Manufacturing Market™ INSIDER

inside the contract manufacturing industry

Vol. 19, No. 8 August 2009

LCD-TV Space Starting to Heat Up

Despite the global slowdown, or perhaps because of it, there are signs that the LCD-TV market is warming up as a source of new outsourcing. The signs come from two large OEMs in the space – **Sony** and **LG Electronics**. Though Sony has yet to disclose any new outsourcing of its LCD-TV production, the company told *MMI* that it continues to assess its TV operations following an unconfirmed report that it is selling its TV plant in Tijuana, Mexico. LG, on the other hand, has made an outsourcing move with the announcement that **Flextronics** will manufacture a portion of LG's LCD TVs for the North and South American markets.

Sony Evaluating TV Operations

Won't say whether it plans to sell TV plant in Tijuana, Mexico

"Sony has carried out several measures and continues to investigate reforming its TV business operations. Operations in Tijuana, Mexico, continue to be evaluated along with other operations," John Dolak, a company spokesperson, told *MMI*. Dolak gave this response when asked if Sony planned to sell its LCD-TV factory in Mexico to **Hon Hai Precision Industry**, as was reported by *Digitimes*, a Taiwan-based website. He declined to comment any further.

Under restructuring initiatives, Sony closed an LCD-TV plant in Pennsylvania in February and intended to pull the plug on an LCD-TV operation in Japan in June. The company also plans to shutter its LCD-TV factory in Mexicali, Mexico, in September. In January, Sony said it would pursue an "asset-light" strategy for its LCD-TV business and increase its use of contract manufacturers (July, p. 3-4). Sony has yet to make any announcements this year regarding the outsourcing of LCD-TV production.

Operations in Mexicali are being consolidated in Juarez, where the Sony work force is increasing from 3,500 to 5,000 people, according to a June article that was posted on *The San Diego Union-Tribune* website. TV operations were reportedly moved from Pennsylvania to Juarez as well.

Flextronics Makes LCD-TV Splash

LG Electronics has chosen Flextronics to manufacture 19-, 22-, 26-, 32- and 37-inch LCD TVs at its Juarez, Mexico, facility for distribution to the North and South American markets. This appears to be a significant win for Flextronics in the LCD-TV space, where the company has committed to building a business.

Described by *Bloomberg* as the third largest producer of LCD TVs worldwide, LG Electronics is known for its reliance on internal manufacturing for its LCD TVs. LG outsourced well below 10% of the LCD TVs it shipped in the first quarter, according to data from **DisplaySearch**. This outsourcing agreement offers vindication for those who have predicted that economic pressures will result in an increase of contract manufacturing in the LCD-TV space, where only two brands are heavily outsourced (July, p. 3-4).

"By collaborating with Flextronics, LG will be able to expand its product portfolio and cost effective access to these key markets," stated Didier Chenneveau, chief supply chain officer

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at LG Electronics.

LG ranked fifth in terms of its share of LCD-TV shipments for the U.S. market in the second quarter, based on data from **iSuppli**. The market research firm put LG's Q2 share at 7.9% of the 6.86 million units shipped. Do the math, and LG's shipments for the U.S. market in Q2 work out to be about 542,000 LCD TVs. Annualizing this figure yields a rough projection of over 2 million units to be produced this year for the U.S. market.

It is unknown how much of LG's LCD-TV production for North and South America will go to Flextronics, which will be assembling models that do not command the prices of the large sizes. There is no information on what portion of LG's shipments for the two markets these models represent. Furthermore, Flextronics' press release did not specify whether Flextronics will manufacture *all* of LG's LCD-TVs in the five model sizes for North and South America.

To support this LG business, Flextronics will also utilize services from its Doumen (China) and Brazil facilities.

Environment

A Challenging Regulation

The EMS industry has had plenty of time to prepare for REACH, the EU regulation for chemicals. It went into effect in 2007, but didn't require action from EMS companies until October 2008 when a candidate list of substances of very high concern (SVHCs) was published. Article 33 of the regulation mandated that any supplier importing or manufacturing articles in the EU automatically notify business customers if the articles being received contain an SVHC in a concentration above 0.1% (w/w). The supplier must furnish available safety information about the substance, but its name will suffice where safety information is irrelevant. The requirement sounds straightforward, but satisfying it is anything but.

Some EMS providers are unwilling to talk about REACH. Of the seven providers contacted by phone or email for this article, only one responded to questions about complying with REACH. This is unusual in the annals of *MMI*, and the newsletter believes that REACH has created problems for at least some companies in the EMS industry, despite the preparation time that was available for REACH.

For one thing, REACH is one of the most complex pieces of legislation ever to involve electronics industry suppliers, namely component suppliers, distributors and contract manufacturers. "The REACH regulation is a complicated regulation," said Dr. Aidan Turnbull, head of WEEE, RoHS and EcoDesign at consulting firm **ENVIRON UK Ltd**. You have to read the guidance documents "carefully to understand how the regulation applies to suppliers. I believe that many suppliers have simply not understood how the REACH regulation applies to them," he said during a late June interview.

What's more, REACH has generated different interpretations of what it requires. Take the declaration requirement under article 33. Some contract manufactures and distributors have informed ENVIRON in writing that they see no need to ask their suppliers for article 33 declaration data. A justification of this passive approach is that according to the wording of article 33 these CMs and distributors are only responsible for SVHC information that is available to them.

ENVIRON begs to differ, citing a new REACH guide titled *Requirements for Substances in Articles*. In section 5.3, the guide states, "Importers of substances, mixtures and articles will not necessarily receive comparable standard information from their non-EEA suppliers. In this case and whenever standard information received from suppliers in EEA is not sufficient to check compliance with REACH, companies have to obtain the necessary information by **proactive requests** in the supply chain [boldface emphasis as originally printed]."

Differences in interpretation even extend to member states of the EU. As written, the declaration requirement for REACH applies to articles produced or imported in the EU. For imported goods, there is an advantage here because the 0.1% (w/w) threshold for declaration is based on the weight of the entire article. In contrast, when products are manufactured in the EU, the disclosure threshold applies at every step in the supply chain. But six dissenting countries – Austria, Belgium, Denmark, France, Germany and Sweden – do not agree with this favorable treatment of imported products. They argue that the 0.1% threshold (which applies to other REACH requirements as well) should pertain to homogeneous materials or parts of an article. Note that RoHS applies in this manner. Reportedly, this argument over words will have real-life repercussions. Belgium has said it will take away the advantage for offshore producers by checking products for REACH compliance at the component level, according to ENVIRON.

REACH's candidate list of SVHCs contains 15 substances. The number of them applicable to electronic equipment ranges from six to nine, depending on the source, noted Graeme Elder, **Jabil's** regional environmental manager for Europe. Six of these were singled out by Dr. Turnbull when he spoke to *MMI*. They are three phthalate plasticizers, DEHP, DBP and BBP, which are used in PVC and other applications; HBCDD, commonly found in high-impact polystyrene; SCCP, an ingredient in certain grades of rubber; and cobal dichloride, used in packaging gels that indicate the presence of moisture. Many suppliers have focused on flexible PVC as a source of DEHP and DBP, but these substances also show up in NBR rubber, used in a wide range of engineering applications, ENVIRON reported.

Another challenge for the EMS industry stems from the expectation that the candidate list will expand over time. The European Chemicals Agency anticipates that about 25 substances will be added to the list each year, according to Dr. Turnbull. So EMS providers will have to keep track of more and more substances. It is said that the list will be updated twice a year, leaving providers who rely on a supply base survey for compliance with the burden of conducting surveys semiannually.

But surveys aren't the industry's only option. Jabil avoids this burden by obtaining full material disclosures from its supply base. With Jabil's approach, declaration data only need be collected once. "Suppliers giving full material declarations are the ultimate solution because it doesn't matter which banned substance or which new piece of legislation or whatever the requirement may be. You're merely running it against a fairly comprehensive and detailed database," said Jabil's Elder. In essence, it's a process of running a filter against the database to extract the disclosure data for whatever substances must be reported. "Now if they increase the SVHC list from 15 to 30 to 50, you're changing the filter," he noted.

Still, EMS companies cannot expect to get full declarations from every supplier. On the high end, there's reluctance among semiconductor suppliers who are concerned about their intellectual property. At the other end of the spectrum, Elder has seen a number of mechanicals suppliers who don't truly understand their obligation to provide material composition data. Hence, at both ends there are likely to be parts that should be checked manually. "But it's a very small percentage of parts," he said.

Jabil's solution is a general-purpose reporting system that works for other requirements besides REACH. "The solution that's in place is not just a solution that meets RoHS. It's not just a solution that meets REACH. It's a material composition reporting solution," Elder noted. Jabil made significant investment in composition reporting during the RoHS era not only to satisfy RoHS, but also to meet customer requirements that might arise such as bans on certain substances. This investment, coupled with Jabil's experience in IMDS (International Material Data System) reporting for the automotive industry, paid great dividends in providing Jabil with a ready-made solution for REACH compliance.

This solution, which applies to approved manufacturers list and bill of material parts, rests on Jabil's CFP module, which is integrated with company's **SAP** platform. (CFP stands for Compliance for Products, a solution from **TechniData**.) The CFP module allows Jabil to store, report and present data in the required formats. Jabil's material composition reporting team in Penang, Malaysia, continually feeds data into the CFP module. The provider also has a separate process for handling MRO items.

Another alternative for REACH compliance links parts suppliers, contract manufacturers and OEMs through a web database system called BOMcheck. Suppliers on the system generate one substance declaration for a family of parts manufactured from the same set of materials. With BOMcheck, suppliers do not have to keep track of new substances that are added to the REACH candidate list; the system informs them automatically. "When new substances are entered to the list, they receive expert guidance [as to] what the substances are, where they're found in electrical equipment, what they should be looking for," said ENVIRON's Dr. Turnbull. "And they can update their declarations on a centralized database immediately, and that immediately informs their manufacturing customers of the updated status of their part numbers."

Philips requires all of its suppliers to join BOMcheck. The company has decided not to receive REACH compliance information individually from each of its suppliers each time a new SVHC list is published. **Siemens** has also taken the same step, according to Dr. Turnbull.

BOMcheck was developed by ENVIRON under an initiative led by the European trade association COCIR. Manufacturers who sign up for BOMcheck get access to download SVHC declarations data from the web database. BOMcheck also addresses compliance with REACH's substance restrictions, in effect since June. Within the BOMcheck system, an EMS provider would be considered both a supplier and a manufacturer.

But the choices for REACH compliance do not end here. There are a number of companies selling compliance software and/or services. *MMI's* cursory search of the Internet turned up **The GoodBye Chain Group**, **Green EcoSystems Group**, **Synapsis Technology**, TechniData, and **Total Parts Plus**. This is not intended to be a complete list.

Market Data

Gross Margin Rebounds in Q2

Composite GAAP gross margin for the six largest U.S.-traded providers in Q2 2009 snapped back nicely from the prior quarter's level. GAAP gross margin for the group came in at 5.2%, up 90 basis points from the Q1 margin of 4.3% (see also May, p. 4), largely re-

Table 1: Q2 and Six-Month 2009 GAAP Results for the Six Largest U.S.-Traded EMS Providers (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.
Flextronics*	5,782.7	5,582.5	3.6	8,350.2	-30.7	3.9	5.5	-0.2	2.2	(154.0)	(249.2)	130.3	11,365.2	16,125.6	-29.5	(403.2)	37.5
Jabil	2,615.1	2,887.4	-9.4	3,088.3	-15.3	5.7	6.8	-0.3	2.0	(28.8)	(866.1)	38.4	5,502.5	6,146.9	-10.5	(894.9)	14.4
Celestica	1,402.2	1,469.4	-4.6	1,876.3	-25.3	7.3	6.7	1.0	2.5	5.3	19.2	39.8	2,871.6	3,712.0	-22.6	24.5	69.6
Sanmina-SCI	1,209.2	1,195.1	1.2	1,903.3	-36.5	6.3	7.3	-0.1	2.1	(41.1)	(37.5)	15.3**	2,404.3	3,720.7	-35.4	(78.6)	(9.1)
Benchmark	481.8	496.8	-3.0	682.4	-29.4	7.2	6.7	2.6	3.3	11.6	9.2	22.1	978.6	1,366.7	-28.4	20.8	44.5
Plexus	378.6	388.9	-2.6	456.4	-17.0	9.1	10.7	3.2	4.9	9.2	5.0	17.4	767.5	907.4	-15.4	14.2	39.5
Total/avg.	**11,869.6**	**12,020.1**	**-1.3**	**16,356.9**	**-27.4**	**5.2**	**6.3**	**0.1**	**2.3**	**(197.8)**	**(1,119.4)**	**263.3**	**23,889.7**	**31,979.3**	**-25.3**	**(1,317.2)**	**196.4**

*Intangible amortization was subtracted from Flextronics' reported operating income. Company's Q1 and Q2 '09 net income include a change in accounting rules.
**Sanmina-SCI's Q2 '08 net income includes discontinued operations of its former PC business.

flecting providers' efforts to reduce costs. In Q2, group gross profit increased sequentially by 21.1% to $619.3 million.

Still, gross margin was 110 basis points below the level of the year-earlier quarter. It was too much to expect that gross margin would return to its year-ago level as restructuring programs take time to implement.

Plexus led the group with a Q2 gross margin of 9.1%, followed by **Celestica** and **Benchmark Electronics** at 7.3% and 7.2% respectively (Table 1).

Overall, the U.S.-traded group was at about break even in terms of GAAP operating income. Operating income totaled $15.9 million, or 0.1% of sales. This GAAP operating margin showed a great improvement over Q1's margin of -6.7%, which was dragged down by restructuring and goodwill impairment charges. However, the Q2 margin was well below the year-earlier figure of 2.3%. On a GAAP basis, half of the publicly held providers reported positive operating income for Q2 (Table 1).

Q2 sales for the group of six totaled $11.87 billion, down 1.3% sequentially and 27.4% year over year. **Flextronics** and **Sanmina-SCI** were the only providers in the group to record sequential sales increases. Compared with the year-ago quarter, which predated the global financial crisis, revenue drops ranged from 15.3% (**Jabil Circuit**) to 36.5% (Sanmina-SCI).

It appears that the group's year-over-year decline of 27.4% for Q2 is far greater than the corresponding drop in OEM revenue, estimated at 11% in a report by **Custer Consulting Group**. The disparity in these two numbers can be explained at least in part by OEMs drawing down their inventory instead of placing orders with their EMS providers.

The group produced a combined GAAP net loss of $197.8 million for Q2, much better than the prior quarter's loss of $1.12 billion, but below the year-earlier net income of $263.3 million. Celestica, Benchmark and Plexus all reported a positive result for Q2 on the GAAP bottom line.

Six-month sales for the group of six totaled $23.89 billion, down 25.3% from a year earlier. Revenue for the period at all six providers was off by double-digit percentages.

Inventory levels within this public group continue to fall. Group inventory decreased by $589.6 million in Q2, or 9.1%. Both Flextronics and Jabil achieved double-digit reductions in inventory (Table 2). Inventory levels are down substantially from a year ago. Together, the six providers have reduced their inventory by $2.52 billion, or 30%, from where it was at end of Q2 2008. With finished product inventories depleted, demand signals from OEM end markets will in many cases pull product directly from the production floor.

MMI calculated 7.2 inventory turns overall for the group. The group's Q2 cost of sales, $11.20 billion, was annualized and then divided by the average combined inventory for the quarter, $6.19 billion.

Plexus results in brief

Press deadlines prevented *MMI* from covering Plexus' latest results in last month's issue. So here is a brief summary of the company's results for its fiscal Q3 ended July 4. Plexus earned GAAP EPS of $0.23 on sales of $378.6 million, which were down 2.6% sequentially. The provider saw sequential sales declines in all of its sectors except wireline/networking where improved end-market demand drove revenue up about 4% from the prior quarter. The sector with the greatest sequential decline was medi-

Table 2: Inventory for the Six Largest U.S.-Traded Providers (M US$)

Company (in order of 6-mo. sales)	Q2 '09 inventory	Q1 '09 inventory	Qtr.-qtr. change	Q2 '08 inventory	Yr.-yr. change
Flextronics	2,671.4	2,996.8	-10.9%	4,456.1	-40.1%
Jabil	1,255.5	1,403.6	-10.6%	1,511.6	-16.9%
Celestica	634.3	695.1	-8.7%	812.0	-21.9%
Sanmina-SCI	696.2	706.0	-1.4%	901.0	-22.7%
Benchmark	322.2	345.0	-6.6%	393.0	-18.0%
Plexus	313.5	336.2	-6.8%	342.3	-8.4%
Total/avg.	**5,893.1**	**6,482.7**	**-9.1%**	**8,416.0**	**-30.0%**

cal, where sales were down 14%. Plexus said many of its medical customers are enduring unprecedented end market challenges. Generally speaking, Plexus noted a reduction in demand volatility during the quarter, perhaps a signal that customers' end markets may be stabilizing.

During the quarter, Plexus won 15 new manufacturing programs anticipated to generate about $188 million in annualized revenue when fully ramped. The provider also won about $14 million in new engineering programs.

Fiscal Q4 sales guidance of $380 million to $405 million suggests modest sequential growth after three quarters of declining revenues. Plexus expects EPS of $0.27 to $0.32, excluding any restructuring charges. The company cautioned that relative to fiscal Q4 results, first-half fiscal 2010 operating margins will be pressured by mix shift, compensation-related cost increases and necessary capacity investments.

Q3 Estimates Offer Both Types of News

For those who like to hear the good news first, four out of the six largest U.S.-traded providers are projected to enjoy sequential sales growth in the third quarter, according to Q3 estimates pegged to guidance midpoints. If companies hit the midpoint of their sales guidance, quarter-to-quarter growth rates for the four providers will range from 2.7% to 7.0%, with **Celestica** at the high end of the range (see table).

On the other hand, revenue estimates for the first nine months of the year show that 2009 is shaping up as one of the worst years in the history of the EMS industry. Indeed, a case can be made that 2009 will take the booby prize for poorest year ever when it comes to revenue performance among the largest players in the U.S.-traded group. For the first nine months, combined sales of the six largest providers are projected to total $35.73 billion, down 27.0% year over year (table). It would take a miraculous Q4 to bring the group's revenue decline for the year below 20%. A 20+% annual sales drop for a major group within the EMS industry is without precedent in the 18 years *MMI* has been covering the EMS industry.

Combined Q3 projections for the six providers offer still more evidence that revenue stabilization is underway. Estimated Q3 sales total $11.84 billion, nearly flat as compared with the prior quarter's sum of $11.87 billion. Sequential sales increases for the aforementioned four providers are essentially offset by quarter-to-quarter slippage projected for **Flextronics**. Stabilization is one thing, recovery is quite another. For those who are looking for evidence of a budding recovery, the Q3 revenue estimate for the U.S.-traded group does not support it.

When Q3 comparisons are made year over year, however, the results are downright ugly. If sales come in at guidance midpoints, Q3 revenue for the group of six providers will be down 30.3% from a year earlier. This drop is even greater than what was experienced in the first two quarters and shows the extent of the revenue loss created by the global downturn. As seen in the table, projected year-over-year declines for Q3 range from 17.5% (**Plexus**) to 36.8% (Flextronics).

For the first nine months, estimated revenue drops versus a year earlier range from 13.9% (**Jabil**) to 32.6% (**Sanmina-SCI**), again not a pretty picture (table). (Note that the Jabil figure corresponds to the nine months from December 2008 to August 2009.)

Guidance from Plexus implies that its non-GAAP EPS for Q3 will improve sequentially, while Celestica's outlook calls for its non-GAAP EPS to equal or exceed the prior quarter's result. No such conclusions can be drawn from guidance provided by the other companies in the U.S.-traded group.

Q3 2009 Guidance and Estimates for the Six Largest U.S.-Traded Providers (sales in B$ except as noted)

Company	Q3 guidance	Q3 midpoint	Q2 '09 sales	Qtr.-qtr. estim. chg.	Q3 '08 sales	Yr.-yr. estim. chg.	Q1-2 '09 sales	Q1-3 '09 estimated sales	Q1-3 '08 sales	estimated change	Q2 EPS Non-GAAP* $	Q3 Guidance Non-GAAP* $
Flextronics	5.2 - 6.0	5.6	5.78	-3.2%	8.86	-36.8%	11.37	16.97	24.99	-32.1%	0.08	0.07 - 0.11
Jabil	2.5 - 2.7	2.6	2.62	-0.6%	3.26	-20.4%	5.50	8.10	9.41	-13.9%	0.04	0.02 - 0.12
Celestica	1.425 - 1.575	1.5	1.40	7.0%	2.03	-26.1%	2.87	4.37	5.74	-23.9%	0.11	0.11 - 0.17
Sanmina-SCI	1.2 - 1.3	1.25	1.21	3.4%	1.70	-26.6%	2.40	3.65	5.42	-32.6%	(0.02)	(0.03) - (0.01)
Benchmark	470 - 520 M	495 M	0.48	2.7%	0.64	-22.9%	0.98	1.47	2.01	-26.6%	0.19	0.17 - 0.22
Plexus	380 - 405 M	392.5 M	0.38	3.7%	0.48	-17.5%	0.77	1.16	1.38	-16.1%	0.23	0.27 - 0.32
Total		**11.84**	**11.87**	**-0.3%**	**16.98**	**-30.3%**	**23.89**	**35.73**	**48.96**	**-27.0%**		

Q3 estimates equal midpoint of Q3 guidance. Nine-month 2009 estimates equal six-month sales plus midpoint of Q3 guidance.
*Non-GAAP EPS may not be comparable from company to company.

New business…According to a *Reuters* report, **Foxconn Technology Group**, anchored by **Hon Hai Precision Industry** (Tucheng City, Taiwan), has joined with **China Mobile** to develop and produce e-book readers for the China market. In addition, two online sources from Taiwan, *Digitimes* and *CENS.com*, reported that Hon Hai and **Wistron** have obtained business notebook orders from **HP** at the expense of a competitor, **Inventec**. Hon Hai has also won AMD-based notebook business from HP, according to *Digitimes*, which cited a Chinese-language newspaper. Finally, relying on market sources, *Digitimes* reported that **Asustek** has outsourced production of three notebook models to Hon Hai….**Flextronics** (Singapore) has gained additional consumer notebook business from HP, according to *Digitimes*, which cited industry sources. …**Kaman Aerospace** has awarded **LaBarge** (St. Louis, MO) contracts valued at about $12 million. LaBarge will provide cockpit wiring harnesses for several models of the Black Hawk helicopter. Also, LaBarge has received a $6.1-million contract from **BAE Systems** to continue to produce electronic assemblies for a gun system to be used on the first two Zumwalt-class U.S. Navy destroyers. Another award, worth $2.6 million, came from **Northrop Grumman**, which contracted LaBarge to continue to provide electronic subsystems for a surveillance radar system, called MESA, which is used in military aircraft with early warning and control (AEW&C) platforms….**Adeptron Technologies** (Markham, Ontario, Canada) recently announced three program wins from unidentified customers. The company has landed an EMS contract for 3D interactive displays and entertainment systems with an estimated value at over $2 million a year. A major aerospace and defense OEM has selected Adeptron to provide EMS valued at more than $3 million a year. Adeptron has won a contract with an initial value estimated at over $1 million for 2010 from a division of a major OEM in the field of scientific instruments and laboratory automation. Last month, Adeptron reported that it has managed to grow its year-over-year revenues by about 30% in each of the last two reported quarters….Under a new design and manufacturing agreement with **Reinke Manufacturing** (Deshler, NE), publicly held **Elecsys** (Olathe, KS) will become Reinke's dedicated partner for manufacturing electronic devices used in Reinke's irrigation systems. Elecsys provides design and manufacturing services; custom LCDs; and custom engineered solutions for remote monitoring, rugged mobile computing and RFID.

Alliance…**Zollner Elektronik** (Zandt, Germany) and **EIT** (Sterling, VA) have entered into an agreement to form a strategic partnership, which expands Zollner's resources in North America while providing EIT access to Zollner's global network of manufacturing and engineering capabilities. The offices of Zollner Electronics, the U.S. arm of the Zollner Group, will be colocated within the corporate offices of EIT in Northern Virginia. EIT's Northern and Southside Virginia-based operations will play an important role in supporting the domestic NPI and production needs of Zollner's U.S.-based customers, according to a statement from the two companies. The arrangement is designed to better serve long-term customers of both organizations and to attract future growth throughout North America.

Joint venture…**Cable Connection** (Fremont, CA), a manufacturer of custom cables and wire harnesses, and **Lorom Industrial** (Taipei, Taiwan), a supplier of cable, cable assemblies and EMS, have formed a private joint venture. Under the joint venture agreement, Cable Connection will become **Lorom West**, a sales, engineering and domestic manufacturing arm for Lorom. Lorom West will support Lorom's customer base in the U.S. by providing engineering, prototyping and short-run production, to include cables, wire harnesses and PCB assemblies. Lorom Industrial will handle volume production at its factories in China and India.

Sale completed…On July 31, **Elcoteq** (Luxembourg) completed the sale of the majority of machinery, equipment and materials of its Tallinn, Estonia, operations to **Ericsson** (June, p. 1-2). About 1,200 of Elcoteq's 1,600 employees in Tallinn joined Ericsson.

Some financial news…This month, **Jabil Circuit** (St. Petersburg, FL) completed its offering of $312 million in 7.75% senior unsecured notes due 2016, resulting in net proceeds of $293.0 million. Jabil used all of the proceeds, together with cash on hand, to pay for the cost of purchasing its 5.875% senior notes due 2010 that were tendered by an early deadline on Aug. 10. These notes had an aggregate face value of $294.9 million, or 98.3% of the total $300 million in principal amount outstanding. Jabil's full cost of purchasing the tendered notes amounted to $305.4 million. On July 28, the company announced a cash tender offer for all of its outstanding 5.875% notes due 2010….For the first six months, Hong Kong-listed **Foxconn International Holdings**, Hon Hai's majority-owned handset subsidiary, recorded turnover of $3.16 billion, down 34.0% year over year. FIH reported a first-half loss of $18.7 million attributable to shareholders, compared with a profit of $142.2 million for the year-earlier period. FIH gave two reasons for the loss: lower demand and pricing for its products due to the global downturn and asset impairment. …**Nam Tai Electronics** (Macao) has successfully privatized its subsidiary, Nam Tai Electronic & Electrical Products Limited, which conducts the operations of Nam Tai Electronics (June, p. 7)….**Nortech Systems** (Wayzata, MN) has entered into a new financing agreement with **Wells Fargo Bank**. The provider signed a new credit agreement with Wells Fargo, which provides a $12-million line of credit through June 30, 2010, and a new real estate term note maturing on May 31, 2012….**Sparton** (Schaumburg, IL) has obtained a line of credit of up to $20 million through a new three-year credit agreement with **National City Business Credit**. Using available cash, Sparton paid off its previous credit facility and the remaining balance of an associated term loan….**CEI Contract Manufacturing** (Singapore) reported first-half 2009 sales of S$38.0 million, down 14.0% from the same period a year ago due to a decrease in demand as a result of the global slowdown. Profit from operations amounted S$2.3 million, representing a 29.9% drop from the year-earlier period. Profit after taxation was S$1.3 million, compared with S$2.8 million for the first half of 2008.

*People on the move…***Suntron** (Phoenix, AZ) has named Ed Wheeler COO. With over 25 years of experience in general management, operations and engineering, Wheeler was most recently president of **Honeywell's** Defense and Space business segment….Todd Lovejoy has joined **Victron** as its COO. Most recently, Lovejoy lead a global product development and manufacturing company in doubling its sales and expanding its global capabilities. Previously, he served in multiple leadership roles with a variety of EMS and OEM companies….Ron Keith, COO of managed services provider **Riverwood Solutions** (Menlo Park, CA), has assumed the role of CEO in place of Matthew Ryan, who left company to join **CEVA Logistics** as COO. Both men are founders of Riverwood and former Flextronics executives. In addition, Nicholas Brathwaite has joined Riverwood's board of advisors. Brathwaite is a founding partner of Riverwood Capital, a strategic investor in privately held Riverwood Solutions. Before his involvement with the investment firm, he served as chief technology officer at Flextronics. …**Kimball Electronics Group** (Jasper, IN), the EMS subsidiary of Kimball International, has added Katie Eggert and Anita Conlin to the business development team focused on growth of Kimball Electronics' medical sector, the provider's largest business segment. With over 20 years of experience in the medical equipment sector, Eggert joins Kimball from a top-ten EMS company, where she managed business development and sold EMS. Conlin, an 18-year veteran of the electronics industry, comes from another top-ten EMS provider, where she was responsible for driving growth in the EMS medical sector….Sparton has hired John Payton as director of corporate IT. Prior to his current role, Payton served as director of IT for **FP Mailing Solutions**.

*Certifications…***IEC Electronics** (Newark, NY) has achieved ISO 13485 certification for its EMS operation in Newark, NY, as well as its wire and cable operation in Victor, NY. As has been stated here before, ISO 13485 is the quality management system for the medical device industry. …**Janco Electronics** (Dover, NH) has also earned certification to ISO 13485….**Connor Solutions** has been awarded AS9100 certification for its headquarters facility in Houghton-le-Spring, UK. AS9100 is the quality management standard used by the aerospace industry, which should not be news to *MMI* readers.

*Some company news…*Elcoteq has decided to combine its Home Communications and Personal Communications business areas into a new strategic business unit (SBU), Consumer Electronics. The company's Communications Networks business, which continues as an independent SBU, has been renamed System Solutions. The organizational changes affect about 150 people globally. In addition, Elcoteq has made new sales activities a separate global function, which will be headed by Tomi Saario, senior VP, new sales and business development. He has been responsible for the company's group strategy and mergers and acquisitions….Last month, **Sypris Electronics** (Tampa, FL), a subsidiary of publicly held **Sypris Solutions**, announced that it is targeting the Shingo Prize for Operational Excellence as a benchmark for its operational improvement efforts. Sypris Electronics intends to compete for the prize in 2011….Sparton's EMS business unit in Brooksville, FL, is offering a new rapid prototyping service, which provides a dedicated pilot line and engineering lab.

*More capacity being taken out…*Taiwan's Hon Hai, the world's largest EMS provider, has closed its plant in Fullerton, CA, with about 406,000 ft^2 and moved operations to a smaller 226,000-ft^2 facility in Industry, CA, the *Orange County Business Journal* reported. The newspaper noted that a major part of Fullerton operations had already been shifted to a Dallas facility. It appears that even Hon Hai is not immune to the effects of the recession….**Celestica** (Toronto, Canada) has ceased operations in Brazil, according to a notice for an online auction of assets from the provider's Hortolândia facility….Nortech Systems is relocating personnel and production operations from its Aerospace Systems facilities in Fairmont, MN, to its Blue Earth, MN, facilities (see also June, p. 8).

REACH's Lack of Visibility

If you're manufacturing in the EU or shipping assemblies or products into the EU, you fall under the purview of REACH, the EU regulation for chemicals, which applies not only to chemical substances but also the products that contain them. The regulation is not new – it went in effect in 2007. But REACH does not seem to have achieved the visibility within the EMS industry that RoHS has. Many providers small and large have declared themselves RoHS compliant. But how many companies in the industry are touting REACH compliance? Not a lot, *MMI* would submit.

MMI believes that part of the problem with REACH gaining more industry traction is that it is quite complicated. Adding to this difficulty is the fact that not everyone has arrived at the same interpretation of REACH requirements, and that goes for both companies and EU countries. In contrast, RoHS essentially bans six substances – that's a pretty easy message to get.

REACH creates a more daunting challenge for smaller providers who operate with lean corporate staffs. In the changing landscape of environmental regulation, a lean staff can turn into a shortcoming. Large providers have dedicated staff people with expertise to stay on top of new green regulations as they emerge in various parts of the world. Smaller companies often do not have this luxury.

One REACH requirement already in effect could prove troublesome for the industry, particularly the smaller companies. Article 33 of the regulation requires that suppliers to the EU must automatically notify their business customers when an article they supply contains a substance on the candidate list of substances of very high concern (SVHCs) in a concentration above 0.1% (w/w). There are currently 15 substances on this list, which is expected to grow over time (see article on p. 2-3).

If you're shipping product into the EU, there's only one way you can be sure that you comply with this REACH requirement. You collect material composition data from your suppliers. This could be a Herculean task for a smaller provider. One company told *MMI* that the job could potentially take thousands of man-hours and involve hundreds of assemblies. Let's say you manage it somehow. What happens when the candidate list changes? Do you have to repeat the process all over again?

A commercial database where material composition data has already been captured would seem a logical way to go, especially for the smaller providers. But can a provider be guaranteed that its entire supply base is covered by such a database? It would appear that some degree of manual intervention would still be required.

There is evidence that some EMS providers are taking what amounts to a passive approach to REACH notification. Reportedly, their interpretation of REACH allows them to avoid asking their supply base for material composition data. With this approach, it's their suppliers' responsibility to provide any SVHC data.

Enforcement of REACH is another issue. It is unclear how each EU country will monitor and enforce REACH compliance across the many industries covered by the regulation.

With the complexity, interpretation and enforcement issues surrounding REACH, it's no wonder that there are EMS providers keeping a low profile when it comes to REACH.

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

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