



DealReader

EMS

Q1 2018

Inside this Issue

Q1 2018 Deal Volume Comparison

Terms & Turns: Revisting the Cash Cycle

Announcements

- ARRIS has divested a manufacturing facility to Pegatron (Feb-18)
- TT Electronics has acquired the Stadium Group plc (Feb-18)
- Lövånger Elektronik AB has acquired Spocs AB (Mar-18)
- Hindley Circuits has acquired Magnum Electronics (Mar-18)

Lincoln News



Jan-18

Lincoln acted as the exclusive sell-side advisor to RFE Investment Partners in its sale of Atrenne Integrated Solutions Inc., the New Hope, Massachusetts-based rugged and harsh environment solutions provider, to Celestica, Inc.



Mar-18

Lincoln acted as the exclusive sell-side advisor to CHB Capital Partners in the sale of Logic PD Inc., the Eden Prairie, Minnesota-based embedded and connected devices developer, to the Compass Group Equity Partners.

Q1 2018 Summary

There were 6 EMS transactions recorded in Q1 2018, representing the same number recorded in Q1 2017 and an increase from the 5 transactions recorded in Q4 2017. EMS consolidations accounted for 3 transactions in Q1 2018, or 50% of total activity, representing an increase in the number of EMS consolidations from Q4 2017.

In Q1 2018, there was one vertical/horizontal convergence, down from the 2 recorded in Q4 2017. This quarter's activity represented 17% of the total, compared to 40% last quarter.

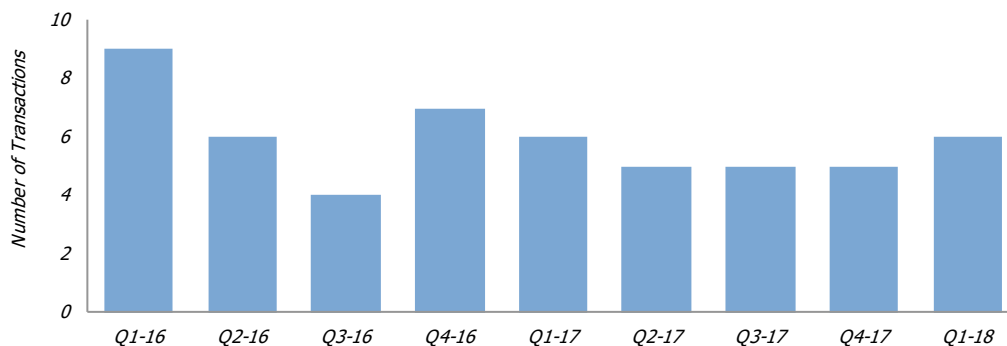
Private equity investments and transactions categorized as OEM Divestitures both accounted for one transaction, each representing 17% of total activity.

EMS divestitures did not account for any transactions in Q1 2018. There were also no transactions categorized as Diversification into EMS this quarter.

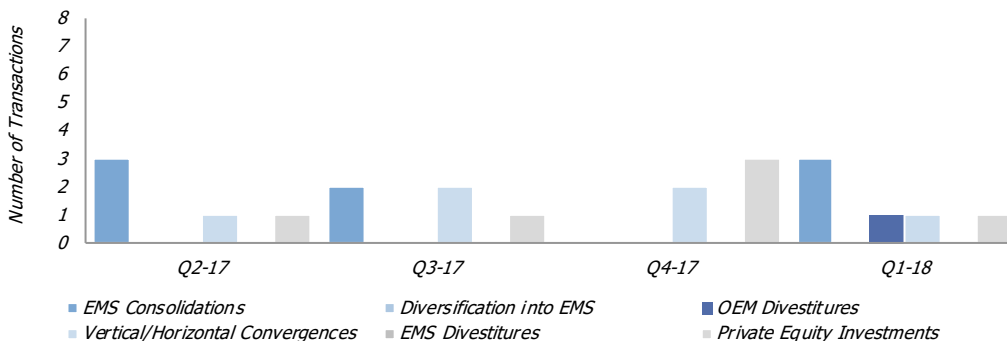
In terms of geography, 3 of the transactions completed in Q1 2018 occurred in Europe. This represented 50% of total transaction activity in Q1 2018. There was one cross-border transaction in Q1 2018 (17% of total), which occurred between high-cost regions. North America and Asia also both recorded one transaction, respectively, each representing 17% of the total.

In terms of transaction size, Small Tier EMS providers accounted for 50% of the Q1 2018 transaction volume with 3 acquisitions. Large Tier EMS providers accounted for 2 acquisitions, representing approximately 33% of total activity. There was one acquisition by a Large Tier EMS provider during the quarter, representing approximately 17% of the total.

Completed EMS Transactions



Quarterly Comparison—EMS M&A by Deal Type

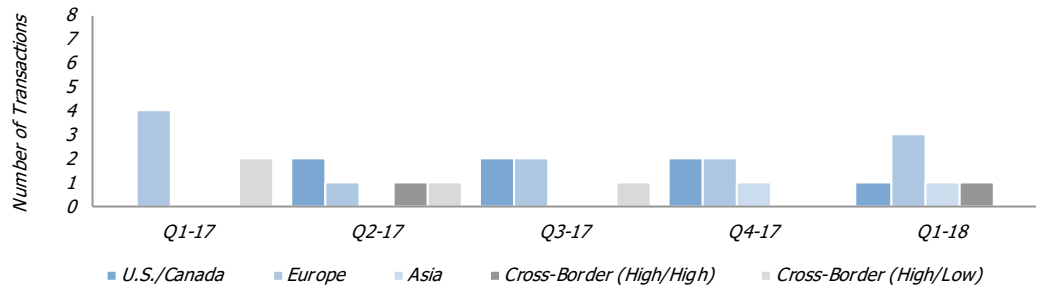


EMS Size Guide (Sales Dollars)

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

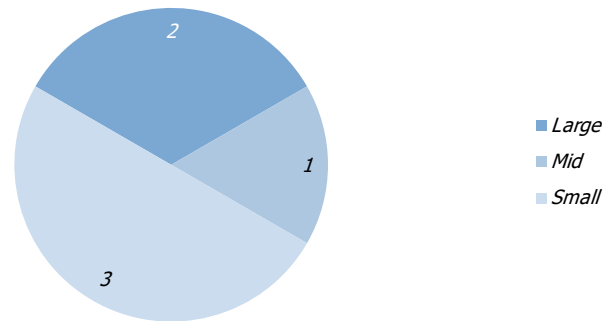
Sources: All information contained in this newsletter including the charts was obtained from company websites, Custer Reports, Lincoln International's internal data, Manufacturing Market Insider and Capital IQ.

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 2018 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 13.0% to 51.4 days in Q1 2018 from 45.5 days in Q1 2017 largely due to higher DSO and DIO. Sanmina's cash cycle lengthened from 43.6 days to 48.2 days, a 10.5% increase, largely because of higher DIO. On the other hand, Jabil's cash cycle shortened to 10.2 in Q1 2018 from 13.0 in Q1 2017, a 21.7% decrease, primarily due to lower DSO and higher DPO. Flex also shortened its cash cycle from 24.6 days to 20.1 days, a 18.2% decrease, as a result of lower DSO.

In the Mid Tier, Benchmark improved its cash cycle, primarily due to higher DPO. All other companies, including Key Tronic, Kimball and Plexus, experienced worsening cash cycles, largely driven by increased DIO among each.

In the Small Tier, IEC was the only company to improve its cash cycle, largely due to lower DSO. Nortech experienced no change in cash cycle. SMTC's cash cycle lengthened from 43.6 days to 60.2 days, a 38.1% increase, primarily due to higher DSO. SigmaTron lengthened its cash cycle by 10.0% to 87.5 days in Q1 2018 from 79.6 days in Q1 2017 largely due to higher DIO.

Inventory turnover is the most important cash cycle factor, making up the majority of the cycle. For example, Key Tronic has one of the longest cash cycles (92.1 days), and also has one of the lowest inventory turns at 4.0. Conversely, three companies with shorter cash cycles, Jabil, Flex and Benchmark (cycles of 10.2, 20.1 and 72.6, respectively), have higher inventory turns (6.6, 6.4 and 5.8, 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.

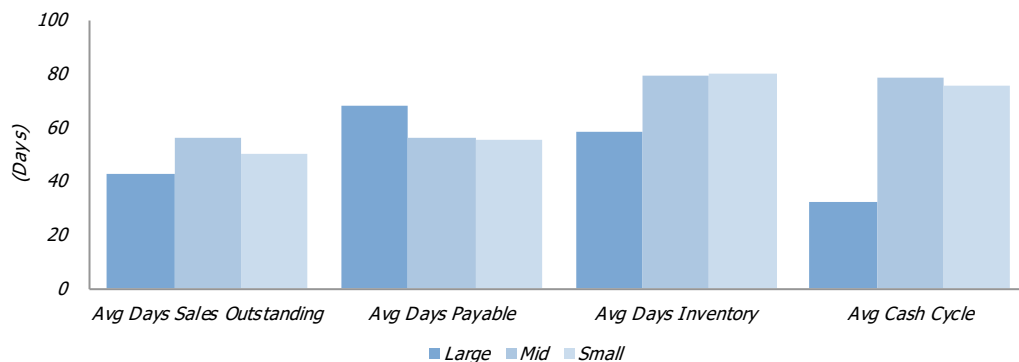
The cash cycle continues to be a focus for EMS providers due to its significant impact on ROIC and the importance of cash flow for growth.

Cash Cycle and Inventory Turns Analysis

	Cash Cycle			Inventory Turns		
	Q1-17	Q1-18	% Change	Q1-17	Q1-18	% Change
Large Tier						
Celestica	45.5	51.4	13.0%	6.3	6.1	(3.7)%
Flex	24.6	20.1	(18.2)%	6.4	6.6	2.5%
Jabil	13.0	10.2	(21.7)%	7.0	6.4	(9.3)%
Sanmina	43.6	48.2	10.5%	6.6	6.0	(9.5)%
Median	34.1	34.2	0.1%	6.5	6.2	(4.7)%
Mid Tier						
Benchmark	82.7	72.6	(12.2)%	5.3	5.8	7.9%
Key Tronic	86.7	92.1	6.2%	4.5	4.0	(9.7)%
Kimball	58.3	61.9	6.2%	6.1	5.7	(5.8)%
Plexus	79.1	89.1	12.6%	4.2	3.7	(12.2)%
Median	80.9	80.8	(0.1)%	4.9	4.9	(0.6)%
Small Tier						
IEC	87.5	74.3	(15.1)%	4.5	4.8	8.1%
Nortech	80.3	80.3	(0.0)%	4.8	5.1	7.2%
SigmaTron	79.6	87.5	10.0%	3.3	3.2	(1.6)%
SMTC	43.6	60.2	38.1%	6.6	6.0	(9.1)%
Median	79.9	77.3	(3.3)%	4.6	5.0	7.6%

Note: Negative % change for cash cycle denotes improvement.

Terms and Turns Comparison



Global Industry Groups

Business Services
Consumer
Energy, Power & Infrastructure
Healthcare
Industrials
Technology, Media & Telecom

Global Locations

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

Advisory Services

Mergers & Acquisitions
Debt Advisory
JV & Partnering
Valuations & Opinions
Special Situations

About Lincoln International

Lincoln International specializes in merger and acquisition advisory services, debt advisory services, private capital raising and restructuring advice on mid-market transactions. Lincoln International also provides fairness opinions, valuations and joint venture and partnering advisory services on a wide range of transaction sizes. With twenty offices in the Americas, Asia and Europe, Lincoln International has strong local knowledge and contacts in key global economies. The firm provides clients with senior-level attention, in-depth industry expertise and integrated resources. By being focused and independent, Lincoln International serves its clients without conflicts of interest. More information about Lincoln International can be obtained at www.lincolninternational.com.

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