short term, contradicts the view that contract manufacturing is becoming a single-digit growth business.

Consisting of ten EMS providers and ten ODMs, the top 20 CMs together generated Q1 sales of \$62.4 billion, up from \$45.0 billion in the year-earlier period. Recovering economies and PC demand helped fuel this increase. However, Q1 was still subject to seasonal effects as aggregate

sales for the top 20 were down 10% sequentially (table).

While the top 20 produced high growth year over year in Q1, the ten ODMs in the group overall did even better, in fact much better. Combined Q1 sales of the ODM subset increased at a scintillating rate of 50.1% (in U.S. dollars). By comparison, revenue on the EMS side grew by 29.3% year over year (chart). That's a difference of 20.8 percentage points by which composite growth of the EMS providers lagged the increase of their ODM counterparts.

Compared with Q1 2009, four ODMs posted growth rates above 60% (in U.S. dollars), a feat unmatched by any EMS provider in the group.

With currency conversion, both Compal Electronics and Ability Enterprise more than doubled their Q1 sales from a year earlier. Of the top 20, 14 CMs achieved double-digit increases in sales year over year.

Q1 sales for the EMS providers came to \$31.8 billion, slightly larger than the ODM total of \$30.5 billion. On a sequential basis, EMS providers' Q1 sales did not decline as much as ODMs' sales did. On the EMS side, sales decreased by 8.1% from the previous quarter, compared with a 12% drop for the ODMs.

Net profit for the top 20 CMs amounted to \$1.52 billion, down from \$1.93 billion in the prior quarter but up from a loss of \$406 million a year

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1		sults for the	20 Lar	gest Co	ntract M	_	cturers	•		•	
Company (in order of Q1 sales)	Primary busi- ness	Head- quarters	Reports in US\$	Q1 '10 sales	Q4 '09 sales	Qtr qtr. chg.	Q1 '09 sales	Yryr. chg.	Q1 '10 net profit	Q4 '09 net profit	Q1 '09 net profit
Hon Hai (Foxconn)	EMS	Taiwan	No	17,055	18,856	-9.6	11,137	53.1	564	898	393
Quanta Computer	ODM	Taiwan	No	7,914	8,699	-9.0	4,889	61.9	167	214	129
Compal Electronics	ODM	Taiwan	No	7,173	7,282	-1.5	3,533	103.0	267	249	82
Flextronics	EMS	Singapore	Yes	5,940	6,556	-9.4	5,583	6.4	60	93	(240)
Wistron	ODM	Taiwan	No	4,491	4,970	-9.6	3,312	35.6	85	97	42
Pegatron	ODM	Taiwan	No	3,452	4,585	-24.7	2,444	41.2	56	69	15
Jabil Circuit	EMS	Florida	Yes	3,005	3,088	-2.7	2,887	4.1	30	28	(866)
Inventec	ODM	Taiwan	No	2,808	3,552	-20.9	2,912	-3.6	36	37	42
TPV Technology	ODM	Taiwan	Yes	2,385	2,673	-10.8	1,380	72.9	40	47	15
Sanmina-SCI	EMS	California	Yes	1,528	1,478	3.3	1,195	27.8	10	59	(38)
Celestica	EMS	Canada	Yes	1,518	1,664	-8.8	1,469	3.3	26	31	19
Qisda	ODM	Taiwan	No	1,174	1,216	-3.5	980	19.7	54	(2)	(63)
Cal-Comp Electronics	EMS	Thailand	No	831	849	-2.2	687	21.0	12	9	3
Benchmark Electronics	EMS	Texas	Yes	572	600	-4.7	497	15.1	18	17	9
Plexus	EMS	Wisconsin	Yes	491	430	14.1	389	26.3	21	18	5
Venture	EMS	Singapore	No	456	655	-30.4	480	-4.9	28	12	18
Universal Scien- tific Industrial	EMS	Taiwan	No	454	464	-2.0	314	44.5	17	16	8
AmTRAN Technology	ODM	Taiwan	No	439	633	-30.7	495	-11.3	12	17	12
Ability Enterprise	ODM	Taiwan	No	352	394	-10.8	154	128.5	19	19	8
Inventec Appliances	ODM	Taiwan	No	331	682	-51.4	236	40.7	1	6	0.7
Total/avg.				62,369	69,328	-10.0	44,974	38.7	1,521	1,933	(406)

Results in non-U.S. currencies were converted to U.S. dollars by applying a three-month average rate for the corresponding period. Average exchange rates were based on monthly 2009 and 2010 data from the U.S. Federal Reserve.

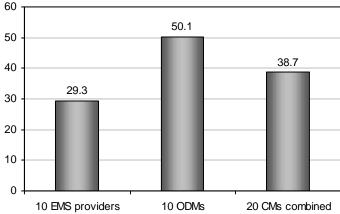
earlier. On a sequential basis, aggregate net profit fell by 21.3%, more than twice the comparable decline in Q1 sales. Q1 net margin was 2.44%,

down 35 basis points from the prior quarter. The CM with the highest net profit margin was **Venture** at 6.2%, followed by Ability Enterprise at 5.4%.

ODM business is usually thought 10 of as commanding higher mar- 0 gins than those

found in EMS work. But aggregate Q1 results don't support this popular wisdom. Together, the ten EMS providers achieved a net profit margin of 2.46%,





compared with 2.41% for the ten ODMs. It must be said, however, that Hon Hai's net profit accounted for 72% of the EMS total, with the company contributing a net margin of 3.3%.

When the 20 CMs are ranked by their Q1 sales, ODM gains have resulted in a new order among the largest CMs to start 2010. With **Hon Hai**

Precision Industry (Foxconn) ensconced in first place, ODMs Quanta Computer and Compal Electronics secured second and third place respectively in the Q1 order, causing Flextronics to drop to fourth (table, p. 3). Flextronics was in third position in the 2009 standings (May, p. 2). Compal has a \$1.2-billion lead over Flextron-

ics going into the second quarter.

Editor's note: This analysis presents a rough approximation of EMS versus ODM sales since a number of the contract manufacturers listed here do both EMS and ODM work. Companies were classified as EMS or ODM based on which model represents their primary business.

North America-Based Group Increases Q1 Sales Both Ways

On both a sequential and year-overyear basis, combined Q1 sales increased for a group of eight mid-tier and smaller EMS providers based in North America. In the aggregate, their Q1 sales showed no signs of seasonal effects that can cause sequential declines in Q1 revenue elsewhere in the EMS industry. But this lack of seasonality stands to reason: these North America-based providers are not the sort of companies that chase high-volume consumer business, which softens after holiday buying in Q4.

The group's Q1 sales rose by 7% from the prior quarter and by 10.5% from the year-earlier period. Q1 reve-

nue for the eight providers totaled \$519.5 million. Three providers – **IEC Electronics**, **Kimball Electronics Group** and **SMTC** – reported year-on-year growth above 30% for the quarter, led by IEC with a 54.5% surge in sales (table).

Of the eight providers, six are stand-alone EMS companies, all publicly traded, and two are business units within larger publicly held corporations. All six stand-alone providers achieved Q1 GAAP gross margins above 10%, with a high of 20.6% posted by **LaBarge**. Together, the six providers achieved a Q1 gross margin of 14.3%, down 70 basis points from the previous quarter's result but up 250 basis points from the same period a year ago (table). The six providers' gross margin for Q1 was more than twice the 6.6% combined margin of

the six largest U.S.-traded providers (see May, p. 5).

As for GAAP operating margin, the six smaller stand-alone providers again trounced their large counterparts. The six smaller companies combined for a Q1 operating margin of 5.3%, compared with 2.3% for the six large providers. For the six smaller providers, composite operating margin in O1 increased by 60 basis points sequentially and 290 basis points year over year. When Q1 operating income for the two EMS business units was added in, the entire group's O1 operating margin came to 4.2%, still well above what the large providers collectively produced.

Aggregate net income for the six stand-alone providers in the group totaled \$12.4 million, up 15.6% sequentially and 230.8% year over year.

Q1 2010 GAAP	Results	for Eig	ht Mic	l-tier an	d Sma	aller EN	IS Prov	iders B	ased i	n North	n Americ	ca (M\$	or %)	
	Q1 '10	04 '09	Qtr	01 '00	Vr _\/r	Q1 '10	Q4 '09	Q1 '09	Q1 '10	Q4 '09	Q1 '09	Q1 '10	Q4 '09	Q1 '09
Organization	sales		qtr.		1 '09 Yryr. sales chg.	gross	gross	gross	oper.	oper.	oper.	net	net	net
	34103	34103	chg.	30103		marg.	marg.	marg.	marg.	marg.	marg.	profit	profit	profit
				Stand	d-Alone	e EMS I	Provide	'S						
LaBarge	74.7	69.0	8.3	72.2	3.5	20.6	19.9	20.3	9.4	7.0	9.5	4.1	2.8	3.8
SMTC	61.4	51.2	19.7	44.9	36.5	10.4	11.5	8.8	4.3	4.9	-0.9	2.1	2.41	$(0.9)^{1}$
Key Tronic	51.7	44.8	15.5	44.2	16.9	10.1	10.5	7.5	4.3	3.9	1.0	4.4	1.7	0.3
Sparton	38.6	47.2	-18.2	54.6	-29.2	14.3	17.2	8.6	0.8	2.8	0.1	0.7	3.2	(8.0)
IEC Electronics	25.2	18.1	39.7	16.3	54.5	15.9	15.6	16.0	7.9	7.3	7.0	1.0	0.8	2.6
Nortech Systems	21.7	19.8	0.9	21.6	0.9	12.1	11.3	3.9	1.5	0.0	-9.9	0.1	(0.1)	(1.3)
Subtotal/avg.	273.4	250.1	9.3	253.9	7.7	14.3	15.0	11.8	5.3	4.7	2.4	12.4	10.7	3.8
	EMS Units of Larger Public Companies													
Kimball Electronics	190.1	167.0	13.9	140.6	35.2				5.3	not	-11.5	10.8	2.7	(9.6)
Group										avail.				
CTS Electronics	56.0	68.4	-18.1	75.8	-26.1				-4.8	1.0	4.4^{2}			
Manufacturing Solutions														
Total/avg.	519.5	485.5	7.0	470.3	10.5				4.2					
¹ From continuing op	² Segment operating income excluded charges of \$35.4 million not allocated to business segments.													

Who Will Tap the Growth of Solar Panel Contract Manufacturing?

Contract manufacturing of solar panels is expected to grow rapidly over the next four years. Who will benefit from this growth? Two of the largest EMS providers have staked highly visible claims in this emerging market, but so far no one else in the EMS business has said anything about building panels. Despite this forecasted growth, contract manufacturing of panels is not without issues.

According to market research firm **iSuppli**, contract manufacturers this year will produce 1.1 gigawatts of solar panels, up 200% from 369 megawatts in 2009. The firm predicts that over the next four years contract manufacturing of solar panels will nearly quadruple to 4.1 gigawatts. From 2009 to 2014, contract manufacturing of panels, as measured in gigawatts of production, is projected to grow at a compound annual rate of 62%, based on iSuppli's forecast.

Both Flextronics and Jabil Circuit have positioned themselves to take advantage of this growth. Each company has invested in solar panel production, and each has won solar business requiring panel production. Flextronics' most recently announced program in solar power generation comes from Petra Solar, for whom Flextronics will build smart energy modules that go into a pole-mounted, distributed solar generation system that is gridtied. In another solar project, disclosed last month, Flextronics has partnered with Pythagoras Solar for production of the company's photovoltaic glass unit products that combine energy efficiency, solar power generation and transparency in a green building material. In addition, Flextronics has landed solar panel manufacturing contracts from Q-Cells and SunPower (April, p. 6-7).

One of Jabil's solar customers is **BP Solar**, which has contracted Jabil to assemble solar modules in Mexico

and Poland (Feb., p. 7). **SunPower** and **Day4Energy** have also engaged Jabil to build solar panels (June 2009, p. 4-5).

Note that the above contracts represent the only solar panel business that has been made public in the EMS industry, according to *MMI's* records. Are other EMS providers involved in solar panel production? *MMI* contacted two other large providers to see where they stand.

Celestica told MMI that it was unable to discuss details of its solar strategy and programs. The company's overall growth strategy is to expand in new markets such as the green technology areas of power generation and power conservation. As a company based in Ontario, Canada, Celestica sees opportunities there through the Ontario Green Energy Act, which provides for feed-in tariffs to subsidize green energy projects if local content criteria are met. In April, Celestica's president and CEO Craig Muhlhauser told Reuters that Celestica views Ontario as mainly a solar opportunity. Celestica presents an interesting case because in 2008 the company was ramping solar panel business in Spain. The company never revealed what resulted from that effort.

Sanmina-SCI said it is currently serving customers in almost every segment of the solar value chain. The provider continues to evaluate opportunities to manufacture solar modules.

There are factors that might dissuade some providers from taking the plunge into panel production. One is cost. Compared with investing in SMT, "you can go off and get some [panel processing] equipment prices easily and find that you're working much larger numbers," said E.C. Sykes, president of Flextronics Industrial, in an interview with *MMI*. Risk is another factor. SMT equipment can be kept busy building a variety of prod-

ucts, while a solar panel line is dedicated to one type of product. When a solar line is not being used, that situation introduces other risk that must be considered in a provider's model, Sykes pointed out.

In addition, the amount of solar capacity coming on line in China creates uncertainty for a contract manufacturer. Could Chinese manufacturers cause overcapacity? According to Sykes, it's a matter of supply and demand, part of which is cost driven. "It depends on what they come on line at and what the price is," he added.

As Flextronics and Jabil have accepted the risk and uncertainty of panel contract manufacturing, so too have other players outside the EMS world. Sykes believes that some other people will enter the business as well. But he warned that, unlike SMT, this form of contract manufacturing will become so competitive so fast that it will be very hard to survive, "except for those people who are really, really good at it."

News

California Deal

Fremont, CA-based **Alta Manufacturing**, described as a tier-3 EMS provider specializing in NPI to pilot production of complex PCBs, has acquired **NRC Manufacturing**, another EMS company with a facility in Fremont.

The acquisition will increase Alta's manufacturing capacity and is a key step in the company's five-year plan to grow into a significant tier-2 presence in the EMS industry. The purchase price was not disclosed.

According to Alta, the deal also adds a proven manufacturing team led by Ratha Chea, president and founder of NRC. Before starting NRC in 2008, Chea co-founded **Orion Manufacturing**, which grew to a \$40-million com-

pany by the time it was sold to **CTS** also in 2008. At Orion, he oversaw all manufacturing operations.

NRC operates out of a 32,000-ft² facility in Fremont.

Alta offers services from two locations: a Fremont plant that focuses on NPI, pilot and domestic production and a sister company in Suzhou, China, that handles both pilot runs and production. Alta bills itself as a company that can provide the offerings of a tier-1 contract manufacturer but with the flexibility and responsiveness of a smaller company.

The company began operations in 1998 with a team that came from **Altatron**, which was acquired by **Flextronics** that year. Alta's founder, Mr. Lee, died in 2008, and in 2009 Craig Arcuri joined Alta as CEO. Arcuri is the founder and former president and CEO of EMS provider **NBS**.

New business... According to reports by Taiwan's Digitimes, Hon Hai Precision Industry (Tucheng City, Taiwan) has landed 2011 notebook orders from HP and Dell, with the latter's orders consisting of laptops for business. Unnamed sources in the notebook industry believe that Hon Hai's notebook volumes will hit 15 million to 20 million next year, up from 8 million to 10 million in 2010, Digitimes reported. The Taiwan-based source also wrote that Hon Hai, along with ODM AmTRAN, will supply LCD TVs under the label of a Japanese OEM to Suning Appliance, an electronics retailer in China....Flextronics (Singapore) will expand its relationship with Citrix Systems to include the joint design for Citrix's next-generation hardware for WAN optimization and secure access appliances. Also, Flextronics is serving as **Intel's** manufacturing provider in the development of energy management products, reported EE Times. Intel's platform for personal energy management is the basis for this effort, which

also involves OEMs....Flextronics and Hon Hai have been identified as manufacturers of the Kinect accessory for Microsoft's Xbox 360 game console, according to a report by Digitimes. Kinect enables a person to interact with the console without using a controller....ANDA Networks has selected Elcoteq (Luxembourg) to produce Carrier Ethernet switches and broadband access equipment for ANDA's EtherTone product line. Production will take place at Elcoteq's factory in Dongguan, China. Elcoteq will also provide prototyping. In addition, Elcoteq has identified the Japanese handset manufacturer that, as previously reported, awarded Elcoteq a contract estimated to generate over 150 million euros in revenue this year (April, p. 7). The handset OEM is Sharp, and Elcoteq will provide Life Cycle Services for Sharp's latest smartphone line, dubbed KIN. Initially, all manufacturing will occur at Elcoteq's facility in Beijing, China. Furthermore, Sarantel Group, a manufacturer of miniature antennas for mobile and wireless devices, has signed a letter of intent with Elcoteq to outsource Sarantel's assembly, test and supply chain processes. The initiative is expected to generate annual production savings of about £0.5 million, and the transfer of these processes and associated equipment should be completed by the end of 2010....Under an exclusive arrangement, Kimball Electronics Group (Jasper, IN), the EMS subsidiary of Kimball International, will manufacture the Avantis Third Eye Retroscope for Avantis Medical Systems (Sunnyvale, CA). The Avantis product is a new catheter-based camera device that works in conjunction with a standard colonoscope and provides a backward view of the colon to supplement the colonoscope's forward view. In clinical studies, the Third Eye has demonstrated an additional pre-cancerous adenoma detection rate of up to 25% compared with

standard colonoscopy. Initial production has begun at the Kimball Electronics-Fremont (CA) facility, with future higher volume production planned for Kimball's operation in Thailand....Two subsidiaries of **Kitron ASA** (Billingstad, Norway), namely Kitron AB of Sweden and Kitron UAB of Lithuania, have recently won four new customers with a revenue value of NOK 180 million (\$27.2 million) over three years. The new programs are within the industrial and energy segments. Another Kitron subsidiary, Kitron Microelectronics AB in Jönköping, Sweden, has landed a contract from Atlas Copco Tools AB. The contract will be worth about NOK 45 million (\$6.8 million) a year in the long run and includes electronics manufacturing and industrial tools assembly....Kontron Canada, a designer and manufacturer of high-end embedded computer technology, has engaged SMTC (Markham, Ontario, Canada) to provide PCB and module-level assembly in its Chihuahua, Mexico, and Dongguan, China, facilities. SMTC's Toronto location will support Kontron's design teams with early manufacturing activities prior to transitioning product to SMTC's low-cost production facilities....ESCATEC (Penang, Malaysia) recently started high-volume cleanroom production for an FDA-approved medical device in Penang. The customer is a major U.S. pharmaceutical company. To serve medical device customers, ESCATEC established Penang-based ESCATEC Medical Sdn Bhd in January. The medical unit is certified to ISO-13485....The Electronic Systems Division of **Parker Aerospace** (Irvine, CA) has selected **LaBarge** (St Louis, MO) as a provider of printed circuit card assemblies for a variety of military and commercial aircraft programs. The company estimates the value of this award at about \$5 million a year. Production is taking place at La-Barge's Tulsa, OK, facility. Also, LaBarge has received a \$1.5-million contract from Northrop Grumman to continue to produce electronic assemblies for the fire control radar system of the F-16 fighter aircraft....Micro Identification Technologies (San Clemente, CA) has contracted OSI Optoelectronics to produce MIT's microbial identification system, which is a certified test method for food safety. OSI Optoelectronics, an OSI Systems (Hawthorne, CA) company, designs, makes and sells optoelectronics products and provides EMS.

Alliance... Cinterion Wireless
Modules (Munich, Germany), a supplier of cellular machine-to-machine (M2M) communication modules, and Assembly Contracts Limited (Manchester, UK), an EMS provider, have teamed up to jointly design and integrate wireless components based on Cinterion's modules.

Kitron Entering North American Market

Seeking a presence in North America, Norway-based Kitron, an *MMI* Top 50 EMS provider, has decided to set up a wholly owned subsidiary in Johnstown, PA. The operation is scheduled to be up and running as of Jan. 1, 2011 and will focus predominantly on the defense industry.

"In the longer term, we will approach customers from other market segments as well," stated Roger Hovland, Kitron's sales and marketing director.

A location with 20,000 ft² of space will be available to Kitron starting Oct. 1, and the company is already recruiting staff.

"This is another example of Kitron following their customers internationally," said CEO Jorgen Bredsen.

Facility projects... Hon Hai plans to increase its investment in Wuhan, the capital of Hubei province in central

China, according to a report out of China. Wuhan is known as the Optics Valley of China....Flextronics plans to develop a manufacturing and aftermarket service facility for its power business in Ganzhou within China's Jiangxi province. The vertically integrated Power campus is expected to be completed by April 2011 in a twophase build-out. Flextronics selected Jiangxi province to expand its Power operations based on support from the local government, availability of educated and talented personnel, and the area's multiple export processing zones and excellent logistics infrastructure....Suntron (Phoenix, AZ) is combining its Northeast (U.S.) operations at Manchester, NH, and Lawrence, MA, into a new larger facility in Methuen, MA. The larger facility will allow for more production capacity and the addition of RoHS-compliant services. The company is moving the current service offerings of COTS (commercial off the shelf) Solutions, Complex System Integration and Express Prototyping to the new location. ... Macrotron Systems, an EMS provider in Fremont, CA, has moved across town to a former Intel building with 75,000 ft², of which 40,000 ft² is occupied by Macrotron. The new facility gives Macrotron a greater ability to expand its existing business and delve into new business areas like the eBook reader from Ditto Book, a subsidiary of Macrotron....Trilogy Circuits, an EMS company based in Richardson, TX, has expanded its headquarters and production facility from 10,000 to 20,000 ft².

Divestitures...Last month, Elcoteq sold its subsidiary in St. Petersburg, Russia, to **Optogan**, a European supplier of LEDs for the solid state lighting market. The transaction included the factory premises of the subsidiary and about 40 employees but excluded any customer agreements. As a result, Elcoteq will save about 2 million euros

a year. Last year, the company announced that it would close the St. Petersburg plant as part of a restructuring plan (Jan. 2009, p. 7)....Kitron has reached an agreement to sell its Development Department in Oslo, Norway, to some local employees and Simpro (Løkken Verk, Norway), an EMS provider. With about 25 employees, the Kitron unit had annual sales of NOK 22 million (\$3.4 million) and an operating loss of NOK 11 million (\$1.7 million) in 2009. Simpro is taking a 33% stake in the unit, renamed Creo **Development**, and this ownership will allow Simpro to offer development services in electronics, mechanics and software in addition to production services and industrialization. Kitron is entering into a cooperation agreement with the new company for the provision of development services in line with Kitron's current strategy....Stadium Group (Hartlepool, UK) has sold its branded plastics business for net cash of about £2.5 million and is now focused solely on its EMS and power supply businesses. The plastics business contributed sales of £11.3 million in 2009 out of the group's total turnover of £46.6 million.

Some financial news... Hon Hai's shareholders have empowered the company to issue 880 million new shares to be offered as global depositary receipts, according to several published reports....Flextronics' board has authorized the repurchase of up to \$200 million of the company's outstanding ordinary shares. This authorization is in support of the current shareholder authorization for the repurchase of up to 10% of outstanding ordinary shares....SMTC has signed amended loan agreements to refinance the company's short- and long-term debt. Accordingly, the term and principal repayment schedule have been extended to 2013, and virtually all principal payments eliminated in 2010. With the performance and prospects

for SMTC continuing to improve, interest rates have been reduced, and covenants either eliminated or modified. This refinancing will provide greater financial flexibility and lower annual interest expense by \$350,000 at current debt levels. In addition, SMTC has adopted a plan designed to protect the company's U.S. net operating loss carry-forwards (NOLs) amounting to about \$100 million. These NOLs are worth up to about \$30 million, or about \$2.00 per share, in potential tax savings....Integrated Micro-Electronics Inc. (Laguna, Philippines), a member of the Ayala group, recorded Q1 revenue of \$90.5 million, up 11% year over year. Higher sales coupled with operational streamlining and cost management resulted in net income (after tax) of \$3.2 million, a reversal of the net loss incurred in the same period last year. The revenue growth stemmed from a rebound in the telecom infrastructure and consumer electronics markets, increased demand for Blu-ray disc drives, and an upturn in the automobile industry....Nortech Systems (Wayzata, MN) has entered into a new financing agreement, which provides a \$12-million line of credit through May 31, 2013 and real estate term notes maturing on May 31, 2012....NOTE (Danderyd, Sweden) has completed a rights issue that added 19,248,400 new shares. The provider

expected that the new share issue would raise some SEK 86.6 million (\$10.8 million) before deducting issue costs.

People on the move... In April, Pauli Aalto-Setälä, managing director of Aller Media, and Dr. Sándor Csányi, chairman and CEO of Hungary's OTP Bank, were elected to Elcoteq's board. Two months later, however, Dr. Csányi resigned from the board at his own request and for person reasons, according to a statement from Elcoteq. Seats on the board opened up when three former directors, including two founder-shareholders, announced that they would not stand for reelection (April, p. 8). Last month, the board selected Jorma Vanhanen, a foundershareholder who remained on the board, as its chairman....Creation Technologies (Burnaby, BC, Canada), an MMI Top 50 EMS provider, has hired Andy Hyatt as executive VP, business development. With 20 years of EMS experience, Hyatt has held leadership positions in operations, program management and business development at tier-1, -2 and -3 providers. ...Victron (Fremont, CA) has appointed Jim Williams VP of North America sales and David Yu VP of supply chain management. Williams brings more than 15 years of executive experience in the EMS industry including

responsibility for two market sectors at **Celestica**. Yu has over 15 years of experience with OEM and EMS companies....**IEC Electronics** (Newark, NY) has named Susan Topel-Samek VP and CFO. A former executive at **Bausch & Lomb**, she most recently served as VP and treasurer there, before leaving in June 2009 to spend time with her family. Topel-Samek replaces Mike Schlehr, who has resigned to pursue other endeavors. ...**Libra Industries** (Mentor, OH) has promoted James Sabo to COO.

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