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Slight Slippage for the Top 25 in 2015

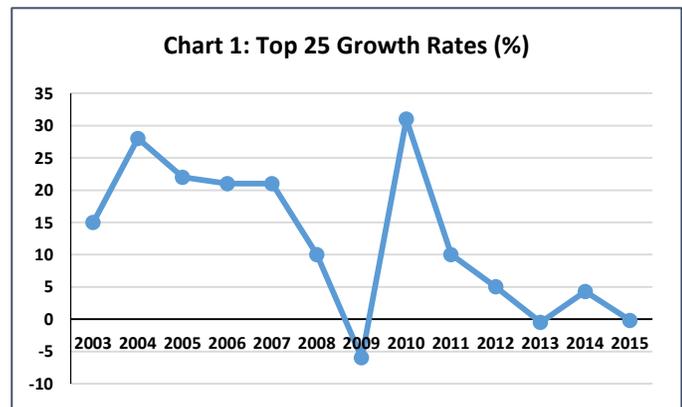
For only the third time in the past 13 years, combined revenue for the top 25 contract manufacturers (EMS providers and ODMs) failed to grow in 2015. Last year, top 25 revenue totaled \$378 billion, down 0.2% from 2014 (Chart 1). Because the top 25 group accounts for 80% to 90% of revenue in the outsourcing space, this downward tick in revenue serves as an approximate indicator of how the contract manufacturing market behaved in 2015.

Perhaps more disappointing than the lack of growth was the realization that the top 25 as a whole did not keep up with the global economy, which grew at a 3.1% rate in 2015, according to the **International Monetary Fund**. The top 25's underperformance says something about the contract manufacturing space: It can no longer be relied on to outgrow the global economic baseline. Longer-term industry attractiveness is tempered by lack of near-term catalysts. This suggests that expectations have modestly risen, while the fundamental outlook could become more challenging due to slow growth in key end markets such as telecom infrastructure, computing, consumer/smart phones, and semi-cap equipment. Last year it was clear that softness among end markets, along with revenue losses from products at end of life and cost reductions, can offset gains from new programs.

Annual sales growth for the top 25 over the last 13 years has averaged 9.1%. But annual results for the past two years haven't been anywhere near double digits, much less at that level. Once again, the question arises: Are the days of double-digit growth now behind the top 25 and, by extension, the entire contract manufacturing sector?

EMS Providers Outgrow ODMs

The top 25 contract manufacturers for 2015 consist of 17 companies whose primary business is EMS—defined here as EMS providers—and eight companies that mainly rely on ODM work—classified as ODMs. In 2015, the EMS group outgrew the ODM side by 0.9 percentage point. Combined revenue for the EMS providers increased by just 0.9%, but sales on the ODM side dropped by 3.4% (Chart 2, p. 4). It's no surprise that 2015 was a tough year overall for the ODM group, given its reliance on the PC market and the market's worst-ever decline in 2015.



For 2015, EMS providers contributed 75.5% of top 25 sales, up from 73.4% in 2014. The primary reason for the share gain was due to double-digit sales growth at **Jabil Circuit** and **Pegatron**. Combined revenue on the EMS side amounted to \$285.5 billion, while the ODM cohort brought in EMS sales of \$92.5 billion, or 24.4% of the total.

As shown in Table 1 on the next page, *MMI* ranked the top 25 contract manufacturers in order of calendar 2015 sales in US dollars. It was significantly easier to make the 2015 edition of the top 25 than the previous year's version. A place in the top 25 required

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Table 1: Top 25 Contract Manufacturers for 2015

Business Model	Company	Headquarters	Sales calendar 2015 (millions USD)	Rank by 2015 (millions USD)	Sales calendar 2014 (millions USD)	2014 rank	Growth '14-'15 in US\$ (%)	No. of people	No. of plants	Total facility s.f.	No. SMT lines	No. of customers and/or notable customers
EMS	HonHai Precision Industry (Foxconn)	New Taipei, Taiwan	141,227	1	139,030	1	1.6%	1,290,000	70	45.5 M (est.)	2000 (est.)	Acer, Amazon, Apple, Blackberry, Cisco, Dell, HP, IBM, Intel, Nintendo, Sony, Visio, Xiaomi
EMS	Pegatron	Taipei, Taiwan	38,231	2	33,656	2	13.6%	250,000	11	25 M (est.)	350 (est.)	Acer, Apple, ASUS, Epson, Sony, Toshiba
ODM	Quanta Computer	Taipei, Taiwan	31,731	3	30,573	6	3.8%	100,000	13	15M	300	Acer, Apple, ASUS, Dell, Fujitsu, Google, HP, Microsoft, NEC, Panasonic, Philips, Sharp, Sony, Toshiba
ODM	Compal	Taipei, Taiwan	26,692	4	27,912	7	-4.4%	100,000 (est.)	8	13M (est.)	300 (est.)	Acer, Alcatel-Lucent, Dell, HP, Hitachi, Juniper, Linksys, Microsoft, Motorola, NEC, Panasonic, Toshiba, VIBO, Western Digital
EMS	Flextronics	San Jose, CA	24,595	5	26,921	3	-8.6%	150,000	69	27.6 M	415 (est.)	Alcatel-Lucent, Casio, Ciena, Cree Lighting, F-5 Networks, Ford, Google, HP, J&J, Lockheed, Motorola, NEC, Oracle, Pace, Q-Cells, Siemens, Sunpower, Xerox
EMS	Wistron	Taipei, Taiwan	19,634	6	19,950	4	-1.6%	24,101	8	1.4 M	78	Acer, Apple, ASUS, Dell, HP, Japan Display, Lenovo
EMS	Jabil Circuit	St. Petersburg, FL	18,557	7	15,969	5	16.2%	160,000	37	77.6 M	300 (est.)	Agilent, Apple, Cisco, EchoStar, Ericsson, GE, HP, IBM, Medtronic, Motorola, NetApp, Nokia Siemens Networks, Novartis, Pace, Sunpower, Valeo
ODM	Inventec	Taipei City, Taiwan	12,458	8	14,377	9	-13.3%	60,000	12	6M (est.)	150 (est.)	Apple, Barnes & Noble, British Telecom, Cisco, Dell, Fujitsu, Google, HP, Psion, Siemens, TI, Toshiba, Xiaomi
EMS	TPV Technology	Hong Kong	11,062	9	11,908	8	-7.1%	31,589	14	6M	130 (est.)	Dell, HP, IBM, Inventec, Mitsubishi Electric, NEC, Panasonic, Toshiba
ODM	Lite-On	Taipei, Taiwan	6,834	10	7,612	19	-10.2%	40,000	7	2M	55	Alcatel-Lucent, Dell, HP, Huawei, Microsoft, Philips, Siemens, Sony Ericsson
ODM	Delta	Taipei, Taiwan	6,409	11	6,292	17	1.9%	50,000	43	6M	100	Amazon, Apple, ASUS, Audi, Black & Decker, Dell, Cisco, Eaton, Ericsson, Facebook, Fujitsu, GE, Google, HP, IBM, Intel, Microsoft, NEC, Oracle, Rockwell, Sony, Toshiba
EMS	Sanmina	San Jose, CA	6,374	12	6,438	10	-1.0%	44,000	72	12 M	220	Advanced Digital Broadcast, AT&T, Brunswick, Canon, Ciena, Citizen, Dell, Diebold, GE, Harman, HP, IBM, Illumina, Panasonic, Philips, RF Surgical, Seagate, Trane
EMS	Celestica	Toronto, ON, Canada	5,639	13	5,630	12	0.2%	33,000	75	6.6 M	150 (est.)	Agilent, Alcatel-Lucent, Applied Materials, Baxter, Carrier, Cisco, EMC, HP, Hitachi, Honeywell, IBM, Juniper, NEC, Oracle
EMS	New Kinpo Group	New Taipei, Taiwan	4,423	14	7,230	11	-38.8%	37,377	31	15.5 M	150 (est.)	HP, Seagate, Western Digital, Panasonic, Toshiba, Hitachi, TI, Casio, Pace, Nikon, Pioneer, GE, Lenovo, ASUS, Asrock, Gigabyte, Sony, Buffalo, Epson, Samsung
ODM	Qisda	Taipei, Taiwan	4,193	15	4,406	13	-4.8%	20,000	3	3.5 M	75	NEC, Philips (displays), Siemens, Sony
EMS	USI	Shanghai, China	2,779	16	2,579	16	7.8%	15,000	7	3.2 M	128	100+
ODM	MicroStar	Taipei, Taiwan	2,687	17	2,802	23	-4.1%	10,000	4	1.6 M	35	Gateway, Fujitsu, IBM, Legend, NEC

Business Model	Company	Headquarters	Sales calendar 2015 (millions USD)	2015 rank	Sales calendar 2014 (millions USD)	2014 rank	Growth '14-'15 in US\$ (%)	No. of people	No. of plants	Total facility s.f.	No. SMT lines	No. of customers and/or notable customers
EMS	Plexus	Neenah, WI	2,607	18	2,509	18	3.9%	14,000	19	3.1 M	90	ABB, AMX, ARRIS Group, Coca-Cola, Draeger, Dragonwave, GE, General Dynamics, Gotham Networks, Harmonic, Honeywell Aerospace, Inovonics, Juniper, Motorola, MNS, Patientline, Siemens, Tellular, Visual Networks
EMS	Benchmark Electronics	Angleton, TX	2,541	19	2,797	14	-9.2%	10,500	21	3.7M	148	Applied Materials, ARRIS Solutions, Emerson, IBM
EMS	Shenzhen Kaifa	Shenzhen, China	2,447	20	2,654	15	-7.8%	23,000	7	5.8 M	>150	Seagate, Western Digital, HGST, Kingston, Samsung, ZTE, Huawei, Epson, ResMed, ENEL
EMS	Venture	Singapore	1,933	21	1,950	20	-0.9%	12,000	10	3 M (est.)	180	ABB, Agilent, HP, Honeywell, IBM, Illumina, Keysight, Micros, NCR, Oclaro, Qlogic, Talaris/Glory, Toshiba-TEC, Verifone, Waters
ODM	Elite Group Computer	New Taipei, Taiwan	1,528	22	1,828	N/A	-16.4%	9,300	2	3 M	40	Canon, Casio, HP, Olivetti, Panasonic, Sharp
EMS	Zollner	Zandt, Germany	1,304	23	1,423	21	-8.4%	9,200	17	3.1 M	63	AL Lighting Automotive, BMW, Continental, Valeo, Alcatel-Lucent, Core Optics, National Instruments, G&D, HP, IBM, BSH, Miele, ABB, Agilent, Bombardier, Carl Zeiss, Teradyne, Verigy, Draeger Medical, Dornier Medtech, Siemens, Diehl Aerospace
EMS	SIIX Corp.	Osaka, Japan	1,150	24	1,139	24	1.0%	9,567	15	1.45 M	N/A	200+
EMS	PKC Group	Raahel, Finland	1,008	25	1,101	23	-8.4%	19,640	10	1.3 M	30	Saab, Sinotruk
Total/Average			378,043		378,686		-0.2%					

Companies with multiple businesses were classified as EMS or ODM as indicated by the first acronym in the business model description. Model descriptions are not meant to capture every business a company might pursue. For Taiwan-based ODMs and Hon Hai, converting NT\$ into US\$ was done using average quarterly exchange rates based on US Federal Reserve data.

a minimum of \$1 billion, \$26 million below the 2014 cutoff of \$1.03 billion. Sales declines among the bottom ranks of the top 25 resulted in a lowering of the cutoff. Interestingly, the cutoff dropped for three consecutive years following 2010 (Chart 3, p. 4). Indeed, it's somewhat counterintuitive that entering the top 25 has become progressively easier over the last several years, but that is what the data shows. On the other hand, the barrier to entry will fall if there are sales declines at the bottom of the previous year's top 25 and any replacements haven't grown enough to support the prior year's cutoff. To *MMI*, this progressive easing of the cutoff indicates that in the \$800 million to \$1 billion range, not enough CMs have been growing.

At \$141.2 billion in sales for 2015, **Hon Hai Precision Industry** again stood unchallenged atop the top 25. The company's share of top 25 revenue increased in 2015, reaching 37.3% for a gain of 80 basis points year over year. But unlike the previous three years

when Hon Hai gave top 25 growth a substantial boost, in 2015 Hon Hai's effect was minimal, at 1.6%. Last year, revenue for the 24 companies excluding Hon Hai fell by 1.2% from a year earlier versus a decrease of 0.2% for the entire group. Hence, Hon Hai narrowed the top 25 decline by 100 basis points.

The top 25 order from second to eighth also changed in 2015. Pegatron held on to second place, followed by **Quanta Computer, Compal, Flextronics, Wistron**, Jabil Circuit, and **Inventec**. Inventec moved up one position to eighth. Inventec's upward move resulted from higher income in the smart handheld device segment, which contributed between 10 and 15 percent to last year's total revenue. It also secured 20 clients in this segment, with **Xiaomi, Inc.** accounting for the majority of revenue. Xiaomi has also chosen Inventec as a partner for its first notebook, which may be introduced in 2016. Inventec has also joined the supply chain of US company **Fitbit, Inc.**'s wearable products as a

joint design manufacturer.

There were few new entrants to the ODM group in 2015 compared with the previous year's version. One spot on the 2015 list opened up when ODM provider **MicroStar** was replaced with new entrant **Elite Group Computer**.

Sales were down at 16 CMs (Table 1). Whereas four players posted double-digit growth, ODM provider Compal Electronics climbed the highest—an ascent from 7th to 4th place. It was no coincidence that Compal Electronics also achieved the highest sales growth, at 22.1%.

Note: The EMS-versus-ODM analysis presented here does not allow for the fact that some companies pursue both EMS and ODM business. Also, the top 25's sales of \$378 billion were not all derived from EMS and ODM work. As shown in Table 1, some companies mix in revenue from other businesses such as components and own-brand manufacturing. To some degree, top 25 sales and growth figures have been

influenced by revenue from businesses outside the realm of contract

manufacturing. There may be cases where the addition of other business to

contract manufacturing revenue might have unfairly boosted a provider's rank.

Chart 2: 2015 Growth Percentages in US\$

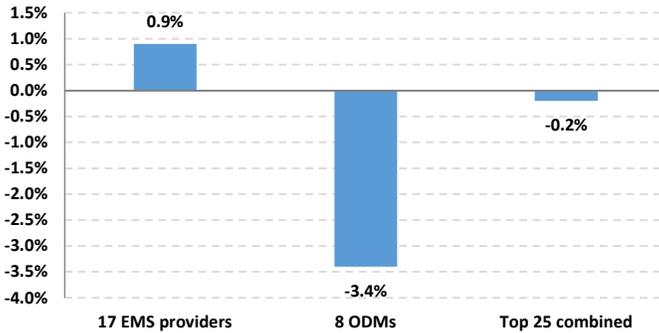
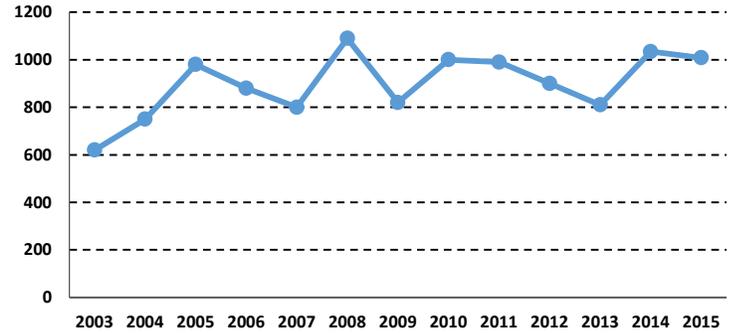


Chart 3: Top 25 Cutoff (Millions USD)



New Analysis of Market Segments

MMI has completed its latest analysis of EMS market segments by utilizing data from its annual Top 50 survey. Data from 40 of the *MMI* Top 50™ EMS providers show that consumer, mobile, and other high-velocity areas comprised the largest source of combined revenue for these players in 2015. The segments include consumer electronics and communication commodities, which together represented 48.5% of the providers' total sales of \$229 billion. Nontraditional segments—industrial/commercial, medical, automotive, defense/security/aerospace, and other—together represented 15.3% of the total (Chart 1A, p. 6).

The attraction of the consumer electronics, mobile phones, and similar product areas can be attributed to **Foxconn (Hon Hai)**, which is included in our analysis this year. Foxconn generated more than \$60 billion in revenue from this segment, with 43% market share.

Market segment percentages for the 40 Top 50 EMS providers appear in Table 1A on page 5. Percentages came directly from the providers' responses to the Top 50 survey. Ten companies in the Top 50 either did not provide a breakdown of their sales by market segment or supplied data inconsistent with *MMI's* categories.

Computer and storage took the second largest share of the 40 providers'

aggregate sales in 2015. The computer and storage segment accounted for 29.8% of combined sales. Again, Foxconn obtained 35% of its sales from the segment, while Jabil obtained more than 29% of its sales from the segment. Among some of the best diversified companies in terms of balance of industries were Flex, Jabil, Sanmina and Celestica.

For 18 providers out of 40, the computer and storage segment was one to avoid, which is no surprise. Much of the outsourcing in the computer and storage space is controlled by the EMS giant **Hon Hai**, number-two EMS provider **Pegatron**, and the ODM companies. Their considerable presence in the space shrinks the amount of business available to other EMS providers and even more so for those who eschew high volumes. Still, some providers have carved out niches for themselves within the space. For example, two providers gained more than 75% of their revenue from computer and storage: **Shenzhen Kaifa**, and **SMT Technologies**. (Table 1A).

Consumer electronics is another segment that a significant number of Top 50 providers stayed away from. Of the 40 Top 50 providers in this analysis, 19 steered clear of this segment. Of course, providers that follow a lower volume, high-mix strategy, which is common among players below the top tier, want no part of the high-volume work required in this space. Still, three providers—**V.S. Industry Berhad**, **VTech Communications**, and

Valuetronics Holdings—generated between 45% and 100% of their revenue from the consumer segment.

Although 2015 was a year of modest growth for the Top 50, the same can be said for the four main market segments shown in Chart 1A based on the results of this analysis. To see which areas grew and which did not, *MMI* performed an apples-to-apples comparison by using market segment data from 40 companies in both the 2015 and 2014 analyses. [Though we would like to note that, Foxconn and Fideltronik market share data were newly included in 2015.]

After combining the segment data from the 40 providers for both years, analysis showed that all sectors except nontraditional and communications infrastructure gained revenue in 2015 versus the prior year. The computer and storage sector posted more than double digit growth and the consumer, mobile, and other high-velocity segment posted quadruple-digit growth. The huge increase can be attributed to Foxconn's inclusion in the analysis this year. The nontraditional sector posted a decline, and the communications infrastructure segment also had declining growth in comparison with 2014.

For the 40 providers as a whole, 2015 sales from the consumer/mobile/other high-velocity segment rose 1,244%, well above the group's average growth of 154.6%. The above-average growth of this segment is likely a somewhat pleasant surprise in light of slower than expected overall

growth in world markets. Inclusion of Foxconn and helped the segment's growth markedly. Further, demand for consumer products in China and other developing countries continues unabated, giving this segment a built-in engine for growth.

Revenue from computer and storage products grew at a healthy rate, one much better than was observed for the communications infrastructure area. The 254% growth rate for computer and storage was driven by cloud infrastructure spending. According to **IDC**, spending on infrastructure for cloud environments will hit \$38.2 billion in 2016. IDC noted that its tally excludes double counting between storage and server. Private cloud infrastructure spending will be up 11.1% to \$13.9 billion in 2016, while that for the public cloud environment will deliver growth of 14.1% to \$24.4 billion.

In comparison, the decrease in sales for the communications infrastructure segment from 2014 to 2015 can be attributed to decreased corporate expenditure in segments such as mobility, collaboration, videoconferencing, and business process integration with communications. The segment lost 7,124 basis points of market share in 2015, which brought its share down to 6.4%.

For the 40 providers as a whole, 2015 sales from the nontraditional segments (plus "other") declined 29.7%, well below the group's average growth of 154.6%. The below-average growth of the nontraditional areas probably indicates a lack of new outsourcing opportunities in those areas, which tend to be less penetrated than the more mature computer and storage and communications infrastructure segments. In this comparison, the nontraditional areas lost 5,470 basis points of market share in 2015, which decreased their share to 15.3% (Table 2A, below).

The three top-tier providers in this analysis contributed 81% of total sales. As a result, these three providers heavily influenced market segment

Table 1A: Market Percentages for 40 of the Largest EMS Providers in 2015

Organization	Auto-motive	Comm. Infrastructure	Comm. Commodities	Computer & Storage	Consumer	Industrial	Medical	Military/Avionics	Other	Total EMS Sales
HonHai Precision Industry (Foxconn)	1		43	35	19	2				141,227
Flextronics	2.0	14.8	32.1	12.5	19.6	13.0	4.5	1.5		24,595
Jabil Circuit	5	15	20	29	7	12	8	4		18,557
Sanmina		39.0		21.0		25.0	15.0			6,374
Celestica		40		29	3	12	9	7		5,639
New Kinpo Group		23.3		46.6	30.1					4,423
USI	5		66	14	7	8				2,779
Plexus		32				26	28	14		2,607
Benchmark Electronics		23		22		32	14	9		2,541
Shenzhen Kaifa			11	78		6	5			2,447
Venture		20		23		57				1,933
Zollner	25	1		11	3	43	12	5		1,304
SIIX Corp.	42	2		12	1	39			5	1,150
PKC Group	100									1,008
Sumitronics	15		5	59	16	5				874
Kimball Electronics	38					25	29	8		816
Integrated Micro-Electronics, Inc.	45	20		3	11	15	3		3	772
Asteel/flash	22	5		18	2	29	5	4	15	755
Ducommun Inc.						8	10	82		666
Vtech Communications	2	2	27		54	10	5			579
Enics						100				560
V.S. Industry Berhad					100					521
Wong's International Holdings				41		53			6	490
Key Tronic	6	21		4	30	25	12	2		472
Orient Semiconductor Electronics	3	3.5		38.8	6.8	36.0	8.5	3.4		468
VIDEOTON	49	3				30			18	454
Global Brands Mfg.	3	17		66	15					445
Creation Technologies	6	21		6		44	19	4		444
Scanfil		21.0				53.0	12.0	3.0	11.0	573
Neways Electronics Intl. NV	24.0					58.0	16.0	2.0		418
éolane	25	20				25	10	20		410
Computime						100				385
ALL CIRCUITS	73	3	3			18	3			316
Valuetronics Holdings	15				45.0	30.0	10			313
LACROIX Electronics	45					16	3	10	26	311
Di-Nikko Engineering	5	5	20	50	5	5	5	5		265
TT Electronics	45					30	13	12		226
Sparton						20	48	32		430
SMT Technologies		0	2.4	75.0	22.0	0.1	0.3			220
Fideltronik	5		8		15	60	12			216

results for the entire group of 40. What do the market segments look like for providers below the top tier? When these three companies were excluded, along with three others whose nontraditional categories did not correspond with *MMI's*, a different picture emerges. For the remaining 34 EMS providers with sales under \$3 billion, the nontraditional areas overall take on greater importance. In 2015, the nontraditional segments (plus other) accounted for 43.2% of the combined revenue of those 34 providers. This result contrasts significantly with a 2014 analysis of 35 providers, in which the nontraditional areas captured share of 63.9% (April 2015, p. 6). If these results can be extrapolated to the industry at large, then it can be said that the nontraditional segments supply more than half of the revenue for providers below the top tier.

Data from providers below \$3 billion in sales show how the individual segments within the nontraditional category break down for them. For this subgroup of 34 Top 50 EMS providers, the industrial/commercial area furnished more revenue than any other segment, nontraditional or otherwise. The industrial/commercial segment represented 26% of total sales, out-sizing the other traditional segments. Again, if these results can be generalized, then the industrial/commercial segment has become the number-one revenue producer for providers below the top tier.

Next in size among the segments was computer and storage, with 24% of revenue. Growth of cloud computing and storage in 2015 helped contribute to this market share, which was 504 basis points lower than in the 2014 analysis (excluding Foxconn). Following the computer and storage segment was the automotive segment with a 14.1% share, 100 basis points higher than in the 2014 analysis.

Publisher's note: This analysis covered providers who sometimes differ as to which products go in what categories. As a result, there is some uncertainty with respect to the results presented here.

Chart 1A: Market Mix for 40 Top 50 EMS Providers in 2015

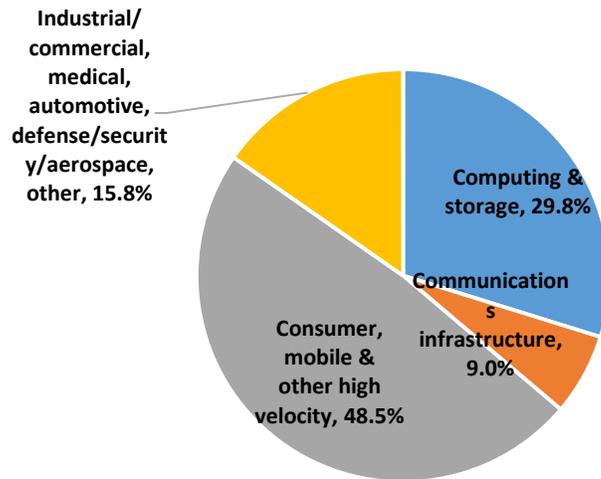


Chart 2A: Individual Markets for 34 EMS Providers Under \$3 Billion

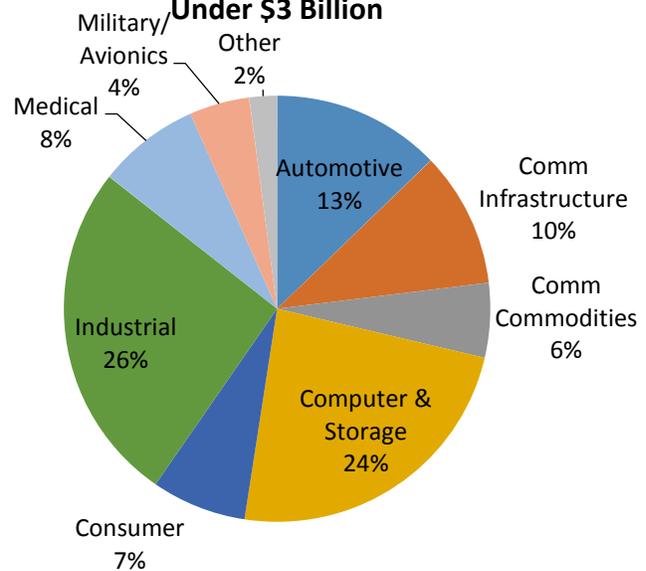


Table 2A: A Comparison of Segment Revenue for the Same 40 Top 50 EMS Providers

Segment	2015 share	2014 share	2015 sales (M)	2014 sales (M)	Change
Computing & storage	29.8%	21.4%	68,187	19,262	254.0%
Communications infrastructure	6.4%	24.3%	14,760	21,884	-32.6%
Consumer, mobile & other high velocity	48.5%	9.2%	110,976	8,258	1243.9%
Nontraditional*	15.3%	45.0%	35,060	40,530	-13.5%
			228,983	89,934	154.6%

* Includes other. Foxconn (Hon Hai) and Fieltronik have been included in this analysis.

Foxconn to Invest Billions in Chinese Subsidiaries

The Taiwanese giant is investing about \$1.65 billion in several of the company's Chinese subsidiaries. The subsidiaries receiving the investments focus on handsets, optical lenses, glass products, automation systems, and robots.

Foxconn has expanded the investment in its Zhengzhou, China subsidiary by \$1.5 billion. This company mainly deals with handset products and the investment is intended to strengthen the subsidiary's production line for new iPhone products, according to a report in *DigiTimes*.

The company has also invested about \$100 million to set up a subsidiary in China to develop, manufacture, and sell optical lenses and glass products. The rest of the investment is spread out over manufacturing machine tools and automation systems, as well as establishing another subsidiary to manufacture paper and packaging boxes, the report continues.

Facilities expansion... EMS provider **Incap** (Finland) has signed a construction contract for an expansion of its factory in India. The construction will start in April and the 2,000-square-meter expansion is scheduled to be ready by the end of 2016.

The €1 million expansion will boost Incap's manufacturing capacity to meet the demand of the growing export business.

The factory is located in Tumkur, near Bangalore. The floor space of the current facility is approximately 7,700 square meters and the number of personnel is about 400. The factory manufactures power supplies, inverters and UPSs, PCBs for fuel dispensers, and electric actuators, as well as other electronic products... Norwegian EMS provider **Norautron** is expanding in Poland. The new 8,400-square-meter subsidiary, Norautron SA, is now officially a part of the group. It also extends its offerings to include both machining and welding of mechanical components.

Executive changes... California-based EMS provider **MX Electronics Manufacturing** has recently appointed Jeffrey Nicholas as its new VP of Operations

as part of the company's ongoing expansion plan. Before MX Electronics Manufacturing, Mr. Nicholas had been with **Meggitt Sensing Systems** for over 32 years... **Flex** (Singapore) has appointed John Carlson as president of Flex Medical Solutions. Mr. Carlson joins Flex from **Johnson & Johnson**, where he spent the past 15 years in leadership roles related to medical device research and development.

TIMS Acquires Sanyo Plastics Operation in Tijuana, Mexico

EMS provider **Tekmart Integrated Manufacturing Services** (TIMS) (Mexico) has continued its expansion in Mexico through the acquisition of the Sanyo plastics operation in Tijuana.

TIMS currently operates a 650,000-square-foot facility that once housed the Thompson RCA consumer electronics manufacturing operations in Juarez. This latest expansion will increase the company's footprint to a total of 65 large injection machines, mostly in the 1000T to 3000T range, and offer over 190,000 square feet of additional manufacturing space.

The company plans to expand the Tijuana business focus beyond plastic consumer electronics to include automotive and eventually healthcare, with the addition of multiple **Fanuc** electric injection machines suited for the medical molding industry, as reported by *Evertiq*.

Partnership... **Vexos** (LaGrange, OH) and **cms electronics** (Austria) have entered into a strategic partnership agreement. The agreement aims to strengthen the global reach and scale of each company and give customers additional ability to more easily start locally and scale globally. With this relationship, the companies can both offer customers services from prototype and manufacturing to full box build, with operations now serving North America, Europe, and Asia.

Contracts awarded... **Kitron** (Norway) has been selected as an

international source for manufacturing of a subassembly related to the JSF radar system developed by Northrop Grumman Corporation for the F-35 Lightning II.

The contract for the subassembly, called the IF Receiver, was won by Kitron Norway in a best value competition. The potential value of the contract is more than NOK500 million (€53 million) over the lifetime of the agreement.

Foxconn Buys TeleEye

The giant is growing even bigger via a \$30.95 million investment to acquire a 50.07% stake in Hong Kong-based **TeleEye Holdings**.

TeleEye is an audiovisual information technology company that provides network surveillance solutions. The acquisition will provide Foxconn with access to the network surveillance market as well as ownership of related hardware technologies, according to a report in *DigiTimes*.

Sharp May Outsource Mass Production to Innolux

Sharp, following **Foxconn Electronics'** stake investment, will focus R&D and production on panels involving cutting-edge technologies, while **Innolux**, a member of the Foxconn Group, will maintain large-volume production. Sharp is likely to outsource mass production to Innolux, according to Foxconn chairman Terry Guo, speaking at a Taiwan media press conference in Japan.

In addition, Sharp will develop AMOLED technology with Foxconn's financial and global ODM/OEM support, targeting smart phones, smart wearables, and VR devices, Guo noted.

Foxconn's stake investment in Sharp is motivated by Sharp's corporate value rather than price, Guo emphasized. Including home-use electric appliances, Sharp has many cutting-edge technologies, and Foxconn will provide funding and large-scale production capability to commercialize such technologies, Guo said.

Guo is 90% confident that Sharp will quickly swing from operational troubles to profitability after the investment, reports *DigiTimes*.

Acquisitions... **PARPRO** (Taiwan) announced that it has acquired privately held **Cal Quality Electronics** (Santa Ana, CA). Based in southern California, Cal Quality Electronics (CQE) is an electronics manufacturing services (EMS) company serving OEM customers in the medical, industrial, communications, and aerospace and defense markets. The acquisition of CQE will expand PARPRO's US-based EMS capabilities and complement PARPRO's "global ODM strategy," providing customers with a total solution that extends far beyond traditional electronics manufacturing services. The companies' combined capabilities, along with their Asian supply chain, will provide customers with maximum flexibility.

New Kinpo Group Bets on Growth of Philippines Manufacturing

Taiwanese electronics giant **New Kinpo Group** will expand its operations in the Philippines by setting up more factories, potentially generating some 15,000 jobs for the country.

According to Trade Secretary Adrian S. Cristobal, Jr., this commitment from a foreign firm is proof that the Philippines is fast

becoming a regional hub for electronics manufacturing.

Cristobal said the New Kinpo Group was planning to build another facility at First Philippine Industrial Park (FPIP) in Batangas, following the completion of two other factories in the same province. One of these factories, located at the Lima Technology Center, was recently inaugurated, while the other started operations last year.

In 2015, the firm announced it was relocating many of its production lines in China by investing ₱2.8 billion for a new plant in Batangas. This facility will serve as the main production base for consumer electronics products such as calculators and electronic keyboards. Annual capacity was seen to reach nearly 1 million electronic products, catering to the requirements of customers that include **Casio**, **Texas Instruments**, and **Citizen Systems**, as reported by *Enquirer*.

Toshiba Reportedly to Sell Notebook Factory in China

Toshiba (Japan) will reportedly sell its notebook factory in Hangzhou, eastern China, and has inquired about a few Taiwan-based notebook ODMs' interest, as reported in *DigiTimes*.

The factory used to be the largest single notebook factory in the world and Toshiba was once the third-largest notebook vendor.

Toshiba is negotiating to combine its PC business with **Fujitsu's** PC business and **Vaio**, but has not yet reached a consensus, and this may be related to Toshiba's plan to sell the notebook factory, the sources said.

In addition, Toshiba has decided to quit the consumer PC business and focus on enterprise PCs, the sources noted.

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