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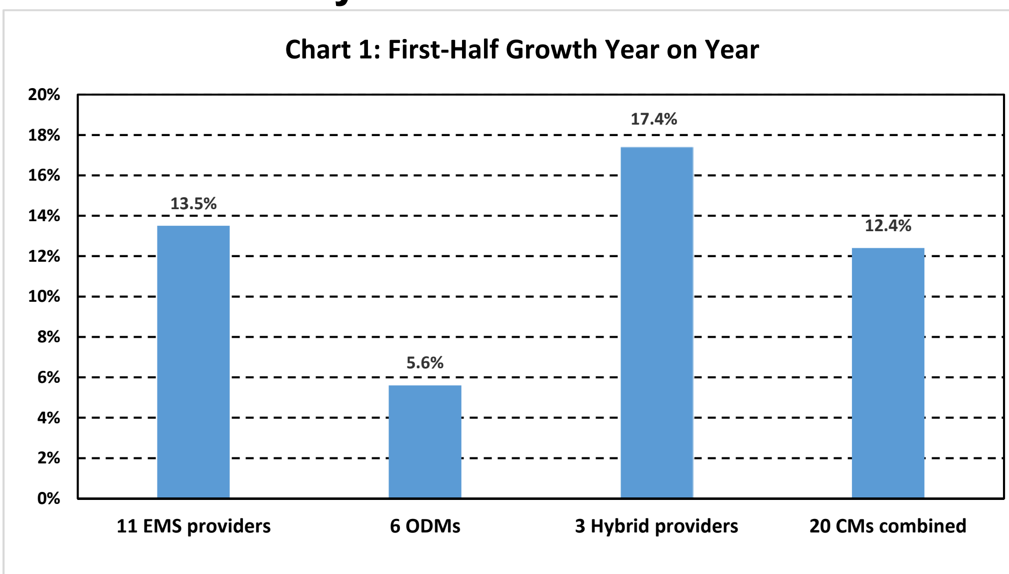
First-Half Growth Favors Hybrid Providers



Based on first-half results of 20 of the largest contract manufacturers, neither the EMS approach nor the ODM model has enjoyed an appreciable advantage this year so far. Combined first-half sales of 11 large EMS providers increased to 13.5%, while the aggregate sales of six large ODMs increased to 5.6%. Both groups were able to circumvent any macroeconomic headwinds swirling about the global economy. But that is not the end of the story of the first six months.

There is a third class of contract manufacturer—the hybrid provider—that does substantial amounts of both EMS and ODM business. In conformity with the increases of the EMS and ODM group, combined sales of three large hybrid CMs increased in the first half. The hybrid group's revenue increased by 17.4% year over year (Chart 1). If this comparison can be generalized, it would seem that all three groups—EMS, ODM, and hybrids—did a reasonable job of withstanding the vicissitudes of the first half.

Hybrid companies benefited from the rebound in demand for smart phones and tablets, plus a resurgence from traditional industries such as medical, industrial, and transportation, where ODMs have only a minor manufacturing presence.

The companies with the strongest improvement in terms of year-to-year gain were **Shenzhen Kaifa** (24.8%), **Jabil** (20.2%), **Pegatron** (19.2%), **Qisda** (18.1%), and **Plexus** (16.5%). **Foxconn**'s (Hon Hai) gross revenue increased from $62.4 billion to $71.7 billion, an increase of 14.9%. This result was the highest among the EMS group, which recorded a 13.5% growth rate in 2018.

The biggest player in the hybrid group was Pegatron. Spun off from **ASUSTeK** in 2010, Pegatron has emerged as one of the world's largest contract manufacturers, having risen to second biggest in terms of total first-half revenue (see Table 1, p. 2). While Pegatron is known as an ODM, much of its recent growth has been fueled by its **Apple** assembly business, which has expanded the EMS piece of Pegatron's revenue pie. Reportedly, Pegatron has built iPad tablets and some versions of the iPhone for Apple.

Some articles in this issue

Table 1: Q2 and Six-Month 2018 Results for 20 of the Largest Contract Manufacturers (US$M or %)																
Company	**Primary Business**	**Head-quarters**	**Reports in US$**	**2Q2018 Sales**	**1Q2018 Sales**	**Qtr.–Qtr. Chg.**	**2Q2017 Sales**	**Yr–Yr. Chg.**	**2Q2018 Net Inc.**	**1Q2018 Net Inc.**	**2Q2017 Net Inc.**	**Q1–2 ’18 Sales**	**Q1–2 ’17 Sales**	**Yr.–Yr. Chg.**	**Q1–2 ’18 Net Profit**	**Q1–2 ’17 Net Profit**
Hon Hai	EMS	Taiwan	No	36,485.2	35,277.8	3.4	30,322.6	20.3	591.1	825.9	587.8	71,763.0	62,457.2	14.9	1,417.0	1,516.1
Pegatron	ODM/EMS	Taiwan	No	9,168.2	9,633.8	–4.8	7,902.1	16.0	99.1	71.3	113.0	18,802.1	15,778.8	19.2	170.4	240.9
Quanta	ODM	Taiwan	No	7,037.9	7,577.2	–7.1	7,737.2	–9.0	119.5	93.8	130.8	14,615.1	15,248.6	–4.2	213.3	222.8
Compal	ODM	Taiwan	No	8,040.3	6,726.1	19.5	7,027.6	14.4	70.7	47.8	8.4	14,766.4	13,204.7	11.8	118.5	43.7
Wistron	ODM/EMS	Taiwan	No	6,399.8	7,444.3	–14.0	6,372.1	0.4	21.7	31.3	26.9	13,844.1	11,922.3	16.1	53.0	44.9
Flex	EMS	Singapore	Yes	6,424.0	6,410.9	0.2	6,008.3	6.9	116.0	(19.6)	124.7	12,834.8	11,870.9	8.1	96.4	211.6
Jabil	EMS	Florida	Yes	5,437.0	5,301.1	2.6	4,489.6	21.1	42.5	68.2	(25.3)	10,738.1	8,935.2	20.2	110.7	(4.6)
Inventec	ODM	Taiwan	No	4,289.1	3,594.7	19.3	3,652.9	17.4	75.6	43.6	63.3	7,883.8	6,940.5	13.6	119.2	85.6
Sanmina	EMS	California	Yes	1,813.4	1,675.6	8.2	1,711.4	6.0	34.0	24.6	36.4	3,489.0	3,393.6	2.8	58.6	68.1
Celestica	EMS	Canada	Yes	1,695.2	1,499.7	13.0	1,557.6	8.8	16.1	14.1	34.6	3,194.9	3,039.7	5.1	30.2	57.1
Qisda	ODM	Taiwan	No	1,286.7	1,222.8	5.2	1,081.4	19.0	27.1	34.2	44.9	2,509.5	2,125.7	18.1	61.4	85.4
Universal Scientific Industrial	EMS	China	No	1,035.4	988.3	4.8	945.8	9.5	32.3	29.7	39.7	2,023.7	1,883.4	7.4	62.1	81.3
Kinpo Electronics	ODM/EMS	Taiwan	No	1,092.7	975.6	12.0	925.8	18.0	15.3	(7.3)	7.1	2,068.4	1,879.4	10.1	8.0	14.3
Cal-Comp Electronics	EMS	Thailand	No	846.4	786.4	7.6	721.7	17.3	3.8	(8.0)	8.7	1,632.7	1,476.9	10.6	(4.2)	17.8
Venture Corp	EMS	Singapore	No	719.2	652.8	10.2	735.8	–2.3	73.9	63.8	50.7	1,372.0	1,339.2	2.5	137.8	85.5
Plexus	EMS	Wisconsin	Yes	726.4	698.7	4.0	618.8	17.4	26.5	12.3	25.6	1,425.0	1,223.2	16.5	38.8	54.9
Benchmark Electronics	EMS	Texas	Yes	660.6	608.1	8.6	619.6	6.6	10.9	16.5	18.1	1,268.7	1,177.5	7.7	27.4	26.6
Shenzhen Kaifa	EMS	China	No	669.8	633.5	5.7	544.7	23.0	13.6	13.6	28.1	1,303.3	1,044.5	24.8	27.2	45.1
AmTRAN Technology	ODM	Taiwan	No	114.3	88.1	29.7	139.2	–17.9	1.1	0.7	(11.1)	202.4	259.3	–21.9	1.8	(27.9)
Ability Enterprise	ODM	Taiwan	No	68.8	65.3	5.3	101.5	–32.2	(2.8)	(4.3)	2.3	134.1	193.3	–30.6	(7.1)	2.8
Total/Avg.				**94,010.4**	**91,860.7**	**2.3**	**83,215.5**	**13.0**	**1,388.2**	**1,352.3**	**1,314.6**	**185,871.1**	**165,393.9**	**12.4**	**2,740.5**	**2,872**
Total/Avg. without Hon Hai				**57,525.1**	**56,582.9**	**1.7**	**52,892.9**	**8.8**	**797.0**	**526.4**	**726.8**	**114,108.1**	**102,936.7**	**10.9**	**1,323.4**	**1,355.9**

Results in non-US currencies were converted to US dollars by applying a three-month average exchange rate for the corresponding quarter. Average exchange rates were based on monthly 2018 and 2017 data from the US Federal Reserve. Company net profits shown here are attributable to shareholders. Net profit totals are approximate because not all companies follow the same accounting standard.

Wistron is another large player operating as both an ODM and an EMS provider. Although Wistron has the reputation of being a major notebook ODM, the company has a history of doing business on both sides of the outsourcing street. Wistron has reportedly been selected to become part of the supply chain for Apple, Inc.’s next-generation iPhone 8 Plus and is shipping the product this year. Previously, Wistron helped assemble Apple’s iPhone 5C and iPhone 6 Plus, according to those familiar with the matter.

The third and final company placed in the hybrid group is **Kinpo Electronics**, of which the New Kinpo Group accounts for 70% of EMS revenue. The New Kinpo Group is a subsidiary of the holding company Kinpo Group, which owns and manages 23 subsidiaries (for example, the **Compal Group** and the **VIBO Services** companies), seven of which are publicly listed corporations. By first-half revenue, the hybrid providers comprise the smallest of the three groups into which the 20 CMs are divided.

Sales of the hybrid CMs totaled $34.7 billion in the first half, or 19% of the combined sales of the group of 20. By far the largest share of total sales—60%—belonged to the EMS group, while the ODMs generated 21% (Chart 2, p. 3).

First-half sales of the 20 CMs amounted to $186 billion, an increase of 12.4% year over year. *MMI* believes that this figure can be used as a proxy for the board- and system-level outsourcing space, since these 20 companies account for the vast majority of revenue from the space.

Hon Hai Precision Industry, the EMS giant, did influence this result in a big way. Without Hon Hai, the increase would have been 10.9%.

Of the 20 CMs, three experienced first-half sales declines in US dollars ranging from slight to rather severe. In contrast, of the 17 CMs that raised their first-half sales versus a year ago, 11 companies (Shenzhen Kaifa, Jabil, Pegatron, Qisda, Plexus, Wistron, Hon Hai, **Inventec,** Compal, **Cal-Comp Electronics,** and Kinpo Electronics) achieved double-digit growth. Shenzhen Kaifa separated itself from the other CMs with a 24.8% gain.

Two providers, **Ability Enterprise** and **AmTRAN Technology,** endured double-digit decreases of over 20% (in US dollars) from a year earlier.

For the first six months, the 20 CMs together earned net income of approximately $2.74 billion. (Net income was approximate because not all companies follow the same accounting rules.) Net profit decreased by about 4.6% year on year, in contrast with the aforementioned sales increase of 12.4%. However, unlike the EMS and hybrid contingents, the ODM group improved its net income from a year earlier (Table 2, below). On the other hand, first-half net margin for the hybrid group came in at about 0.7%, compared with about 1.8% for the EMS group and 1.3% for the ODMs. Hon Hai contributed some 51.7% of total net income for the first half, while accounting for 38.6% of sales.

Second-quarter revenue for the entire group totaled $94 billion, up 2.3% from the prior quarter and increased 13% from the year-ago period. Sequential increases on the part of 17 CMs outweighed decreases produced by the others. Six companies, AmTRAN Technology, Compal, Inventec, **Celestica,** Kinpo Electronics, and **Venture Corp,** experienced double-digit increases. Excluding Hon Hai, the sequential increase in 2Q18 was around 1.7%.

In the year-over-year comparison, Q2 increases from 16 companies more than offset decreases by four CMs. Ten CMs posted two-digit growth in their revenue (expressed in US dollars), with Shenzhen Kaifa, Jabil, and Hon Hai reporting increases of more than 20% (Table 1).

With regard to year-over-year comparison, the EMS group's revenue increased 17.1%, while the hybrid group's revenue increased 9.6% and that of the ODM group increased 5.6%. When compared with the prior quarter, the EMS group's sales increased 3.6% and the ODM group had an 8.1% increase, whereas the hybrid group had a 7.7% decline (Table 2).

Q2 net income for the group of 20 was approximately $1.4 billion, up from about $1.35 billion in the previous quarter and up from about $1.31 billion a year earlier. Net income increased about 5.6% year over year, a good outcome, and Q2 sales increased 13%. Eight CMs boosted their net income from a year ago; this combined effort was enough to counter the declines at the other providers. Without Hon Hai, the increase in Q2 net income would have been about 9.7% year on year instead of about 5.6%.

First-Half Growth for Asian Group

A group of 11 large and midsized EMS providers based in Asia produced a first-half sales increase. First-half 2018 sales of the Asia-based group increased 11% year on year. With respect to first-half sales, Asia-centric manufacturing prove to be an overall advantage for the Asian group. Asia-based production became an asset in light of a growing trend toward onshoring (keeping new programs in higher-cost geographies) and reshoring (relocating work from lower-cost to higher-cost regions). Indeed, it appears that a weak demand environment had virtually the same effect on each of the three industry groups in the publicly traded sector. Note that all of the EMS providers in this comparison are publicly listed or are part of a publicly traded company.

First-half revenue for the 11 Asia-based providers totaled $9.03 billion, up from $8.14 billion in the year-ago period. For the first six months, all EMS providers posted strong growth except for **Fabrinet,**

Chart 2: First-Half Sales by Provider Type

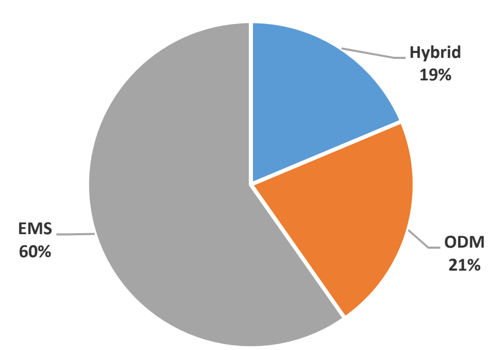


Table 2: Comparing Results Where Companies Are Grouped by Primary Business (US$M or %)

No. of Companies	Primary Business	2Q2018 Sales	1Q2018 Sales	Qtr.–Qtr. Chg.	2Q2017 Sales	Yr.–Yr. Chg.	2Q2018 Net Inc.	1Q2018 Net Inc.	2Q2017 Net Inc.	Q1–2 '18 Sales	Q1–2 '17 Sales	Yr.–Yr. Chg.	Q1–2 '18 Net Profit	Q1–2 '17 Net Profit
11	EMS	56,512.5	54,532.8	3.6	48,275.9	17.1	960.9	1,041.1	929.2	111,045.3	97,841.3	13.5	2,002.0	2,159.5
6	ODM	20,837.1	19,274.2	8.1	19,739.7	5.6	291.3	215.8	238.4	40,111.2	37,972.1	5.6	507.1	412.4
3	ODM/EMS	16,660.8	18,053.7	–7.7	15,199.9	9.6	136.0	95.3	147.0	34,714.5	29,580.5	17.4	231.4	300.1
20		**94,010.4**	**91,860.7**	**2.3**	**83,215.5**	**13.0**	**1,388.2**	**1,352.3**	**1,314.6**	**185,871.1**	**165,393.9**	**12.4**	**2,740.5**	**2,872.0**

Net profit totals are approximate because not all companies follow the same accounting standard.

which posted an 8.1% decline. Seven players, including **Integrated Micro-Electronics, PCI, SVI, Cal-Comp Electronics, Pan-International, Shenzhen Kaifa,** and **WKK International Holdings**, chalked up double-digit growth (in US dollars), as shown in Table 3 below.

Two of the 11 Asian providers, WKK and Wong's International Holdings, report results only on a half-year basis. For the remaining nine players, sales for 2Q2018 amounted to $4.37 billion, up 6.7% sequentially and up 11.4% year over year. All but one of the nine providers increased their sales from the prior quarter, and three of these—SVI, Venture, and Pan-International Industrial—achieved double-digit gains. In the year-over-year comparison, two out of nine providers saw their sales drop, and five companies— Integrated Micro-Electronics, PCI, SVI, Cal-Comp Electronics, and Shenzhen Kaifa—reported double-digit growth (Table 3).

In Q2, the nine providers together earned net income of approximately $199 million for a net margin of about 4.5%. (Net income was approximate because not all companies follow the same accounting rules.) The highest net margins in the quarter were turned in by **Venture** at 10.3% and Integrated Micro-Electronics at 7.6%. Collectively, net income grew about 48% sequentially, in line with the 6.7% increase in sales from the prior quarter. Sequential net income increases were seen at eight companies; Shenzhen remained flat.

On a year-over-year basis, combined Q2 net income for the nine companies grew in line with sales increase. Net income rose about 14% compared with the sales increase of 11.4%. Significant profit growth at Integrated Micro-Electronics and Pan-International Industrial drove the increase.

For the first six months, net income of the nine providers totaled approximately $333.4 million for a net margin of about 4%. First-half net income increased about 5% year over year due to positive swings in net income at Integrated Micro-Electronics, Venture, and Pan-International Industrial.

Some Quarterly Results

Venture Corporation (Venture). In the second quarter of 2018, Venture Corporation, Limited registered a 40% increase in net profit to S$97.9 million. For the six months ended 30 June, 2018, net profit rose 53% to S$181.6 million. The Group's initiatives to leverage its core capabilities in R&D and advanced manufacturing to deliver deep value creation and drive operational excellence across the value chain contributed to the improvement in profitability.

For the quarter ended 30 June 2018, the Group generated revenue of S$952.3 million. Quarter on quarter, revenue for 2Q2018 increased by 11.2%. On a year-on-year basis, revenue declined by 6.0%. For the six months ended 30 June 2018, the Group recorded revenue of S$1.8 billion, a slight decline of 2.6% year on year. In US dollar terms, revenue for 1H2018 would have grown by 3.4%.

The Group recorded profit before tax (PBT) of S$115.2 million for the quarter ended 30 June 2018, an increase of 36.3% year on year. For 1H2018, the Group recorded PBT of S$213.8 million, an increase of 48.0% year on year. In line with the higher PBT, the Group reported income tax expense of S$17.3 million for the reported quarter and S$32.2 million for 1H2018.

Net profit (profit attributable to owners of the company) rose 40.2% year on year to S$97.9 million for the reported quarter. For the six months ended 30 June 2018, net profit rose 53.3%

Table 3: Six-Month 2018 Results for 11 Asia-Based EMS Providers (US$M or %)

	Headquarters	Reports in US$	2Q2018 Sales	1Q2018 Sales	Qtr.–Qtr. Chg.	2Q2017 Sales	Yr.–Yr. Chg.	2Q 2018 Net Inc.	1Q 2018 Net Inc.	2Q 2017 Net Inc.	Q1–2 '18 Sales	Q1–2 '17 Sales	Yr.–Yr. Chg.	Q1–2 '18 Net Profit	Q1–2 '17 Net Profit
Integrated Micro-Electronics	Philippines	Yes	343.0	325.8	5.3	265.1	29.4	26.0	5.6	8.3	668.8	501.0	33.5	31.6	17.0
PCI	Singapore	Yes	71.1	78.2	–9.1	45.1	57.8	4.0	3.9	2.5	149.3	90.8	64.4	7.9	4.9
SVI	Thailand	No	118.5	104.1	13.8	91.3	29.8	8.6	2.1	3.7	222.7	175.2	27.1	10.6	8.8
Venture	Singapore	No	719.2	652.8	10.2	735.8	–2.3	73.9	63.8	50.7	1,372.0	1,339.2	2.5	137.8	85.5
Cal-Comp Electronics	Thailand	No	846.4	786.4	7.6	721.7	17.3	3.8	–8.0	8.7	1,632.7	1,476.9	10.6	–4.2	17.8
Universal Scientific Industrial	China	No	1,035.4	988.3	4.8	945.8	9.5	32.3	29.7	39.7	2023.7	1,883.4	7.4	62.1	81.3
Pan-International Industrial	Taiwan	No	222.3	194.8	14.1	203.3	9.3	13.7	2.9	5.5	417.1	373.6	11.7	16.7	8.1
Fabrinet	Thailand	Yes	345.3	332.2	3.9	370.5	–6.8	22.9	21.1	27.4	677.5	737.3	–8.1	43.9	49.1
Shenzhen Kaifa	China	No	669.8	633.5	5.7	544.7	23.0	13.6	13.6	28.1	1,303.3	1,044.5	24.8	27.2	45.1
Subtotal/Avg.			**4,371.0**	**4,096.1**	**6.7**	**3,923.3**	**11.4**	**198.8**	**134.6**	**174.7**	**8,467.2**	**7,621.9**	**11.1**	**333.5**	**317.6**
WKK International (Holdings)	Hong Kong	No									322.6	288.3	11.9	4.5	3.0
Wong's International Holdings	Hong Kong	No									248.8	229.1	8.6	89.9	16.5
Six-month Total/Avg.											**9,038.6**	**8,139.3**	**11.0**		

Results in non-US currencies were converted to US dollars by applying a three-month average exchange rate for the corresponding quarter, except for the two Hong Kong–based companies, whose results were converted by using six-month average exchange rates. Average exchange rates were based on monthly 2018 and 2017 data from the US Federal Reserve. Company net profits shown here are attributable to shareholders. Net profit totals are approximate because not all companies follow the same accounting standard.

year on year to S$181.6 million. The Group registered a net margin of 10.3% for the reported quarter (2Q2017: 6.9%) and 10.0% for 1H2018 (1H2017: 6.4%).

The Group generated operating cash flow of S$121.0 million before working capital changes for the quarter ended 30 June 2018 (2Q2017: S$92.1 million). For the six months ended 30 June 2018, operating profit before working capital changes amounted to S$226.0 million (1H2017: S$162.4 million). For the quarter ended 30 June 2018, the Group registered an increase in working capital position mainly due to inventory balances to support customers' requirements and programs. For the six months ended 30 June 2018, the Group generated cash from operations of S$156.7 million (1H2017: S$121.4 million).

While Venture has delivered a creditable 1H2018 performance, some volatility may arise in the near term from customers' M&A, new product/platform transitions, and also from the possibility of escalation of a trade war and component shortages. Venture and its partners have worked out various strategies to mitigate these issues.

Moreover, the Group is well positioned to leverage its strong Clusters of Excellence, differentiated strategy, and diversified competencies to capture new opportunities arising from the changing operating environment. In addition, growth drivers across Venture's broad-based portfolio of technology domains and strong supply chain management will provide resilience and stability to its long-term performance.

Venture's focus on its expanding R&D capabilities, transformational engineering, and operational excellence continue to underpin the Group's ability to gain traction and deepen its collaborative partnerships with leaders in fast-growing domains of interest. The Group will continue to execute with excellence in quality, productivity, and value creation.

Fabrinet (NYSE: FN), announced its financial results for its fourth quarter and fiscal year ended June 29, 2018. Revenue for the fourth quarter of fiscal year 2018 was $345.3 million, compared to revenue of $370.5 million for the comparable period in fiscal year 2017. GAAP net income for the fourth quarter of fiscal year 2018 was $22.9 million, compared to GAAP net income of $27.4 million for the fourth quarter of fiscal year 2017. GAAP net income for the fourth quarter of fiscal year 2018 included a foreign exchange loss of $0.9 million, or $0.02 per diluted share, compared to a foreign exchange loss of $1.0 million, or $0.03 per diluted share, for the fourth quarter of fiscal year 2017. GAAP net income per diluted share for the fourth quarter of fiscal year 2018 was $0.60, compared to GAAP net income per diluted share of $0.72 for the fourth quarter of fiscal year 2017.

Revenue for fiscal year 2018 was $1,371.9 million, compared to revenue of $1,420.5 million for fiscal year 2017. GAAP net income for fiscal year 2018 was $84.2 million, compared to GAAP net income of $97.1 million for fiscal year 2017. GAAP net income for fiscal year 2018 included a foreign exchange loss of $6.6 million, or $0.17 per diluted share, compared to a foreign exchange loss of $1.1 million, or $0.03 per diluted share, for fiscal year 2017. GAAP net income per diluted share for fiscal year 2018 was $2.21, compared to GAAP net income per diluted share of $2.57 for fiscal year 2017.

Based on information available as of August 20, 2018, Fabrinet is issuing guidance for its first fiscal quarter of 2019 ending September 28, 2018, as follows: Fabrinet expects first-quarter revenue to be in the range of $347 million to $355 million. GAAP net income per diluted share is expected to be in the range of $0.58 to $0.61, based on approximately 37.9 million fully diluted shares outstanding. Non-GAAP net income per diluted share is expected to be in the range of $0.80 to $0.83, based on approximately 37.9 million fully diluted shares outstanding.

Integrated Micro-Electronics, Inc. (IMI) announced that its first-half 2018 revenues stood at $668.8 million, up 33.5% year on year, strengthened by its core businesses and contributions of acquired entities. The company posted a net profit of $31.6 million, including a net gain arising from the sale of its China property. Excluding one-offs, operating income increased 28% from that of last year despite the effect of electronics component shortages. However, weaknesses of the euro and RMB, and higher interest expenses and effective tax rates had an adverse impact on IMI's bottom line.

Revenues from acquired businesses amounted to US$154.2 million in the first half of 2018. **VIA Optronics** reported $100.3 million, 51% higher than last year, buoyed by its top customer in the consumer segment. **STI**'s six-month revenue of $53.9 million versus its one-month contribution last year further boosted IMI's global revenues.

Revenues from European operations grew 29% year on year to US$170.1 million, still dominated by automotive businesses, while Mexico revenues posted a 17% increase year on year to $46.9 million, despite delays in the mass production of its new projects.

China revenues increased by 27% to $162.1 million, strengthened by the ramp-up of new industrial applications and automotive platforms. In the first half of 2018, IMI completed the shares sale transaction related to the transfer of its Liantang facility to the new Pingshan facility in Shenzhen. The transaction generated a net gain of $11.0 million, including expenses incurred in 2017.

Company News

Kimball Electronics Signs Agreement to Acquire Global Equipment Services (GES)

Kimball Electronics, Inc. (Nasdaq: KE), acting through its wholly owned subsidiaries, announced that it has signed an agreement to purchase substantially all of the assets and assume certain liabilities of **GES Holdings, Inc.,** Global Equipment Services and Manufacturing, Inc., and its subsidiaries (collectively "GES") for approximately $50 million plus the assumed liabilities, subject to certain post-closing working capital adjustments. The transaction is also subject to customary closing conditions, regulatory requirements, and governmental approvals. The transaction is expected to close in the first quarter of Kimball's fiscal year 2019.

VirTex Acquires PPI-Time Zero

VirTex Enterprises has acquired fellow EMS firm **PPI-Time Zero** for an undisclosed sum. The deal extends the respective companies' footprints and service offerings.

PPI-Time Zero features more than 100,000 square feet of manufacturing space, with the ability to produce electronic components and systems with volumes ranging from prototyping to full-scale production. It had been acquired by **Guardian Capital Partners** in January 2011.

The combined firms will have plants in New Jersey, Virginia, Massachusetts, Texas, Wisconsin, and Mexico. PPI-Time Zero also does business as **New Age EMS**, the company it acquired in 2016. VirTex also owns **MTI Electronics** in Wisconsin and **AVJ Electronics** in Mexico.

Cal-Comp Delays IPO in Philippines

Cal-Comp Technology's subsidiary in the Philippines is pushing back its initial public offering to next year due to market conditions.

The underwriter for the planned IPO told local media that the EMS company would wait to issue stock until 2019 because of "poor market conditions."

Cal-Comp initially planned to hold the offering of up to 378 million common shares in October. Funds would go toward capacity expansion in the Philippines.

PE Firm Establishes Holding Company for Future EMS Acquisitions

Compass Group Equity Partners announced the formation of a new holding company, **Compass Electronics Group**, which includes a pair of EMS firms and potential additional acquisitions.

The group of companies assembled by CEG currently consists of two companies: **Logic PD**, with facilities in Eden Prairie, Minnesota, and Ciudad Juárez, Mexico; and **Manufactured Assemblies Corporation** (MAC), with facilities in Dayton, Ohio, and Atlanta. These companies will provide customers with a suite of capabilities that cover the entire product life cycle, with specializations in connected device design and development, embedded products, electronics manufacturing, wire harness and cable assembly, custom kiosk and box builds, and logistics and support services. Bruce DeWitt, who was the CEO of Logic PD, will lead the new platform.

Kaga Electronics to Acquire Fujitsu Electronics

Kaga Electronics has entered into a definitive agreement to acquire 70% of the shares in **Fujitsu Electronics, Inc**. (FEI) from Fujitsu Semiconductor, Ltd. (FSL).

Kaga plans to also acquire the remaining 30% of shares held by FSL by the end of 2021.

The transfer of the 70% of shares is expected to close in January 2019, subject to approval of relevant regulatory authorities and other customary closing conditions.

The deal will also help expand the company's EMS business by adding FEI's broad customer base, one of its competitive advantages, to the existing global network of EMS business bases, Kaga said.

SMTC Opens Supply Chain Center of Excellence in Phoenix

SMTC announced the opening of its supply chain center in Phoenix, Arizona, one of several key initiatives in the electronics manufacturing services company's ongoing drive to deliver "best-in-class" vertically integrated supply chain services.

Ed Smith, SMTC president and CEO, said the initiatives include the new center in Phoenix, use of lean manufacturing kanban programs, upgraded quoting tools, customer-specific action plans, new agreements with Tier 1 distributors, and extensive investments in safety stock programs.

Eulau Out as CEO at Sanmina

Sanmina announced the surprise resignation of Bob Eulau as chief executive, effective immediately.

The company will replace him with Michael Clarke, a current board member and former head of the company's enclosures unit.

Clarke will become CEO effective October 1. In the interim, Jure Sola will lead the company as executive chairman.

Sanmina did not disclose a reason for Eulau's departure after less than one year running the company. Eulau replaced cofounder Sola as chief executive last October. In a statement, Sola said, "I would like to thank Bob for his hard work and dedication during his nine years of service with the company and wish him well in his future endeavors."

Clarke has more than 30 years of senior executive, business development, and hands-on operational experience managing global companies in electronics manufacturing for the telecommunications, industrial, aerospace, and automotive industries. He was president and chief executive of **Nortek**, a manufacturer of air management, security, and technology products for home and work environments from 2011 until its acquisition in 2016. From 2005 until he joined Nortek, he was group president of Integrated Networks Solutions, a $12 billion business at **Flex**.

Construction on Foxconn's Wisconsin Park Begins

Work began on **Foxconn**'s $10 billion Racine County science and technology park this week, according to reports.

The walls of the first building were installed. Workers have prepared the site for several months, and construction is expected to be completed this winter.

Shareholder Accuses Sparton Board of Mismanagement, Calls for New Leadership

An investment firm that owns more than 2% of the outstanding shares of **Sparton** informed the company that it would vote against any incumbent directors for the board except Alan Bazaar.

In a letter, **Breach Inlet Capital Management** said Sparton's board has a long history of destroying shareholder value, with the share price declining about 50% over the past three years.

The investment firm believes "better candidates may be available," including four people who served on the board of **TechPrecision**. Breach Inlet pointed to Walter Schenker, who has been nominated to public company boards several times by Gamco Asset Management, Sparton's largest shareholder.

Sparton's share price is near a six-year low, and the board isn't aligned with its shareholders, the firm continued. The electronics manufacturer "has been mismanaged since the board appointed Hartnett interim CEO" in February 2016. Breach Inlet says the board "never recruited a permanent CEO with relevant experience," and poorly managed its first sales process. The board "arguably allowed Ultra Electronics Holdings to disrupt the process and then agreed to sell to Ultra for only $23.50 per share.

"Six months have passed since the board began the second sales process … [but] the board has provided zero relevant updates or even a deadline for ending the process."

Breach Inlet believes Sparton's board has allowed two directors too much control and "damaged its most critical customer relationship," that with the US Navy.

Finally, the investment firm stated, "If the board is unable to negotiate a sale near SPA's intrinsic value, then we believe it is time for a meaningful change in leadership and strategy."

Eolane Tallinn Relocates in Estonia

Electronics manufacturer **Eolane** Tallinn is relocating to a new building in Tallinn, Estonia, with operations set for the end of this year, according to reports.

The 118,400-square-foot plant is expected to employ 500.

"The new plant will enable us to increase output at Eolane Tallinn and further raise export volumes," said Eolane Tallinn board member Tuuli Tromp. "Our orders come from the rapidly developing auto and telecom industry all over the world, and our revenue has more than doubled over the past three years. The new plant offers us more space still for growth and implementation of new technology."

Foxconn to Invest $100M on UW-Madison Research Center

Foxconn said it will invest $100 million in engineering and innovation research at the **University of Wisconsin-Madison**, according to reports.

The university also plans to raise $100 million as part of the agreement.

Foxconn CEO Terry Gou and UW-Madison Chancellor Rebecca Blank signed an agreement calling for the creation of a collaborative science and technology institute. The deal is expected to generate potential Foxconn interns and employees.

The Foxconn Institute for Research in Science and Technology will be located on the Racine campus, providing research and development initiatives in medical science, materials science, and computer and data-driven science, say reports. It will also have a presence in Madison.

Foxconn's WI Plans for LCD Panel Plant Now Unclear

Foxconn reiterated that it will create 13,000 jobs and invest $10 billion in a new manufacturing campus in Wisconsin, but is declining to confirm the type of LCD panel plant it will build.

Foxconn's original plans were to build a Gen. 10.5 plant, but in June Foxconn executive Louis Woo said the company now planned to first build a smaller Gen. 6 plant.

The firm ensured it could meet projected demand for LCD panels, with the Gen. 6 plant the first phase. However, Foxconn wasn't specific about subsequent plans, according to reports.

USI Acquires ChungHong EMS, Extends Reach into Europe

A wholly owned subsidiary of **Universal Scientific Industrial** has signed an $11.3 million deal with a Chinese electronics company to acquire its manufacturing division in Poland.

Universal Global Electronics entered into an equity transfer agreement with **ChungHong Electronics (Suzhou) Co**., intending to acquire its entire 60% stake in its Polish subsidiary, ChungHong Electronics Poland, for RMB78 million ($11.3 million).

Under the terms of the deal, UGE can acquire the remaining 40% at 10 times the static P/E ratio that exists within six months following the audit of ChungHong's financial statement for fiscal 2020.

ChungHong EMS has a 930,000-square-foot campus in Wroclaw, Poland, where it employs 2,600 full-time and contract workers, according to *Circuits Assembly*'s Directory of EMS companies.

USI is the world's ninth largest EMS/ODM, according to the *MMI* Top 50.

USI sees the Polish operation as central to its plans to expand its automotive electronics business, which made up 5.65% of the company's total revenue in 2017. The company plans to first deliver automotive electronics products in Poland, and then roll out its industrial and server businesses in the medium and long terms.

Fabrinet CEO Outlines Expansion in California, Israel

Fabrinet is expanding its plant in California and will add services in Israel to accommodate customer demand, the company's chief executive said.

Seamus Grady told analysts that the EMS firm is in the "early stages" of plans to build an NPI plant in Israel.

It also is expanding its advanced packaging capabilities at Fabrinet West in San Francisco to further strengthen NPI manufacturing for new and emerging technology-based products, such as LIDAR, 3-D sensing, and laser-based lighting products for the automotive industry, Grady said.

Fabrinet has grown to over $1.4 billion in revenue, mostly on the backs of optical networking customers such as Lumentumat and Oclaro, which make up nearly one-quarter of its sales, but Grady said the firm is making "continued progress" in industrial lasers and automotive, and has also won a number of medical program bids.

ADM Tronics Making Transition from EMS to OEM

ADM Tronics reported that fiscal first-quarter sales fell 34% to $757,000, as the manufacturer switches its focus to its own suite of proprietary medical devices.

For the quarter ended June 30, net income rose to $22,600 from $2,333 a year ago.

In a press release, the firm said, "As previously announced, ADMT initiated its strategic plan to redefine its business growth strategy by redirecting more of its resources to the research, development, engineering and production of its own suite of proprietary medical technologies. As these technologies go through various stages of development, revenues from engineering services and medical device manufacturing from clients is reduced while continuing to post a profit for the quarter."

Northstar to Become OEM, Focus on Aerospace

Northstar Electronics, an aerospace contract electronics manufacturer, has plans to become an OEM soon.

Its parent company **NEIK** made headway in the purchase of the worldwide rights to a single-engine-turbo-prop airplane from a major overseas aerospace company. Management anticipates a deal soon.

While the negotiations continue, management plans to secure presales of the airplane.

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