

# Inside this Issue

Q1 2016 Deal Volume Comparison

**Terms & Turns: Revisting the Cash Cycle** 



## **Announcements**

- Chemigraphic has acquired CRS Electronics (Jan-16)
- Ducommun has sold its Pittsburgh, PA business unit to a private investment group (Jan-16)
- Foxconn Interconnect Technology has acquired Avago's optical module business unit (Jan-16)
- A private investment group has acquired Alliansys SA (Feb-16)
- PPI-Time Zero has acquired New Age EMS (Feb-16)
- Prettl Electronics has acquired Baltic Elektronik (Feb-16)
- SVI Public Company Limited has acquired Seidel Electronics (Feb-16)
- Ducommun has sold Miltec Corporation to **General Atomics** (Mar-16)
- Schouw & Co. has acquired GPV International (Mar-16)

# **Q1 2016 Summary**

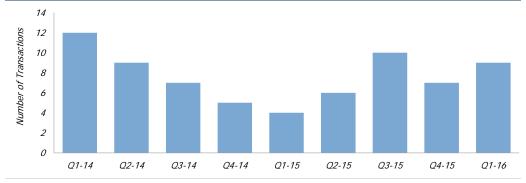
There were nine completed transactions in Q1 2016. As displayed below, the nine transactions represent an increase in recent M&A activity compared to the seven transactions recorded in the previous quarter. On a comparative basis, this represents an increase from the four transactions reported in Q1 2015.

EMS consolidations were up from the last quarter, representing four transactions in Q1 2016 compared to one transaction in Q4 2015. On a comparative basis, this is up from the one EMS consolidation reported in Q1 2015. There were two EMS divestitures in Q1 2016, up from one transaction in Q4 2015 and also up on a comparative basis as no EMS divestitures were reported in Q1 2015. Additionally, transactions categorized as private equity investments, vertical/horizontal convergences and diversification into EMS each accounted for one transaction in Q1 2016. No transactions categorized as OEM divestitures occurred in Q1 2016.

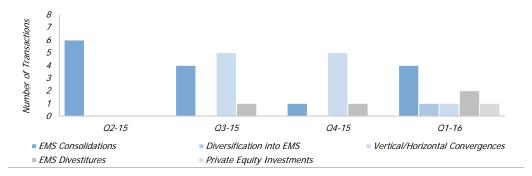
Five transactions occurred within Europe in Q1 2016 (56% of the total transactions), up from two transactions in the previous quarter. On a comparative basis, no transactions occurred within Europe in the same quarter of 2015. Three transactions occurred in the U.S. and Canada (33% of the total transactions) in Q1 2016, down from the four in the previous quarter. There was also one cross-border transaction in Q1 2016, which reflects the same activity as the previous quarter. There were no transactions in Asia this guarter.

Transactions by size for the quarter fell primarily in the Small tier, totaling five. The Mid tier accounted for three transactions while the Large tier accounted for one transaction.

# **Completed EMS Transactions**



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



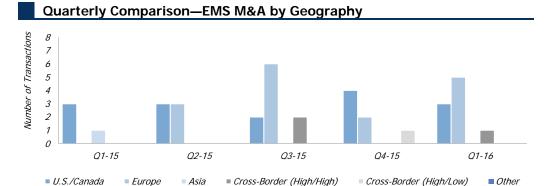


## **EMS Size Guide**

(Sales Dollars)

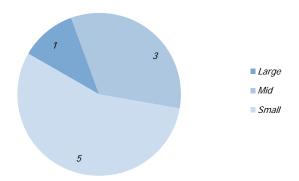
- Large (Tier I) Greater than \$3 billion
- Mid (Tier II) \$300 million to \$3 billion
- Small (Tier III) Below \$300 million

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



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 2016 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, three companies' cash cycles worsened (more days), while one company's cash cycle improved. Celestica lengthened its cash cycle by 4.4% to 44.5 days from 42.6 in Q1 2016 largely due to lower DPO. Jabil's cash cycle lengthened from 6.2 days to 9.0, a 45.3% increase, largely because of higher DSO and DIO. Sanmina's cash cycle also worsened this quarter from 44.8 days to 47.1, a 5.2% increase, primarily due to higher DSO and DIO. On the other hand, Flex shortened its cash cycle from 25.8 days to 22.6, a 12.7% decrease, as a result of lower DSO.

In the Mid tier, Key Tronic and Sparton improved their cash cycles, while the other companies experienced worsening cash cycles. Key Tronic shortened its cash cycle primarily due to lower DSO, while Sparton shortened its cash cycle because of lower DSO and DIO. Benchmark lengthened its cash cycle primarily due to increases in its DSO and DIO. Kimball saw increases in both DSO and DIO by more than its DPO, resulting in a net increase to the cash cycle. Plexus 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.



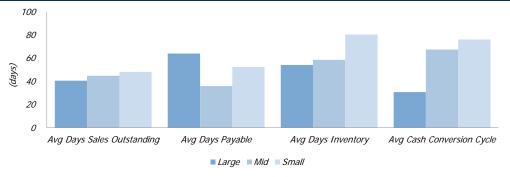
Inventory turnover is the most important cash cycle factor, making up the majority of the cycle. For example, IEC has one of the longest cash cycles (92.3 days), and also has one of the lowest inventory turns at 4.1. Conversely, the three companies with the shortest cash cycles, Jabil, Flex and Celestica (cycles of 9.0, 22.6 and 44.5, respectively), have higher inventory turns (7.7, 6.6 and 6.6, 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		
	Q1-15	Q1-16	% Change	Q1-15	Q1-16	% Change
Large Tier						_
Celestica	42.6	44.5	4.4%	6.6	6.6	(0.2%)
Flex	25.8	22.6	(12.7%)	6.9	6.6	(5.4%)
Jabil	6.2	9.0	45.3%	7.9	7.7	(1.8%)
Sanmina	44.8	47.1	5.2%	7.2	6.4	(11.5%)
Median	34.2	33.5	(2.1%)	7.1	6.6	(7.1%)
Mid Tier						
Benchmark	85.5	94.9	11.0%	5.9	5.5	(6.2%)
Key Tronic	84.4	80.8	(4.2%)	5.7	5.2	(9.8%)
Kimball	57.1	59.6	4.3%	6.4	5.9	(7.4%)
Plexus	76.7	80.5	4.9%	4.6	4.4	(5.9%)
Sparton	97.1	89.1	(8.2%)	4.9	5.2	6.3%
Median	84.4	80.8	(4.2%)	5.7	5.2	(9.8%)
Small Tier						
IEC	101.1	92.3	(8.8%)	4.4	4.1	(5.7%)
Nortech	90.2	86.8	(3.8%)	5.2	5.3	2.8%
SigmaTron	88.3	80.2	(9.2%)	3.3	3.3	1.0%
SMTC	53.6	45.2	(15.7%)	5.6	7.0	25.1%
Median	89.3	83.5	(6.4%)	4.8	4.7	(1.1%)

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

Frankfurt

London

Los Angeles

Madrid

Milan

Moscow

Mumbai

**New York** 

**Paris** 

São Paulo

Tokyo

Vienna

Zurich

# **Advisory Services**

Mergers & Acquisitions **Debt Advisory** 

Valuations & Opinions **Special Situations** 

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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 pension advisory services on a wide range of transaction sizes. With sixteen 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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