Manufacturing Market

inside the contract manufacturing industry

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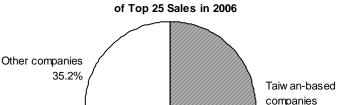
Top 25 Outsourcing Providers Surpass \$200 Billion

Taiwan takes the leading share

Lest anyone doubt that outsourcing of electronics manufacturing and related activities is now a \$200-billion-plus business, consider some empirical data. Revenue of the 25 largest providers in outsourcing, as identified by MMI, totaled \$205.3 billion last year. This business is not only huge; it continued to grow nicely in 2006, thanks to the staying power of outsourcing. MMI's top 25 outsourcing providers collectively increased their sales by 21.6%, which is easily above average forecasts of outsourcing revenue (EMS + ODM) for both the long-term and 2006 (Dec. 2006, p. 1).

A 21.6% growth rate confirms the belief of those who have hitched their businesses to the outsourcing trend. But top 25 results also present some bad new for providers who compete against companies based in Taiwan. Taiwanese companies controlled a clear majority of top 25 revenue in 2006. The 15 Taiwan-based companies in the top 25 accounted for sales of \$123.4 billion, or 64.8% of group revenue (Chart 1). Taiwan's predominant share results primarily from the rapid growth of the ODM business in Taiwan and the meteoric rise of one Taiwan-based company, Hon Hai **Precision Industry.**

What a difference a decade makes.



64.8%

Chart 1: Taiwan-Based Companies' Share

In the mid to late 1990s, outsourcing was centered around US-based EMS providers, and Taiwanese companies were barely recognized as competitors in the outsourcing space, if at all, by the EMS world.

This marks the third straight year of top 25 growth above 20% (Chart 2, p. 3). Over four years from 2003 to 2006, top 25 growth rates have averaged 22.1%, showing that outsourcing overall has advanced briskly through the period with barely a hiccup.

As in the previous four years, *MMI* ranked the largest providers in outsourcing by total sales in 2006, as expressed in US dollars. Results are tabulated on page 2.

Hon Hai finished in first place by a wide margin,

which was not unexpected given its commanding lead in the *MMI* Top 50TM list of the largest EMS providers (March, p. 2). Now that Hon Hai has reported its consolidated sales for 2006, the world's largest provider crossed the \$40-billion line with its 2006 sales. No other provider in the outsourcing space even approached \$20 billion last year. While Hon Hai's 2006 increase of 38% (in US dollars) was down from a preternatural 75% rate achieved the year before, the com-

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pany's 2006 growth was still well above the top 25 overall rate.

Flextronics maintained its hold on the number-two position in the outsourcing world, but not by much. Coming in a close third was ODM Asustek Computer, which moved up two spots from 2005. ODMs occupied fourth and fifth place as well. Quanta Computer dropped to fourth position in 2006 from third the year before, while Compal Electronics rose three positions to fifth. EMS providers Solectron, Jabil Circuit, Sanmina-SCI and Celestica took the next four spots, but only one of them, Jabil, moved up in the standings. Rounding out the top ten was ODM Inventec, whose \$7.91 billion in sales became the minimum required to achieve a top 10 rank. The top 10 minimum increased by about \$827 million from 2005.

While it got harder to earn a top 10 position last year, the same could not be said for making the top 25. The top 25 cutoff actually fell to \$870 million from \$944 million for 2005. This result, which goes against the overall growth of the top 25, is most likely an anomaly that won't be repeated. That's because two companies at the bottom of the 2005 list – **Jurong Technologies** and **Arima Communications** – dropped off because of sales declines. If either one of these had grown, the bar would have been raised.

Two other companies, **BenQ** and **High Tech Computer**, did not return to top 25 for 2006 because of their reliance on own brand sales.

Four Asia-based companies made the top 25 for the first time. Two of them, **TPV Technology** and **Innolux Display** are monitor ODMs, while a third, **Compal Communications**, is a mobile phone ODM. All three ODMs are headquartered in Taiwan. Also added to the list was **Nam Tai Electronics**, an EMS provider based in Macao.

Among the Taiwanese companies

	Top 25 Prov	riders in C	Outsourd	ing fo	r 2006		
	- -	Sales	2006		Sales	Sales	Primary
Organization	Headquarters		,		calendar	growth	business
	'	2006 (M US\$)	total sales	rank	2005 (M US\$)	'05-'06 (%)	model
Hon Hai Dre-	Tu-Cheng, Taiwan	40,619	<u> </u>	1	29,520		EMS/OBM/
cision Industry	ru-Crieriy, laiwari	40,019	-		,		ODM
Flextronics	Singapore	17,708	2	2	15,297		EMS/ODM
Asustek Computer	Taipei, Taiwan	17,235	3	5	11,984	44	ODM/OBM/ EMS
Quanta Computer	Tao Yuan Shien, Taiwan	16,541	4	3	14,915	11	ODM
Compal Electronics	Taipei, Taiwan	11,764	5	8	8,262	42	ODM
Solectron	Milpitas, CA	11,103	6	6	10,207	9	EMS
Jabil Circuit	St. Petersburg,	11,087	7	9	8,095	37	EMS
Sanmina-SCI	San Jose, CA	10,872	8	4	11,344	-4	EMS
Celestica	Toronto, Canada	8,812	9	7	8,471	4	EMS
Inventec	Taipei, Taiwan	7,908	10	11	6,185	28	ODM
TPV Technology	Taipei, Taiwan	7,176	11	new	5,054	42	ODM/OBM
Lite-On Technology	Taipei, Taiwan	6,836	12	10	7,081	-3	ODM
Wistron	Hsinchu, Taiwan	6,800	13	14	5,127	33	ODM/EMS
Elcoteq	Espoo, Finland	5,375	14	13	5,185	4	EMS
New Kinpo Group*	Taipei, Taiwan	3,300	15	22	2,430	36	EMS/ODM
Innolux Display	Miao-Li, Taiwan	3,251	16	new	1,614	101	ODM
Inventec Appliances	Taipei, Taiwan	3,236	17	15	3,745	-14	ODM/OBM
Benchmark Electronics	Angleton, TX	2,907	18	19	2,257	29	EMS
MiTAC International	Hsin-Chu Hsien, Taiwan	2,821	19	16	2,609	8	ODM/OBM
Compal Communications	Taipei, Taiwan	2,205	20	new	1,207	83	ODM
Venture	Singapore	1,968	21	20	1,993	-1	EMS/ODM
FIC Global	Taipei, Taiwan	1,739	22	17	2,534	-31	ODM
USI (Universal Scientific Industrial)	Nan-Tou, Taiwan	1,636	23	21	1,610	2	
Plexus	Neenah, WI	1,513	24	23	1,270	19	EMS
Nam Tai Electronics	Macao	870	25	new	797	9	EMS
Total/avg.		205,282			168,791	21.6	

Companies with multiple businesses were classified as EMS or ODM as indicated by the first acronym in the business model description. Some currency conversions, when necessary, were done using average annual exchange rates from the US Federal Reserve.

* New Kinpo Group was formed in 2006. 2005 rank was based on sales of Cal-Comp Electronics, now part of New Kinpo Group.

in the top 25, there are some interesting linkages. Three companies, Compal Electronics, **New Kinpo Group** and Compal Communications are members of the Kinpo Group. **Inventec Appliances** is a spinoff from Inventec, and Hon Hai has invested in

Innolux Display.

In at least seven cases, top 25 companies mixed EMS business with ODM. These hybrid companies muddy the waters of analysis when comparing EMS and ODM growth rates. Nevertheless, for the purposes of analysis



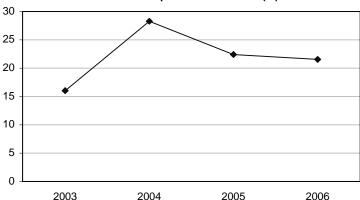
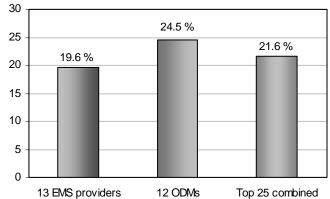


Chart 3: 2006 Growth Percentage in US\$



MMI classified companies EMS or ODM based on which category represented a majority of their sales or was estimated to be in the majority (see table).

Last year, 12 companies identified as ODMs in the top 25 showed combined revenue growth of 24.5%, nearly five percentage points higher than the 19.6% growth of the 13 EMS providers in the group (Chart 3 above). These results can be viewed as either a

negative or a positive. The news is bad because it offers further evidence to those who believe that the ODM model fosters higher growth than the EMS model does. But there is a silver lining in these results. They indicate that the gap between ODM and EMS growth narrowed in 2006 because in 2005 the difference between the two top 25 growth rates was some 19 percentage points (May 2006, p. 1).

Despite a lagging growth rate, the

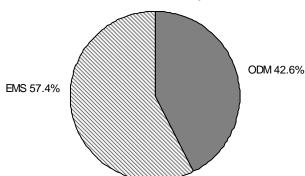
EMS side of the top 25 retained a majority share of the group's revenue. Sales of the 13 EMS providers in the group amounted to \$117.8 billion, or 57.4% of top 25 revenue (Chart 4 left). That's a loss of 60 basis points from the 58.0% share taken by EMS providers in the

2005 top 25.

ODMs registered the highest growth rates in the 2006 top 25, and five of them exceeded 40% annual growth. The fastest growers were Innolux Display and Compal Communications with increases of 101% and 83% respectively (in US dollars). However, the two companies with the greatest sales declines, **Inventec Appliances** and **FIC Global**, were on the ODM side as well.

Editor's note: At least five companies in the top 25 produce their own brands in addition to manufacturing for others. Unfortunately, these companies do not break out their sales from own brand manufacturing (OBM). Because OBM revenue is counted as part of total sales in these cases, top 25 sales and growth figures are to some degree adulterated by this OBM revenue. Still, MMI believes that OBM in most if not all cases represented a minority of total sales.





Growth on the EMS side came in at a healthy 19.5% but 7.5 percentage points below the outsourcing group average. Within the EMS subgroup, eight US-traded providers accounted for a respectable 15.0% increase year over year, despite a sequential decline of 9.7% (Table 2, p. 4). Seven EMS providers listed outside the US produced growth at the

Outsourcing Group Off to Fast Start

On a year-over-year basis, combined Q1 revenues were up smartly for 25 large companies in the outsourcing space. This group of 15 EMS providers and 10 ODMs began the year with aggregate growth of 27.0% in the first quarter (Table 1). Revenue for the group totaled \$46.3 billion.

Table 1: Q	Table 1: Q1 Revenue by Outsourcing								
	Groups in M US\$								
EMS Group	No. of	Q1 '07	Q1 '06	%					
EIVIS GIOUP	cos.	revenue	revenue	chg.					
Listed	7	10,384	8,157	27.3					
outside US									
US-listed	8	16,272	14,145	15.0					
Combined	15	26,656	22,302	19.5					
EMS									
ODM Group	10	19,605	14,131	38.7					
Total/avg.	25	46,261	36,433	27.0					

outsourcing group average, mostly because of the contribution by the world's biggest EMS provider, **Hon Hai Precision Industry** (Table 3).

The 10 Taiwan-based ODMs in this

analysis are off to an especially fast start in 2007. In US dollars, their combined revenues in Q1 rose by 38.7% from a year earlier (Table 4). **Asustek Computer**, the largest of these ODMs, also posted by far the highest growth.

MMI also tracks performance of other EMS providers. Tabulated here are the results of six smaller providers traded in the US (Table 5, p. 5).

	Т	able 2: C	21 200	7 GAAP	Resu	ts for E	ight La	arge EN	IS Prov	/iders,	US Tra	ded (N	1\$ or %)		
Company (in order of Q1 sales)	Q1 '07 sales	Q4 '06 sales	Qtr qtr. chg.	Q1 '06 sales	Yryr.	gross		Q1 '06 gross profit	gross	oper.		oper.	Q1 '06 oper. marg.			Q1 '06 net inc.
Flextronics	4,676.8	5,415.5	-13.6	3,530.9	32.5	225.5	4.8	156.9	4.4	61.2	1.3	31.6	0.9	120.7	118.6	42.9
Jabil	2,934.9	3,224.0	-9.0	2,315.0	26.8	171.5	5.8	184.6	8.0	36.7	1.3	83.3	3.6	13.9	41.4	69.0
Solectron	2,901.9	2,999.1	-3.2	2,499.6	16.1	152.8	5.3	129.0	5.2	19.6	0.7	19.1	0.8	15.3	6.0	30.4
Sanmina-SCI	2,611.7	2,778.8	-6.0	2,668.4	-2.1	137.7	5.3	164.6	6.2	14.7	0.6	44.4	1.7	(26.1)	28.2	(76.1)
Celestica	1,842.3	2,261.8	-18.5	1,934.0	-4.7	78.6	4.3	105.8	5.5	(9.0)	-0.5	7.2	0.4	(34.3)	(60.8)	(17.4)
Benchmark	752.5	737.3	2.1	651.2	15.6	54.5	7.2	45.4	7.0	27.4	3.6	26.2	4.0	24.5	28.3	26.5
Plexus	360.2	380.8	-5.4	337.9	6.6	31.6	8.8	37.0	10.9	10.7	3.0	17.7	5.2	10.2	15.1	18.5
Nam Tai	191.6	229.6	-16.6	208.4	-8.1	17.2	9.0	21.1	10.1	7.2	3.8	12.6	6.0	8.4	(2.3)	12.5
Total/avg.	16,271.9	18,026.9	-9.7	14,145.4	15.0	869.4	5.3	844.4	6.0	168.5	1.0	242.1	1.7	132.6	174.5	106.3

	Tal	ble 3: Q1	2007 Res	ults for S	even L	arge EM	S Provid	ers Tr	aded Out	side the	US		
Company I	Home base	Cur- rency	Q1 '07 sales	Q1 '06 sales	% chg.	Q1 '07 net inc.	Q1'06 net inc.	% chg.	Q1 '07 sales (M \$)	Q1 '06 sales (M \$)	% chg.	Q1 '07 net inc. (M \$)	Q1'06 net inc. (M \$)
Hon Hai*	Taiwan	M NT\$	245,605	183,829	33.6	15,628	10,498	48.9	7,462	5,696	31.0	475	325
Elcoteq	Finland	M euros	952.5	981.1	-2.9	(46.9)	2.1	NA	1,248	1,180	5.8	(61)	3
Venture	Singapore	K S\$	968,901	733,865	32.0	70,713	49,363	43.3	633	451	40.2	46	30
Cal-Comp	Thailand	M baht	21,227	13,642	55.6	710	349	103.2	626	347	80.2	21	9
USI*	Taiwan	M NT\$	8,990	9,626	-6.6	511	258	97.8	273	298	-8.4	16	8
Jurong	Singapore	K S\$	218,316	298,708	-26.9	12,774	16,465	-22.4	143	184	-22.4	8	10
Beyonics	Singapore	K S\$	200,318	226,899	-11.7	5,066	5,368	-5.6	131	139	-6.2	3	3
Total/avg.									10,384	8,157	27.3	504	385
Currencies co	onverted to US	S\$ using 3-	month avera	ages of mor	nthly 200	6 and 200	7 data fror	n the US	S Federal I	Reserve. *	Sales ar	e non-con	solidated.

		Table 4	1· O1 2	007 Res	sults for	Ten Laro	ge Taiwar	-Rased (DMs			
	Q1 '07	Q1 '06	% . Q.	Q1 '07	Q1 '06	Q1 '07	Q1 '06	Q1 '07	Q1 '06	0/	Q1 '07	Q1 '06
Company	sales (M NT\$)	sales (M NT\$)	chg.	oper. marg.	oper. marg.	net. inc. (M NT\$)	net. inc. (M NT\$)	sales (M \$)	sales (M \$)	% chg.	net. inc. (M \$)	net. inc. (M \$)
Asustek	182,940	72,110	153.7	2.2	1.3	6,731	4,216	5,558	2,235	148.7	204	131
Quanta	143,232	104,980	36.4	1.5	2.3	3,402	2,745	4,351	3,253	33.8	103	85
Compal	96,980	59,656	62.6	3.4	3.4	2,601	2,201	2,946	1,849	59.4	79	68
Inventec	58,175	49,932	16.5	2.0	1.6	1,626	1,019	1,767	1,547	14.2	49	32
Wistron	51,597	50,425	2.3	2.5	3.0	1,096	1,284	1,568	1,563	0.3	33	40
Lite-On	35,035	38,063	-8.0	1.9	3.8	1,737	2,059	1,064	1,179	-9.8	53	64
Innolux	29,831	21,300	40.1	4.9	1.1	1,036	81	906	660	37.3	31	3
MiTAC	17,898	18,495	-3.2	4.9	5.3	1,042	1,010	544	573	-5.1	32	31
Compal Com- munications	15,314	16,364	-6.4	5.5	6.0	1,241	1,264	465	507	-8.3	38	39
Inventec Appliances	14,305	24,710	-42.1	0.1	1.1	557	573	435	766	-43.2	17	18
Total/avg.	645,307	456,035	41.5	2.5	2.5	21,069	16,452	19,605	14,131	38.7	640	510
Currency converted	l to US\$ usi	ng 3-month	average	s of mont	hly 2006	and 2007 o	data from th	e US Fede	ral Reserv	e. Sales	are non-co	nsolidated.

	T	able 5:	Q1 20	07 GAA	P Res	sults fo	r Six S	maller	EMS Pr	ovider	s, US T	raded	(M\$ or	%)		
Company (in order of	Q1 '07	Q4 '06	Qtr qtr.	Q1 '06	Yryr.	Q1 '07			Q1 '06	Q1 '07	Q1 '07	Q1' 06	Q1 '06	Q1 '07	Q4 '06	Q1 '06
Q1 sales)	sales	sales	chg.	sales	chg.	gross profit	gross marg.	gross profit	gross marg.	opon.	oper. marg.	opon.	oper. marg.	net inc.	net inc.	net inc.
SMTC	69.5	76.1	-8.7	59.9	16.0	6.5	9.4	6.1	10.1	2.9	4.2	2.2	3.7	2.8	2.1	1.0
Suntron	65.2	69.3	-5.9	95.8	-31.9	3.5	5.4	8.0	8.4	(1.2)	-1.8	1.7	1.8	(1.7)	(5.7)	(1.1)
LaBarge	59.6	60.8	-2.0	47.3	26.0	11.0	18.5	9.8	20.7	4.2	7.0	4.3	9.1	2.8	3.2	2.3
Sparton	47.7	53.1	-10.2	45.3	5.3	0.7	1.5	4.7	10.5	(3.7)	-7.8	0.8	1.7	(2.3)	(1.4)	0.7
Key Tronic	47.2	49.8	-5.2	45.6	3.5	3.7	7.8	4.0	8.8	1.1	2.3	1.2	2.6	0.7	0.3	0.9
Nortech	28.0	27.7	1.1	26.0	7.7	3.6	13.0	3.2	12.2	0.7	2.3	0.6	2.3	0.3	0.4	0.3
Total/avg.	317.2	336.8	-5.8	319.9	-0.8	29.0	9.2	35.8	11.2	4.0	1.2	10.8	3.4	2.6	(1.1)	4.1

First-Half Outlook for US-Traded Sector

Despite recent reports of softness in some end markets, the largest US-traded providers are still projected to achieve double-digit growth collectively in the first half of 2007. *MMI* estimates that the seven largest EMS providers in the US-traded group will combine for 11.0% growth in the first half. Projected sales for these companies total \$32.6 billion for the period.

MMI estimated first-half sales for each company by adding the midpoint of the company's Q2 revenue guidance to its Q1 sales (Table 1).

According to *MMI's* projections, top-line performance in the first-half will vary quite a bit among the seven companies. Only four providers out of seven are expected to increase their sales, with **Flextronics'** projected

Table 1: First Half 2007 Estimates for Seven Large Providers (sales in B\$ except as noted)									
Company	Q1 '07 sales	Q2 guidance	Q2	Q1-2 '07 estimat- ed sales	Q1-2 '06 sales	Esti- mated growth			
Flextronics	4.68	4.8 - 5.0	4.9	9.58	7.59	26.2			
Solectron	2.90	2.90 - 3.10	3.00	5.90	5.20	13.5			
Jabil	2.93	2.9 - 3.0	2.95	5.88	4.91	19.9			
Sanmina-SCI	2.61	2.55 - 2.65	2.60	5.21	5.38	-3.1			
Celestica	1.84	1.85 -2.05	1.95	3.79	4.16	-8.8			
Benchmark	753 M	740 - 775 M	758 M	1.51	1.40	7.8			
Plexus	360 M	365 - 375 M	370 M	0.73	0.74	-0.7			
Total/avg.				32.61	29.37	11.0			

growth of 26% leading the pack, followed by **Jabil Circuit** and **Solectron** also in double digits. First-half revenue declines are estimated for **Celestica** and **Sanmina-SCI**, while **Plexus'** sales are projected to be essentially flat in the period.

Jabil and Solectron will continue to vie for second place among the UStraded providers (third overall), and MMI estimates have Solectron ahead of Jabil by a slim margin of about \$20 million for the first half. It is far from clear that such a narrow lead will hold up once actual sales are tallied.

Five of these US-traded providers have issued either sales guidance or goals for their current fiscal years (Table 2). Because fiscal years end at different times, drawing conclusions from them for the calendar year would not work. Indeed, only one company, **Benchmark Electronics**, has a fiscal year based on the calendar year.

But if expectations or targets have changed over time, that says something about a company's view of its future prospects. In three cases out of five, a company lowered its sales guidance or target for its fiscal year (Table 2). So these three companies are less optimistic about fiscal year sales than they were when they issued their original guidance or target.

Still, for the US-traded group the first half of 2007 is shaping up to be a

	Table 2: EMS C	Company Fiscal Year Outle	ook or Goal
Company	Fiscal year end	Current revenue outlook or goal	Original revenue outlook or goal
Flextronics	March 2008	Expects 10-15% growth to a range of \$20.7-\$21.7 billion	same
Jabil	August 2007	Expects 17-18% growth including Green Point acquisition	Expected revenue growth of about 20% (not including Green Point)
Solectron	August 2007	Goal is to exceed \$11.5 billion (or 8.9% growth)	same
Benchmark	December 2007	Expects top line growth of about 8%	Expected top line growth of 12%-15%
Plexus	September 2007	Growth target of 6% to 8%	Orginal target of 15% to 18% was first revised to 8% to 12%

better growth period overall than was the first half of 2006 when aggregate growth of the seven providers amounted to 4.2%.

World Markets

Two Top-Six Providers Vote for Vietnam

Vietnam has become the new hot spot for EMS investment in Asia. Hon Hai Precision Industry (Tu-Cheng, Taiwan) recently brought Vietnam to the front burner as it was reported that Hon Hai was targeting Vietnam for investment (Jan., p. 6). Now Jabil Circuit (St. Petersburg, FL) is turning up the heat. The company is moving into Vietnam with the addition of a facility in Ho Chi Minh City. These votes for Vietnam by two of the world's top-six providers show a need to add low-cost manufacturing outside of China, where labor costs have been rising.

Jabil has chosen the city's Saigon Hi-Tech Park for the location of the company's new 55,000-ft facility (expandable to 120,000), scheduled to be operational in June. While the initial investment will be modest, Jabil expects the location to grow in importance over time. The industrial park's website reports that Jabil's total investment will amount to \$100 million and its Vietnam operation will employ about 2,400 workers when fully ramped.

"We are developing Vietnam as a production-for-export location. Vietnam offers a globally competitive cost base, a strong work force and provides good balance to our Asia footprint," stated Bill Muir Jabil's regional president for Asia. The company believes that in the long term Vietnam will be an integral part of its customers' global supply chain.

As for Hon Hai, online sources of Vietnam news are reporting that the world's largest EMS provider will invest a total of \$5 billion in Vietnam. Reportedly, the company has singled out the northern provinces of Bac Ninh and Bac Giang for the location of its first manufacturing centers in the country. According to some reports, Hon Hai will spend \$3 billion on projects in the two provinces. Two other reports put Hon Hai's 2007 investment in Vietnam at \$1 billion or so. Hon Hai's first facility in Vietnam may arise in Bac Ninh as Hon Hai reportedly has been allocated 11,000 m² in a Bac Ninh industrial park.

Jabil and Hon Hai will not be the first EMS providers to manufacture in Vietnam. At least two providers, **Sparton** (Jackson, MI) and **CEI Contract Manufacturing Limited** (Singapore), already operate plants there.

News

FDA Actions Impact Two Providers

The medical sector has attracted providers seeking to unlock the outsourcing potential of this nontraditional market. Over the past few years, various providers have enjoyed growing medical businesses. But there is a catch. The U.S. Food and Drug Administration (FDA), under its authority to regulate medical devices, has the power to cause delays in medical programs if necessary. And recent FDA actions have done just that in the case of two EMS providers.

Take **Benchmark Electronics** (Angleton, TX). Four medical programs for three Benchmark customers, totaling about \$30 million in revenue per quarter, have been interrupted by regulatory actions. That means Benchmark will forgo some \$30 million of medical revenue in Q2. But these revenue streams are being delayed, not lost, and the company expects the regulatory issues to be resolved over the next two quarters. "Some of the programs will be released back into production

likely in Q3 and another one probably in Q4," said Gayla Delly, Benchmark's president, during an April conference call to discuss the company's O1 results.

These regulatory actions caused Benchmark to lower its medical sector forecast for Q2 and the full year. Furthermore, the affected medical programs were cited as one of two factors responsible for Benchmark lowering its full-year guidance (see Table 2, p. 5).

For all three medical customers, it's completely the customer's problem with the FDA, according to Benchmark spokesperson Ellen Sykora.

The other provider seeing the impact of FDA actions is **Plexus** (Neenah, WI). FDA issues facing certain accounts were among the causes for March quarter weakness in the company's medical business, Plexus reported.

"I think the FDA is certainly beginning to understand the [outsourcing] model in the industry and is perhaps getting somewhat more aggressive," Dean Foate, Plexus' president and CEO, told analysts last month during its March quarter earnings conference call. "But I think they're doing what they need to in order to make sure that everybody is building product appropriately." He added that he didn't believe that the situations at Plexus and its competitor are necessarily related other than the FDA is involved.

According to Foate, an FDA problem occurred at a customer's facilities, not those of Plexus. Plexus does not have the complete story regarding this problem, but reported that it involves manufacturing, documentation and process tracking. The customer is reviewing all of its product lines in its various facilities to ensure that similar problems do not exist elsewhere within its operations. This effort "is somewhat causing the stall that we're seeing in overall programs," said Foate.

If the FDA is in fact becoming more aggressive in its oversight of

medical device manufacturing, where outsourcing is on the rise, then risks go up for both EMS providers and their medical customers. Providers can satisfy FDA regulations and yet still be vulnerable to program interruptions caused by FDA issues at customer sites.

Jabil Files 10-K at Last

After a long wait, **Jabil Circuit** (St. Petersburg, FL) has filed Form 10-K for its fiscal year ended Aug. 31, 2006. Sales for the year increased 36.4% to \$10.27 billion, but earnings did not follow suit. Net income for fiscal 2006 amounted to \$164.5 million, down 19.3% from a restated \$203.9 million in the prior year. Included in fiscal 2006 results were restructuring charges of \$81.9 million and restructuring-related valuation allowances of \$37.1 million on net deferred tax assets, the latter recorded as income tax expense.

Jabil put off filing the 10-K pending the completion of a review of its historical practices for stock option grants (Sept. 2006, p. 8). The filing was also delayed by a review to determine whether the company properly recognized revenue associated with certain transactions (proposed or effected) between 1992 and 2002.

As a result of the stock option review, the company recorded additional stock-based compensation charges totaling about \$41.1 million net of tax (\$54.3 million gross) for fiscal 1996 through 2005 (see also March, p. 6-7). Jabil's 10-K reflects these charges and restates certain of its financial statements for fiscal 2002 through 2005.

A special review committee of Jabil's board concluded earlier there was no merit to the claim that Jabil's officers engaged in backdating, either directly or through others (Dec. 2006, p. 3).

The review of revenue recognition found one transaction that had inadequate documentation to support Jabil's recognition of \$6 million in fiscal 2001 revenue and the fiscal 2002 expense associated with the return of those funds. Jabil determined that the impact on the prior years' income statements was immaterial.

As this is written on May 24, Jabil reported its results for the Nov. 2006 and Feb. 2007 quarters (Q1 and Q2 fiscal 2007). See Table 2 on page 4.

More authorities involved at Sanmina-SCI

Sanmina-SCI (San Jose, CA), the other provider that investigated its equity awards, earlier resumed quarterly filings with the SEC. Although the company has issued the findings of its investigation, government scrutiny is not going away. If anything, it's increasing.

Two more US government agencies are now involved with the stock options issue at Sanmina-SCI. In the company's latest Form 10-Q, it reported that the Department of Labor is conducting an informal inquiry into the matter. The filing also noted that Sanmina-SCI has received an information document request from the Internal Revenue Service in connection with certain historical stock option grants. Sanmina-SCI previously reported that the SEC has an inquiry underway and that the company has received a subpoena from the U.S. Attorney's office.

Assets purchased...Hon Hai Precision Industry (Tu-Cheng, Taiwan), also known by its Foxconn trade name, has purchased \$31.7 million worth of equipment from Sony Taiwan, according to Hon Hai announcements posted on the Taiwan Stock Exchange. The world's largest provider paid NT\$550.4 million (\$16.5 million) for 142 SMT machines and NT\$507.2 million (\$15.2 million) for 53 pieces of unidentified equipment. When purchased, all of the equipment was located in Taichung City, Taiwan. SMT equipment transfers began in

November 2006 and continued through April 2007, while Hon Hai took possession of the other equipment over a period from May 2006 to April 2007. Equipment transfers of this sort can occur when existing production is outsourced.

New business... Solectron's Charlotte, NC, plant is manufacturing the CryoSpray Ablation system for CSA Medical (Baltimore, MD). This system freezes and destroys unwanted tissues found in the esophagus, which arise from chronic acid reflux. Solectron also manages orders and ships directly to CSA Medical customers. ...Publicly held CTS, whose EMS unit is based in Moorpark, CA, and Ambient (Newton, MA) have entered into an agreement to ensure volume production capability of Ambient's X BPL (broadband over power lines) access node. According to a statement from the two companies, this agreement strengthens their relationship. ...Key Tronic (Spokane Valley, WA) plans to begin providing product assembly for Imation's tape-based data storage cartridges in July under a contract that Key Tronic expects to enter into with Imation. The new business is expected to contribute about \$20 million to Key Tronic's annual revenue. Key Tronic intends to perform the assembly operations in its primary manufacturing facility in Juarez, Mexico. ...LaBarge (St. Louis, MO) has received two contracts from BAE Svstems. The first one, worth \$1 million, calls for LaBarge to produce electronic assemblies for an improved recovery vehicle, used to retrieve heavy combat equipment damaged on the battlefield or otherwise inoperative. Under the second contract, valued at \$2 million, the provider has started production of ruggedized card assemblies for a missile warning system deployed on a variety of military aircraft....ITEC (Nagano, Japan), a wireless EMS provider, will manufacture an active RFID product line of tags and readers for **RF Code** (Mesa, AZ). ITEC will also serve as a channel distribution partner for RF Code. ... Under a multiyear agreement, **Electronic Systems, Inc.** (Sioux Falls, SD) will supply substantially all of **AbleNet's** hardware products. AbleNet (Roseville, MN) provides technology and programs for people with disabilities.

New or expanded facilities... Solectron has announced the expansion of its product development facility in Shanghai, China. Dave Purvis, executive VP and chief technical officer at Solectron, reported that the company is "seeing tremendous demand for complete product development services in China." Solectron expects to hire more than 100 engineers to support this growth....SMTC (Markham, Ontario, Canada) is establishing a new precision manufacturing facility on its Chihuahua, Mexico, site. The company said this facility will broaden services and capabilities for customers of SMTC's enclosure systems division. SMTC expects the new facility to be operational later this year.

People on the move...Terry Cheng, who is leaving **Texas Instruments** after serving as president of TI's oper-

ations in Asia, will join Hon Hai, reported Digitimes.com, which cited a Chinese-language daily....Elcoteq (Espoo, Finland) has announced two promotions. Tommi Pettersson, formerly an account director for certain strategic customers, has been named VP for account management in the Communications Networks business. Jason Phillips has moved up to VP for account management in the Personal Communications business. At Elcoteq in the Americas, Phillips worked as a business development manager and an account director....F. Gordon Bitter will retire from his role as senior VP and CFO at Plexus. The company has named Ginger Jones, its newly hired VP of finance, as his successor. She joined Plexus after serving as VP, corporate controller for Banta Corporation...Nam Tai Electronics (Macao) has brought in John Farina as CFO. He spent over ten years at top-six provider Celestica (Toronto, Canada), where he was part of the company's founding management team. Patinda Lei, who was interim CFO, will now be able to concentrate solely on managing the business of Zastron Precision-Tech Limited, a wholly owned subsidiary of Nam Tai....Kimball Electronics Group (Jasper, IN), a subsidiary of publicly held Kimball International, has appointed Kevin Stokes to the newly created position of VP, global technical services. His responsibilities include oversight of lean six sigma, design and test, development services, advanced manufacturing, engineering, supply chain, quoting and IT for KEG units worldwide. Most recently, Stokes was director of global technical services at KEG....NOTE (Danderyd, Sweden) has named Arne Forslund president and CEO, a position he vacated in February 2007 citing differences with the board of that time. A new board has since been elected.

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