



# DealReader

## EMS

Q1 2017

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### Announcements

- EC Electronics has acquired Hunter Cable Assembly (Jan-17)
- Salcomp has acquired an antenna plant in India from Laird Technologies (Jan-17)
- Acal has acquired Variohm Holdings (Jan-17)
- Enics has acquired PKC Electronics Oy from PKC Group (Feb-17)
- GPV International has acquired BHE (Feb-17)
- Motherson Sumi Systems has acquired PKC Group (March-17)

## Q1 2017 Summary

There were 6 EMS transactions recorded in Q1 2017, down slightly from the 7 recorded in Q4 2016. EMS consolidations accounted for 2 transactions in Q1 2017, or 33% of total activity, representing the same number of EMS consolidations as in Q4 2016.

In Q1 2017, there were 2 vertical/horizontal convergences, down from the 3 recorded in Q4 2016. This quarter's activity represented 33% of the total, compared to 31% last quarter.

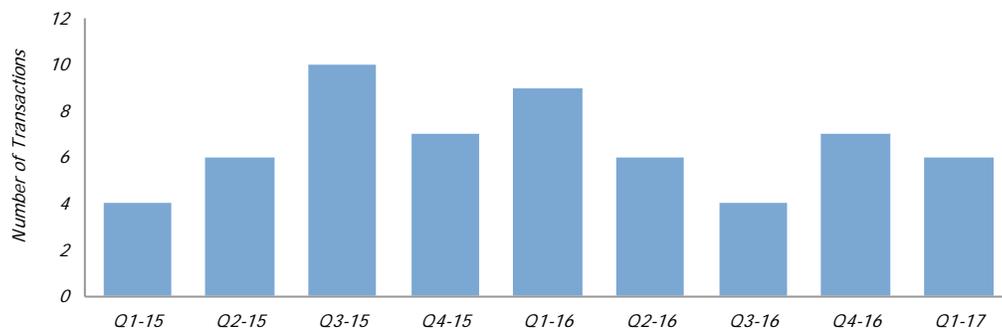
Transactions categorized as Diversification into EMS and transactions categorized as OEM Divestitures both accounted for one transaction, each representing 17% of total activity.

Private equity investors did not account for any transactions in Q1 2017. There were also no transactions categorized as EMS divestitures this quarter.

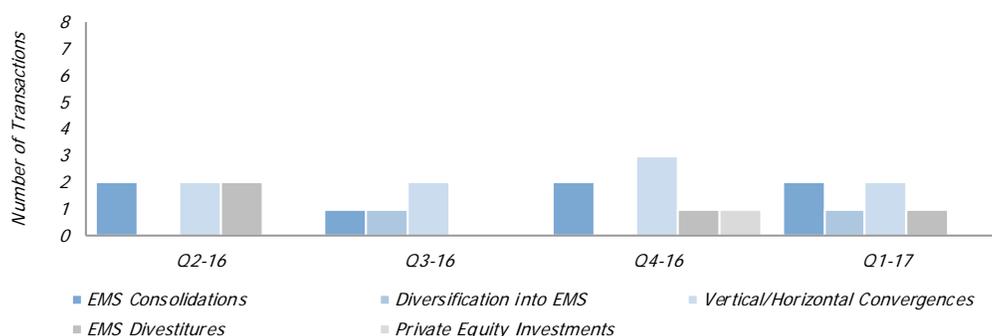
In terms of geography, 4 of the transactions completed in Q1 2017 occurred in Europe. This represented 67% of total transaction activity in Q1 2017. There were 2 cross-border transactions in Q1 2017 (33% of the total), both of which occurred between a high-cost region and a low-cost region. No transactions were isolated to only the U.S./Canada, Asia or South America.

In terms of transaction size, Large Tier EMS providers accounted for 50% of the Q1 2017 transaction volume with 3 acquisitions. Mid Tier EMS providers accounted for 2 acquisitions, representing approximately 33% of total activity. There was one acquisition by a Small Tier EMS provider during the quarter, representing approximately 17% of the total.

### Completed EMS Transactions



### Quarterly Comparison—EMS M&A by Deal Type

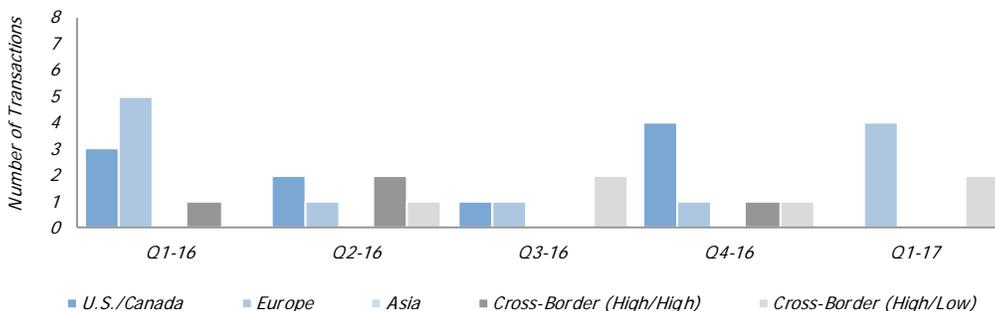


### EMS Size Guide (Sales Dollars)

- Large (Tier I) Greater than \$3 billion
- Mid (Tier II) \$300 million to \$3 billion
- Small (Tier III) Below \$300 million

Sources: All information contained in this newsletter including the charts was obtained from company websites, Custer Reports, Lincoln International's internal data, Manufacturing Market Insider and Capital IQ.

### Quarterly Comparison—EMS M&A by Geography



Note: "High/High" indicates cross-border transactions between Japan, Taiwan, Western Europe and U.S./Canada; "High/Low" indicates cross-border transactions between high-cost regions and low-cost regions.

### Q1 2017 Mergers and Acquisitions by Size



## Terms & Turns: Revisiting the Cash Cycle

The cash cycle is calculated by adding days sales outstanding (DSO) and days inventory outstanding (DIO) and subtracting from this sum days payable outstanding (DPO). The financial statistic is used to measure how quickly a company can turn sales into cash. There are two basic disciplines in managing cash cycle: 1) contractual terms with vendors and customers, and 2) inventory turns, hence "Terms & Turns." Because the electronic manufacturing services industry is very material intensive, inventory management is the most important factor in achieving cash cycle improvements.

In the Large tier, two companies' cash cycles worsened (more days), while two company's cash cycle improved. Celestica lengthened its cash cycle by 2.4% to 45.5 days in Q1 2017 from 44.4 days in Q1 2016 largely due to higher DIO. Jabil's cash cycle lengthened from 9.0 days to 13.0 days, a 44.6% increase, largely because of higher DPO and DIO. On the other hand, Sanmina's cash cycle shortened this quarter to 43.6 in Q1 2017 from 47.1 days in Q1 2016, a 7.4% decrease, primarily due to lower DSO and DPO. Flex also shortened its cash cycle from 26.4 days to 24.6 days, a 6.8% decrease, as a result of lower DSO.

In the Mid tier, Benchmark, Kimball and Plexus improved their cash cycles, while the other companies experienced worsening cash cycles. Benchmark shortened its cash cycle primarily due to higher DPO, while Kimball and Plexus shortened their cash cycles because of lower DSO.

Key Tronic lengthened its cash cycle primarily due to increases in its DIO. Spartan lengthened its cash cycle largely due to increases in its DSO and DIO.

In the Small tier, all companies have improved their cash cycles. The shorter cash cycles within the Small tier were driven mainly by lower DSO and DIO.

Inventory turnover is the most important cash cycle factor, making up the majority of the cycle. For example, IEC has one of the longest cash cycles (87.5 days), and also has one of the lowest inventory turns at 4.5. Conversely, three companies with shorter cash cycles, Jabil, Flex and Celestica (cycles of 13.0, 24.6 and 45.5, respectively), have higher inventory turns (7.0, 6.4 and 6.3, respectively). Inventory turns are also impacted by business type. Low volume, high mix manufacturing, for which inventory management is more difficult, generally leads to lower turns.

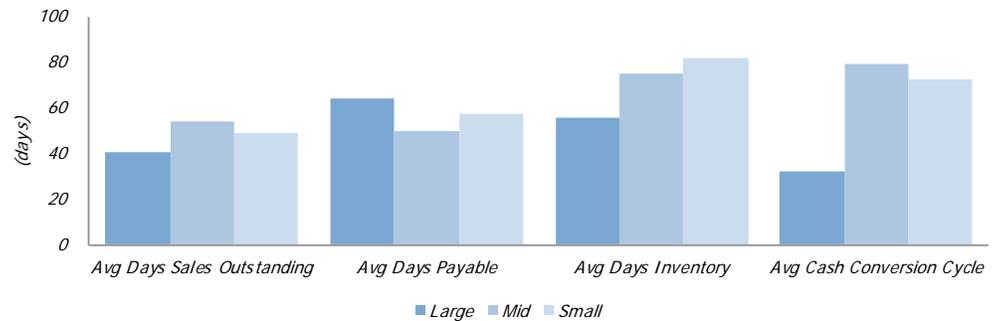
The cash cycle continues to be a focus for EMS providers due to its significant impact on ROIC and the importance of cash flow for growth.

### Cash Cycle and Inventory Turns Analysis

	Cash Cycle			Inventory Turns		
	Q1-16	Q1-17	% Change	Q1-16	Q1-17	% Change
<b>Large Tier</b>						
Celestica	44.5	45.5	2.4%	6.6	6.3	(4.6%)
Flex	26.4	24.6	(6.8%)	6.5	6.4	(1.3%)
Jabil	9.0	13.0	44.6%	7.7	7.0	(9.1%)
Sanmina	47.1	43.6	(7.4%)	6.4	6.6	3.6%
<b>Median</b>	<b>35.4</b>	<b>34.1</b>	<b>(3.7%)</b>	<b>6.6</b>	<b>6.5</b>	<b>(0.5%)</b>
<b>Mid Tier</b>						
Benchmark	94.9	82.7	(12.8%)	5.5	5.3	(3.3%)
Key Tronic	80.8	86.7	7.3%	5.2	4.5	(13.7%)
Kimball	61.3	58.3	(4.9%)	5.9	6.1	1.9%
Plexus	80.5	79.1	(1.7%)	4.4	4.2	(4.2%)
Sparton	88.7	90.1	1.6%	4.9	4.9	0.0%
<b>Median</b>	<b>80.8</b>	<b>82.7</b>	<b>2.3%</b>	<b>5.2</b>	<b>4.9</b>	<b>(5.7%)</b>
<b>Small Tier</b>						
IEC	92.3	87.5	(5.2%)	4.1	4.5	8.2%
Nortech	85.7	80.3	(6.3%)	5.2	4.8	(7.4%)
SigmaTron	80.2	79.7	(0.7%)	3.3	3.3	(1.1%)
SMTC	45.2	43.6	(3.5%)	7.0	6.6	(6.5%)
<b>Median</b>	<b>83.0</b>	<b>80.0</b>	<b>(3.6%)</b>	<b>4.6</b>	<b>4.6</b>	<b>(0.4%)</b>

Note: Negative % change for cash cycle denotes improvement.

### Terms and Turns Comparison



## Global Industry Groups

Aerospace & Defense  
Automotive & Truck  
Building &  
Infrastructure  
Business Services  
Chemicals  
Consumer  
Distribution  
Electronics  
Energy & Power  
Financial Institutions  
Food & Beverage  
Healthcare  
Industrials  
Packaging  
Technology & Media

## Global Locations

Amsterdam  
Beijing  
Chicago  
Dallas  
Frankfurt  
London  
Los Angeles  
Madrid  
Milan  
Moscow  
Mumbai  
Munich  
New York  
Paris  
São Paulo  
Tokyo  
Vienna  
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