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Top 50 Tops \$200 Billion

For the first time since *MMI* began putting together lists of the 50 largest EMS providers, combined sales of the *MMI* Top 50™ have exceeded \$200 billion. Top 50 revenue for 2011 totaled \$213.4 billion.

The EMS industry may be mature and lack sizzle. It may be low in name recognition among the general public. Its performance may be taken for granted by its customers. But make no mistake: Top 50 revenue shows that the glamour-challenged EMS industry has grown to huge proportions, and it will be around as long as there are OEMs that depend on it.

Revenue growth for the Top 50 in 2011 can be viewed from two different angles. On the bright side, Top 50 sales increased by 15.7% over the prior year despite the macroeconomic headwinds that blew in from various parts of the globe. That is no mean accomplishment. But a darker view reveals that nearly half of that growth stemmed from the efforts of one company, **Hon Hai Precision Industry** (Foxconn), by far the world's largest EMS provider. Without Hon Hai's contribution, aggregate growth for the other 49 providers would have been 8.2% (Chart 1). So Hon Hai added 7.5 percentage points to the Top 50 growth rate.

The sheer size of Hon Hai gives it the ability to hold sway over Top 50 results. For 2011, Hon Hai's consoli-

dated 2011 sales amounted to \$117.2 billion, or 55% of the Top 50 total. The company's sales grew by 22.7% (in US dollars), giving Top 50 growth a major boost.

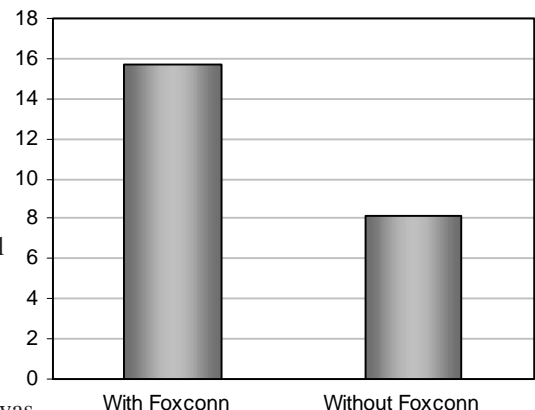
More changes than usual

MMI has completed its annual survey to identify and rank the world's Top 50 EMS providers. Survey results appear on pages 2-4.

Making the Top 50 for 2011 was easier than the year before. To qualify for the 2011 Top 50, an EMS provider needed a minimum of \$208 million in revenue. That's 11% below the 2010 cutoff of \$233 million, which has been the highest barrier to entry so far (Chart 2, p. 5).

Why didn't the 2011 cutoff continue to rise in tandem with Top 50 growth? The basic reason for a lower bar comes down to the number of 2010 Top 50 providers that, for one

Chart 1: 2011 Growth of the Top 50 EMS Providers



reason or another, did not return to the Top 50 for 2011. Seven providers from the 2010 Top 50, a higher number than normal, did not make the new list. The seven departures freed up space at the bottom of the Top 50 standings, allowing companies with lower revenue to take the last few spots in the Top 50.

Providers did not return for a variety of reasons. One company, **Elcoteq**,

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MMI Top 50

The MMI Top 50 EMS Providers in 2011

Organization	Head-quarters	Sales calendar 2011 (millions)	Rank by 2011 sales	Rank 2010	Sales calendar 2010 (millions)	Growth '10-'11 in US\$ (%)	No. of people	No. of plants	Total facility sq. ft.	Percent space in low-cost regions	No. SMT lines	No. of customers and notable customers
Hon Hai Precision Industry (Foxconn)	Tucheng City, Taiwan	\$117,249	1	1	\$95,543	23	>1,200,000	not avail.	not avail.	not avail.	not avail.	Apple, Dell, HP, Cisco, Sony, Amazon, Nintendo, Microsoft, Nokia
Flextronics International	Singapore	\$29,944	2	2	\$27,761	8	176,000 ¹	not avail.	25.1 M ¹	74 ¹	not avail.	Alcatel-Lucent, Cisco, Dell, Ericsson, HP, Huawei, Lenovo, Microsoft, RIM, Xerox
Jabil	St. Petersburg, FL	\$16,797	3	3	\$14,685	14	121,000	60	22.8 M	~75	not avail.	~200: Agilent, Apple, Cisco, Ericsson, GE, HP, IBM, NetApp, Pace, RIM
Celestica	Toronto, Canada	\$7,213	4	4	\$6,526	11	33,000	29 ²	>6 M	~70	not avail.	>100: Alcatel-Lucent, Cisco, EMC, HP, Honeywell, IBM, Juniper, NEC, Raytheon, RIM, Oracle
New Kinpo Group	New Taipei City, Taiwan	\$6,510 ³	5	6	\$5,059	29	37,771	18	11.51 M	80	274	>20: HP, Seagate, Western Digital, Panasonic, Toshiba, Hitachi, TI, Casio, Pace, Nikon, Pioneer, GE, IBM, Dell, EMC, Lenovo, Asus, ASRock, Gigabyte
Sanmina-SCI	San Jose, CA	\$6,442	6	5	\$6,503	-1	45,505 ⁴	not avail.	12.04 M ⁴	~66 ⁴	not avail.	Nokia Siemens Networks, EchoStar, Symmetricom, GigOptix, Catch the Wind, TrueNorth, Emerson, Santerno, Kaiam, KACO new energy
Shenzhen Kaifa Technology	Shenzhen, China	\$2,883	7	7	\$3,081	-6	19,000	6	2.71 M	100	100	33: Seagate, Western Digital, Hitachi, Kingston, Samsung, ZTE, Epson, Resmed, ENEL, Reliance, China Mobile
Benchmark Electronics	Angleton, TX	\$2,253	8	8	\$2,402	-6	~10,000	21	3.05 M	~55	124	~100: Emerson, IBM, Applied Materials
Plexus	Neenah, WI	\$2,195	9	9	\$2,149	2	9,000	18	2.7 M	~56	102	~130: Juniper, GE, Coca-Cola
Universal Scientific Industrial (USI)	Shanghai, China	\$1,965	10	10	\$2,029	-3	>12,000	5	2.27 M	77	116	>100 (EMS)
Venture	Singapore	\$1,940 ⁵	11	11	\$1,959	-1	~13,500	not avail.	not avail.	not avail.	not avail.	171: ABB, Agilent, HP, IBM, Intermec, Micros, NCR, Qualcomm, Talaris
Zollner Elektronik	Zandt, Germany	~\$1,198	12	14	\$1,054	14	8,000	16	2.81 M	55	47	>500
SIIX	Osaka, Japan	\$1,157	13	13	\$1,076	8	7,588	12 ⁶	914 K ⁷	not avail.	103	~200
UMC Electronics	Saitama, Japan	\$953	14	17	\$903	6	8,687	6	864 K	not avail.	133	
Beyonics Technology	Singapore	\$867 ⁸ (estimated)	15	15	\$987	-12	not avail.	9	not avail.	100	not avail.	Seagate, Panasonic, SmarDTV, IndigoVision, Hauppauge, Epson, Animus - Johnson & Johnson, Bio-logic, Stryker
Sumitronics	Tokyo, Japan	\$862	16	16	\$875	-1	~3,800	25 ⁹	not avail.	not avail.	342	55
AsteelFlash Group	Paris, France	\$780	17	20	\$662	18	4,084	12	1.25 M sites	45	35	
Global Brands Manufacture (GBM)	New Taipei City, Taiwan	\$697	18	new	\$715	-3	~10,000	3	not avail.	100	~150	>100: WD, Hitachi, Samsung, Asus, Gigabyte, San Disk, Cisco (indirect), Verizon (indirect), NTT Docomo (indirect), Carrier, Seagate

Note: Unless otherwise indicated, data represents 2011 year-end. ¹ As of March 31, 2011. ² Includes manufacturing, services sites and offices. ³ Sales represent Kinpo Electronics, Cal-Comp Electronics and Acbel Polytech (power supplies). ⁴ As of Oct. 1, 2011. ⁵ ODM business contributed about 35% of revenue. ⁶ Six plants are owned by SIIX, and six are operated by affiliates. ⁷ Corresponds to six plants owned by SIIX. ⁸ Estimated sales of Beyonics' EMS division from Feb. 2011 to Jan. 2012. ⁹ Sumitronics owns four plants and uses 21 partner plants.

The MMI Top 50 EMS Providers in 2011

Organization	Head-quarters	Sales calendar 2011 (millions)	Rank by 2011 sales	Rank by 2010 sales	Sales calendar 2010 (millions)	Growth '10-'11 in US\$ (%)	No. of people	No. of plants	Total facility sq. ft.	Percent space in low-cost regions	No. SMT lines	No. of customers and notable customers
Fabrinet	Cayman Islands	\$668	19	21	\$653	2	5,930	4	1.11 M	98	17	>40: JDSU, Oclaro, Finisar, Opnext, Emcore, Valeo, Cisco, Intel
Kimball Electronics Group	Jasper, IN	\$657	20	19	\$741	-11	3,162	6	914 K	60	37	>20: Johnson Controls, BWI Group, Nualight, Grundfos, Regal Beloit, Brose Automotive, Smith & Nephew, Parker Hannifin, Cobham, Motorola Solutions, TRW Automotive, Eldor, ZOLL Medical
Creation Technologies	Burnaby, BC, Canada	\$546	21	25	\$462	18	2,670	11	600 K	6	31	~200
Enics	Zürich, Switzerland	\$524	22	27	\$426	23	3,200	8	756 K	50	not avail.	ABB, Atlas Copco, Bombardier, Danfoss, Gambro, Getinge, Honeywell, KONE, Leica, Roche Diagnostics, Schneider Electric, Vaisala, Varian Medical
3CEMS Group	Guangzhou, China	\$510	23	24	\$465	10	12,000	7	2.27 M	100	48	198: Asus, Canon, Fossil, Fujifilm, Goodman Air Conditioning and Heating, Honeywell, Sony, Tridium
Integrated Micro-Electronics, Inc.	Laguna, Philippines	\$502 ¹⁰	24	28	\$393	28	13,534	15 sites	2.4 M	99	145	>250
Wong's International (Holdings) Limited	Hong Kong	\$497	25	23	\$508	-2	<6,000	2	890 K	100	-60	<40
VIDEOTON Holding	Székesfehérvár, Hungary	\$455	26	26	\$438	4	6,700	11	5.9 M	100	19	>50: Braun, Electrolux, Philips, Bosch, BWI, Continental, Delphi, Denso, Valeo, Visteon, ABB, GE, Alstom, Carrier, Eaton, Emerson, Hager, Kopp, Legrand, Siemens, Sensus, HP, NCR, 3M, Panasonic
VTech Communications	Hong Kong	\$417	27	29	\$373	12	3,500	1	450 K	100	16	70
Neways Electronics International	Son, The Netherlands	\$395	28	32	\$338	17	2,080	13	not avail.	40	19	~640: ASML, FEI, Philips, Rheinmetall, ThyssenKrupp
Topscom Technology	Hong Kong	\$380	29-30	31	\$350	9	4,500	2	1.61 M	not avail.	50	102: Huawei, ZTE, Cisco, Sony
WKK Technology	Hong Kong	\$380	29-30	33	\$345	10	5,790	1	725 K	100	32	36
éolane	Le Fresne sur Loire, France	\$363	31	35	\$290 ¹¹	25	2,400	16	936 K	15	30	450: Dassault, Thales, Safran, EADS, Alstom, Schlumberger, Sercel, France Telecom, SFR, Atlas Copco, Areva, DGA, Somfy, Fukuda, PSA, Renault, Valeo, Mentor, Alstom
OnCore Manufacturing	San Jose, CA	\$350	32-33	36	\$301	16	1,500	8	517 K	20	40	~100
V.S. Industry	Senai, Malaysia	\$350	32-33	40	\$287	22	4,475	9	1.40 M	100 (estimated)	34	55: Dyson, Itron, Valeo Thermal Systems JPN, Panasonic, Next Window
PartnerTech	Vellinge, Sweden	\$310	34	37	\$300	3	1,306	9	800 K	33	9	>200: Tomra, Vestas Control Systems, Beijer Electronics

Note: Unless otherwise indicated, data represents 2011 year-end. ¹⁰ Does not include IMI's sales of power semiconductor assembly and test services. ¹¹ Original 2010 figure supplied by the company was higher.

MMI Top 50

The MMI Top 50 EMS Providers in 2011												
Organization	Head-quarters	Sales calendar 2011 (millions)	Rank by 2011 sales	2010 rank	Sales calendar 2010 (millions)	Growth '10-'11 (%)	No. of people	No. of plants	Total facility sq. ft.	Percent space in low-cost regions	No. SMT lines	No. of customers and notable customers
CTS Electronics Manufacturing Solutions	Lisle, IL	\$309	35	44	\$270	14	~1,500	7	~500 K	36	22	
Kitron	Billingstad, Norway	\$296	36	43	\$272	9	1,173	8	538 K	28	15	Kongsberg, Lockheed Martin, ABAX, CellaVision, Parker Hannifin, Rheinmetall Defence, Badger Meter
Scanfil EMS	Sievi, Finland	\$294	37-38	38	\$292	1	1,745	5	1.24 M	78	not avail.	
Selcom Elettronica	Bologna, Italy	\$294	37-38	46	\$263	12	2,164	7	646 K	30	18	75: Bosch und Siemens Hausgeraete, Electrolux, KONE Elevators, GD, Fagor Brandt, Gambro, Denso, Sanyo Energy
Ducommun LaBarge Technologies	St. Louis, MO	\$288	39	new	\$137	111	2,080	13	860 K	3	10	175: Raytheon, Owen-Illinois, Bell Helicopter
SRI Holding	Durach, Germany	\$283	40	42	\$270 ¹²	5	498	2	291 K	0	6	47
KeyTronicEMS	Spokane Valley, WA	\$281	41-42	49	\$237	19	2,618	7	800 K	68	8	41
SMT Technologies	Sungai Petani, Kedah, Malaysia	\$281	41-42	new	\$194	45	1,450	2	308 K	100	22	9: Western Digital, Dyson, OJE, IQ Group
SVI	Bangkadi, Pathumthani, Thailand	\$279	43	48	\$258	8	2,300	5	800 K	98	24	30
Alco Electronics	Hong Kong	\$278	44	30	\$366	-24	4,200	3	1.8 M	100	116	9: Toshiba, SMTC, Cherry Automotive, Harley Davidson
LACROIX Electronics	Vern-sur-Seiche, France	\$235	45-46	new	\$170	38	1,695	4	377 K	~45	20	
MC Assembly	Palm Bay, FL	\$235	45-46	return-ee	\$191	23	1,800	3	343 K	25	22	~40
PCI	Singapore	\$232	47	new	\$216	8	not avail.	not avail.	not avail.	not avail.	not avail.	
SMTC	Markham, Ontario, Canada	\$220	48	47	\$263	-16	1,875	4	550 K	70	40	32: Enecsys, Medizone, Edgewater Wireless, Recon Instruments, Prim'Tools, Redline Communications
EPIC Technologies	Norwalk, OH	\$214	49	50	\$233	-8	1,712	4	312 K	70	16	28
Connect Group	Kampenhout, Belgium	\$208	50	return-ee	\$183	14	1,692	6	527 K	40	not avail.	Alstom, ASML, Atlas Copco, Barco, Philips, Atos

Note: Unless otherwise indicated, data represents 2011 year-end. ¹² Original 2010 figure supplied by the company was somewhat higher.

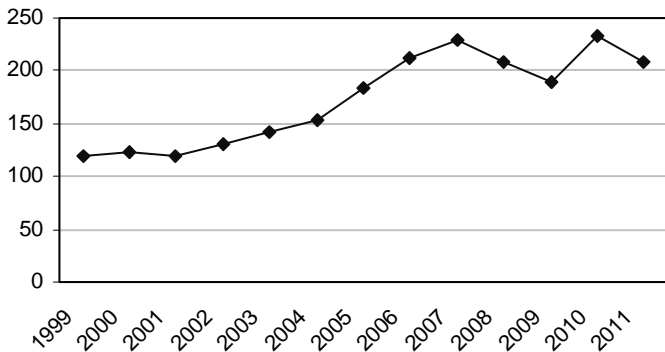
was declared bankrupt. A second provider, **LaBarge**, was acquired, while a third, **EPIQ**, sold off part of its operations. A fourth company, **Hana Microelectronics**, took a pass on the survey due to the impact of the Thailand floods on its numbers but will participate next year. Then there was **Surface Mount Technology (Holdings) Limited**, whose sales dropped

below the cutoff. In the sixth case, **Orient Semiconductor Electronics** presented inconsistent data that were not explained by the Top 50 deadline. Finally, **Nam Tai Electronics** was reclassified from EMS provider to component-level supplier.

Seven departures meant that there were seven additions to the Top 50. Three new members of the club are

based in Asia. They are **Global Brands Manufacture** of Taiwan, Singapore-based **PCI** and Malaysia's **SMT Technologies**. Two American providers in the 2011 Top 50 were not present in the prior list. **Ducommun LaBarge Technologies** is a new EMS player that resulted from Ducommun's acquisition of LaBarge, and **MC Assembly** rejoined the Top 50 after an

Chart 2: Top 50 Cutoff (Millions USD)



absence of four years. Two additions came from Europe. Belgium-based **Connect Group** reappeared on the list after being off it for two years, and France's **LACROIX Electronics** made the Top 50 for the first time.

Counting down the top ten

With two exceptions, top-10 standings did not change from 2010. The order of the first four companies remained the same as the year before, starting as usual with Hon Hai and followed by **Flextronics**, **Jabil** and **Celestica** in that order. But **New Kinpo Group** moved up one position to fifth place, replacing **Sanmina-SCI**, which dropped to sixth. **Shenzhen Kaifa Technology**, **Benchmark Electronics**, **Plexus** and **Universal Scientific Industrial** took seventh, eighth, ninth and tenth respectively, as they did in 2010.

The bar for top-10 admission was

lowered slightly from 2010. It took sales of \$1.97 billion to rank among the 10 largest EMS providers in 2011, down a bit from \$2.03 billion in 2010. For 2011, the top 10 garnered a 90.6% share of Top 50 revenue, up from 88.7% in 2010. As evidenced by the share gain, the EMS industry is becoming even more top-heavy, with Hon Hai being the prime mover in this trend. Top-10 growth amounted to 16.7%, just one percentage point above the Top 50 average.

Upwardly mobile

A combination of sales growth and open slots gave providers the ability to move up in the standings. A total of 24 companies improved their rank over 2010. In addition, a tie meant that **Scanfil EMS** (37th or 38th) either moved up one step or kept the same rank.

Indeed, ties were rather commonplace in 2011. The standings produced five pairings where two companies reported the same 2011 sales figure rounded off to the nearest million. The number of ties was out of the ordinary, but not unheard of. In the 2006 Top 50, seven ties occurred.

Some companies were more upwardly mobile than others. Five providers advanced in rank by seven or more places. **CTS Electronics Manufacturing Solutions** (35th) rose by nine slots; **Selcom Elettronica** (37th or 38th) moved up eight or nine positions; **KeyTronicEMS** (41st or 42nd) and **V.S. Industry** (32nd or 33rd) each advanced by seven or eight places; and **Kitron** (36th) climbed by seven spots in the standings.

Note that it can be easier to leapfrog competitors in the lower ranks because companies are packed closer together.

A 52% majority of the Top 50 had sales of less than \$500 million, and the \$208 million to \$299 million bracket contained the largest number of Top 50 providers at 15. But in the three middle brackets – \$300 million to \$499 million, \$500 million to \$999 million and \$1 billion to \$10 billion – the distribution of companies was nearly even (Chart 3).

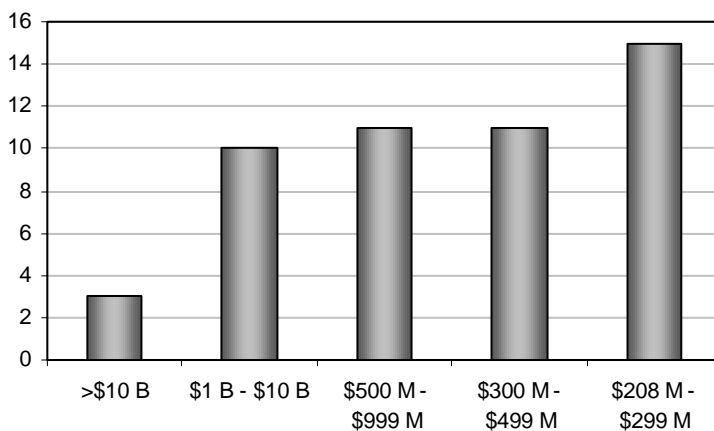
Two participants in the Top 50 survey reported 2011 revenue that was below the Top 50 cutoff. They are Germany's **EN ElectronicNetwork** (\$200 million) and Hong Kong-based **Surface Mount Technology (Holdings) Limited** (\$176 million).

A ration of ratios

Top 50 data can be massaged to yield productivity ratios. To the two ratios computed traditionally – revenue per employee and revenue per square foot – a third, revenue per SMT line, is being added this year.

Let's start with the measure of employee productivity. Employee counts for 47 companies totaled some 1.8 million people, more than 1.2 million of which worked for Hon Hai. If one were to assume 1.2 million employees for Hon Hai, the revenue per employee for these 47 providers works out to \$115,700. But this ratio is skewed by the economics of Hon Hai's massive Chinese workforce. With Hon Hai ex-

Chart 3: Distribution of Top 50 Providers by 2011 Sales



cluded, revenue per employee increases to \$150,700, compared with the 2010 ratio of \$141,200 based on a somewhat different group of 47 companies.

The second traditional ratio, revenue per square foot, was derived from 42 providers that supplied facility space data. On average, their facilities generated \$716 of revenue per square foot. This 2011 ratio is 13% above the 2010 average of \$633, which was computed from 45 providers. Note that these ratios are approximate: they in-

corporate some data that are imprecise or correspond to different time intervals.

For the new ratio, 39 Top 50 providers reported the number of SMT lines that they operate. Revenue per SMT line for these companies averaged \$12.9 million. Note that revenue per SMT line is highly variable, depending on the speed and productivity of a line, whether it's single- or double-sided, and the amount of EMS revenue generated by box build.

Methodology. Providers were

ranked based on calendar 2011 sales in US dollars. Where information was not publicly available, *MMI* depended on companies to provide accurate data. Companies were asked to convert sales in non-US currencies into US dollars, if necessary, by using an average annual exchange rate corresponding to the sales year. Where possible, sales of non-EMS businesses were excluded. In some instances where EMS providers also do ODM work, ODM sales were mixed into the reported revenue.

News

Flextronics to Acquire and Divest

Flextronics (Singapore) has announced two separate moves by which it intends to add one business and subtract another. On the plus side, the company has entered into a definitive agreement to acquire **Stellar Microelectronics** (Valencia, CA), a full-service EMS provider specializing in advanced custom packaging solutions for the aerospace, defense and medical manufacturing markets. Flextronics is also engaged in a divestiture. The company has agreed to sell certain assets of its camera module business, known as **Vista Point Technologies**, to **DigitalOptics Corporation** (DOC), a wholly owned subsidiary of **Tessera Technologies** (San Jose, CA).

Acquiring Stellar will increase Flextronics' service offering to include microelectronic design and manufacturing services in support of customers with unique US manufacturing needs. Stellar's custom packaging solutions utilize the latest microelectronics technologies. Unlike most EMS providers, Stellar provides processing capability from wafer to final product assembly. The prospective deal will also expand Flextronics' customer portfolio in the aerospace and defense and medical markets.

Flextronics did not disclose financial terms other than to say that Stellar's annual revenue run rate is just under \$100 million. Subject to certain closing conditions, completion of the transaction is expected to occur by the end of April.

"This acquisition underscores Flextronics' strategic commitment to expand our service offering in the aerospace, defense and medical markets, and we believe the combined companies will strengthen the services we can provide our customers in this space," said Paul Humphries, group president of Flextronics High Reliability Solutions.

California-based Stellar operates out of a 140,000-ft² facility in Valencia. The company was founded in 1974 under the name **ELMO Semiconductor** and in 1996 was acquired by another EMS provider, **Kimball Electronics** (Jasper, IN). Kimball sold the operation in 2003 to entrepreneur and philanthropist Alfred Mann.

As for the divestiture, assets to be sold include intellectual property and China-based manufacturing operations of the Vista Point camera module business. DOC will take over existing customer contracts and a lease on a facility of about 135,000 ft² in Zhuhai, China. The sale price is about \$23 million in cash, subject to adjustment at closing. Contingent upon closing conditions, the deal is expected to be com-

pleted in the third quarter, if not sooner.

Flextronics will retain a portion of Vista Point assets, but repurpose them and focus engineering talent toward strengthening the company's ability to deliver manufacturing services.

Vista Point was unprofitable in each of the first three quarters of Flextronics' fiscal 2012.

The president of DOC, Bob Roorparvar, has a prior connection with Vista Point. At one time, he served as Vista Point's president and CEO.

Deals done... Publicly held **Adeptron Technologies** and privately owned **Artaflex**, two EMS companies based in Markham, Ontario, Canada, have combined in a reverse takeover of Adeptron by Artaflex (Jan., p. 7-8). The resulting public company is operating under the name Artaflex....EMS provider **ACDi** (American Computer Development, Inc.) of Frederick, MD, recently acquired the assets of another EMS provider, **Fawn Electronics** of Nashville, NC. The seller was Fawn Industries. ACDi has entered into a long-term lease on the Fawn Electronics facility and said it expects to retain all employees of the Fawn operation. The operation gives ACDi new capabilities such as certification for building nuclear products, expertise in the medical industry, and cable and harness skills.

Alliances... **Hon Hai Precision Industry** (Tucheng City, Taiwan) has agreed to purchase up to 50% of the LCD panels and modules manufactured by **Sharp Display Products**. In addition, Hon Hai chairman Terry Gou and other entities will take a 46.5% stake in SDP, while Hon Hai and a subsidiary will buy a 6.6% interest in Sharp, and affiliated **Foxconn Technology Co.** and one of its units will obtain a 3.3% share of Sharp....**Sevcon** (Southborough, MA), a maker of microprocessor-based controls for electric and hybrid vehicles, and Flextronics Automotive, a Flextronics business, have entered into a cooperation agreement to provide hybrid and electric vehicle drivetrain systems to automotive OEM customers in Germany and other central European countries. The companies have agreed to combine Sevcon's motor controllers and onboard systems integration products with Flextronics Automotive's high-voltage DC-DC converter, charger and battery management technology. In addition, the two partners have agreed to jointly conduct product marketing and sales outreach, with Sevcon designated as Tier 1 supplier and Flextronics Automotive as manufacturer for all combined product sales....**ESCATEC** (Penang, Malaysia), which manufactures in Malaysia and Switzerland, has joined forces with US provider **Surface Mount Technology Corporation** (Appleton, WI). This alliance means that the two companies can provide customers in the US and Europe with local support and manufacturing close to customers' design teams and finished goods delivery locations. At the same time, ESCATEC's Malaysian mass-production facilities allow for improved cost management....**Bittele Electronics** (North York, Ontario, Canada), which provides PCB fabrication and assembly in China, and **Xptronics** (Markham, Ontario, Canada), a PCB assembly shop focusing on prototypes and low-volume, high-mix

production, have formed a partnership to offer a more rapid assembly service and serve a greater need for quick-turn prototyping in North America, according to online reports....Design firm **Partner Electronics** (Silverstone, Northamptonshire, UK), and EMS provider **Thames Gateway Manufacturing Centre** (Greater London, UK) have forged a partnership to offer a one-stop shop for development and production.

Oclaro to Transfer Operations to Venture

Oclaro (San Jose, CA), a tier-one provider of optical communications and laser components, modules and subsystems, has agreed to transfer its Shenzhen, China, final assembly and test operations to **Venture's** Malaysia facility in a phased and gradual manner over the next three years. The two companies have also signed a five-year supply agreement.

During the three-year transition period, Oclaro will retain control of the manufacturing facility in Shenzhen, and workers there will remain employed by Oclaro. Several of Venture's operational personnel will relocate to Shenzhen to support Oclaro, oversee the transfer, and ensure that products transitioned to Venture's Malaysia facility are fully qualified by customers before the products are phased out of the Shenzhen facility.

Over the transition period, this outsourcing activity is expected to free up more than \$35 million net of transition and employee retention costs.

Oclaro said the move is a significant milestone in its strategy to adopt an outsourced back-end manufacturing model. The company also noted that the move complements its existing relationship with **Fabrinet**.

A key factor in choosing a contract manufacturer was to ensure that Oclaro would be able to manage a smooth transition for its customers.

Venture has been engaged in the manufacture of optical products since 1992 and maintains a center of excellence for optical communications.

More new business... Hon Hai Precision Industry will begin assembling 10-in Kindle Fire tablets for **Amazon**, *Digitimes* reported. In addition, Hon Hai's handset subsidiary, **Foxconn International Holdings**, has become the second contract manufacturer chosen to assemble smartphones for China's **Xiaomi**, according to *Bloomberg News*....In an expanded relationship with **GigOptix**, **Sanmina-SCI** (San Jose, CA) has designed the optical packaging for GigOptix's next-generation 100G optical modulator and is industrializing it (April 2010, p. 7).

...**Kitron** (Billingstad, Norway) recently announced the names of seven new customers in the German market. They are **Rheinmetall Defence Electronics**, **Badger Meter** (liquid flow measurement), **Märklin** (model railroads), **HSM** (paper shredders), **Parker Hannifin** (electronic manometers in this case), **Binder** (gas flow measurement and control) and **Plaston** (air treatment systems). Also, Kitron has landed new orders worth about NOK 45 million (\$7.8 million) a year from **CellaVision** for the manufacture of medical instruments for routine analysis of blood and other body fluids. On the defense side, Kitron recently won two new F-35 contracts with a potential value of more than NOK 250 million (\$43.6 million) over the life of the program....**Alstom Transport**, a major player in the railway market, has awarded **SMTC** (Markham, Ontario, Canada) a contract to build Alstom's new signaling and information systems. SMTC's Markham, Canada, facility will provide services including NPI, PCBA, module-level assembly, system integration and test. In addition, SMTC will address Alstom's US content requirements by producing controlled products at SMTC's plant

News

in San Jose, CA....**Integrated Micro-Electronics Inc.** (Laguna, Philippines) will be manufacturing for a North American PV company at least 35 megawatts of solar panels for the next three years to serve PV markets in China, India and Australia. This program started last month in IMI's plant in Jiaxing, China....**ZeeVee** (Littleton, MA), a developer of high-definition video distribution products, recently moved its outsourced manufacturing from China to **Suntron's** facility in Methuen, MA.

New facilities... Top 50 EMS provider **3CEMS** (Guangzhou, China) recently launched a new 12,000-m² factory in Dongguan, China. The company said opening the new plant reflects the growth of customer demand in mainland China. The factory is equipped with sufficient production lines to provide one-stop-shop service from PCB assembly to box build. ...**V.S. Industry** (Senai, Malaysia), another Top 50 EMS provider, plans to start work on a new plastics plant in Bekasi, Indonesia, during Q2, Malaysian newspaper *The Star* reported online. The new plant would be the company's second facility in that country....**Enics** (Zürich, Switzerland) expects to start operations in Q2 at a new 10,000-m² site located at Changshu in the Suzhou area within China's

Greater Shanghai region. This plant, Enics' second in China, will enable the provider to serve existing and new customers with manufacturing and related services that are close by. The company also noted that Suzhou and surrounding areas offer a large supply base within a short distance.

New services... EMS provider **I. Technical Services** (Alpharetta, GA) has expanded its service offering with a new high-speed SMT production line, which positions ITS to manufacture higher volume and higher density products. The new line, featuring **Assembleon** placement machines, will be the centerpiece of ITS's assembly operation to go with existing SMT lines for mid-volume and prototype production....**CEI Contract Manufacturing Limited** (Singapore) recently began offering wire harness and cable assembly. The EMS provider added this capability with the Q4 2011 acquisition of a Singapore-based company in the wire and cable assembly business. With this deal, CEI also gained the company's customers, which include blue-chip OEMs and major EMS providers....**SMC**, an EMS start-up, is offering EMS, wire harness and cable assembly, and systems integration in Nicholasville, KY. SMC is co-located in a 22,500-ft² facility with **Custom Wiring**, a wire and cable assembly

operation. Both companies are owned by the same person, Rob Coats. In 2007, Coats sold a Lexington, KY-based EMS company also named SMC to Top 50 EMS provider **Creation Technologies** (Burnaby, BC, Canada).

Flat outlook... According to an **IHS iSuppli** EMS & ODM Market Brief report, EMS revenue will show almost no growth in 2012, barely budging from \$206.8 billion in 2011 to \$207.5 billion this year. That's an increase of just 0.3%.

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