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Q3 2017 Summary

Recent EMS Transaction Announcements

An Analysis of Growth Trends Affecting the EMS Industry



Announcements

- **GUB Management GmbH** has acquired Aifotec AG (Aug-17)
- Stadium Group has acquired PowerPax UK, Limited (Sept-17)
- Jabil has acquired True-Tech Corporation (Sept-
- Integra Technologies, LLC has acquired **CORWIL Technology** Corporation (Sept-17)
- Flex Power has acquired Ericsson's Power Modules business (Sept-
- Ultra Electronics has finalized deal to buy **Sparton Corporation** (Announced)

Q3 2017 Summary

There were 6 EMS transactions recorded in Q3 2017, up slightly from the 5 recorded in Q2 2017. EMS consolidations accounted for 3 transactions in Q3 2017, or 50% of total activity, compared to 60% in the prior quarter.

In Q3 2017, there were 2 vertical/horizontal convergences, down from the one recorded in Q2 2017. This quarter's activity represented 33% of the total, compared to 20% last quarter. Private equity investors accounted for one transaction in Q3 2017, or 17% of the total.

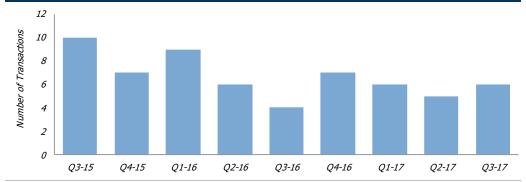
Transactions categorized as Diversification into EMS, EMS Divestitures and OEM Divestitures did not account for any transactions in Q3 2017.

In terms of geography, 2 of the transactions completed in Q3 2017 occurred in North America. This represented 33% of total

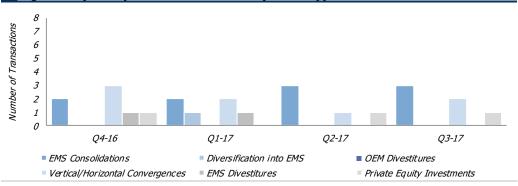
transaction activity in Q3 2017. Two transactions, or 33% of the total, occurred in There were 2 cross-border transactions in Q3 2017 (33% of the total), one of which occurred between high-cost region and a low-cost region, and one of which occurred between two high-cost regions. No transactions were isolated to only Asia or South America.

In terms of transaction size, Large Tier EMS providers recorded 2 transactions, or 33% of the total, in Q3 2017. Mid Tier EMS providers accounted for one acquisition, representing approximately 17% of total activity. There were 3 acquisitions by Small Tier EMS providers during the quarter, representing 50% of the total.

Completed EMS Transactions



Quarterly Comparison—EMS M&A by Deal Type



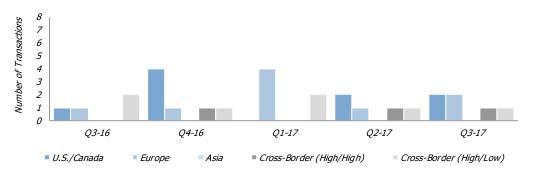


EMS Size Guide (Sales Dollars)

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

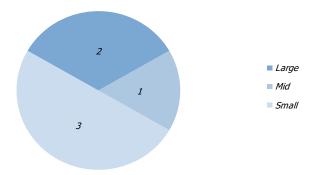
Sources: All information contained in this newsletter including the charts was obtained from company websites, Custer Reports, Lincoln International's internal data. Manufacturing Market Insider and Capital IQ.

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.

Q2 2017 Mergers and Acquisitions by Size



An Analysis of Growth Trends Affecting the **EMS Industry**

EMS industry revenue decreased by 1.0% in 2016, following the 1.8% decrease exhibited in 2015.

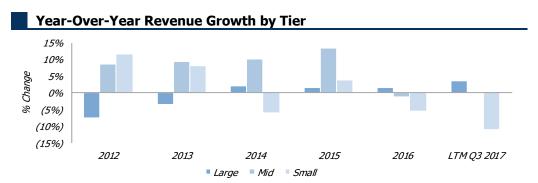
As shown in the chart on the following page, overall LTM Q3 revenue has increased slightly for Large and Mid tier EMS providers, but decreased slightly for those in the Small tier. Large tier EMS providers' revenue increased 3.6% on an LTM Q3 2017 basis versus an increase of 1.9% in LTM Q3 2016. The Mid tier also showed slight improvement with LTM Q3 revenue increasing 0.2% relative to a decrease of 0.7% for the same period during 2016. Small tier EMS companies experienced a decrease of 11.1% in the LTM Q3 2017 period compared to an increase of 1.1% for the same period during 2016.

In the most recent industry forecast, the communications segment is expected to exhibit the most significant growth within the EMS industry over the next five years, with a CAGR of 7.7% from 2016 to 2021. The medical and industrial segments are also expected to show strong growth, with CAGRs of 6.6% and

6.0%, respectively, over the next five years. Also anticipating strong growth are the automotive and commercial aviation segments with expected CAGRs of 5.8% and 5.1%, respectively, through 2021. Overall, the global EMS market is expected to grow 5.4% annually from a \$330 billion market in 2016 to a \$430 billion market in 2021.

OEM customers continue to require their EMS partners to manufacture products near the regions where they are being sold. Certain high-volume products, including consumer electronics, require OEMs to achieve the lowest cost in manufacturing, leaving China, and other Asian countries, as preferable destinations. Yet, certain circumstances, such as low-volume production, transportation and logistical issues, have made the labor cost differentials of offshoring less significant. Offshoring will still occur, according to New Venture Research's estimates, but in many cases production will return to areas in which the product is sold.





Note: Chart represents companies from Lincoln's quarterly Stock Index

Global EMS Market by Industry Segment

	2016		2021		
	Revenue (\$ in millions)	%	Revenue (\$ in millions)	%	CAGR
Automotive	\$13,020	4.0%	\$17,289	4.0%	5.8%
Communications	\$128,746	39.1%	\$186,652	43.7%	7.7%
Computer	\$83,617	25.4%	\$88,132	20.6%	1.1%
Consumer	\$45,846	13.9%	\$57,373	13.4%	4.6%
Industrial	\$30,357	9.2%	\$40,614	9.5%	6.0%
Medical	\$16,974	5.2%	\$23,336	5.5%	6.6%
Commercial Aviation	\$5,442	1.7%	\$6,992	1.6%	5.1%
Defense / Other	\$5,229	1.6%	\$7,073	1.7%	4.3%
Total	\$329,231	100.0%	\$427,462	100.0%	5.4%

Source: The Worldwide Electronics Manufacturing Services Market – 2017 Edition, New Venture Research Corp.



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 &

Telecom

Global Locations

Amsterdam

Beijing

Chicago

Dallas

Frankfurt

London

Los Angeles

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