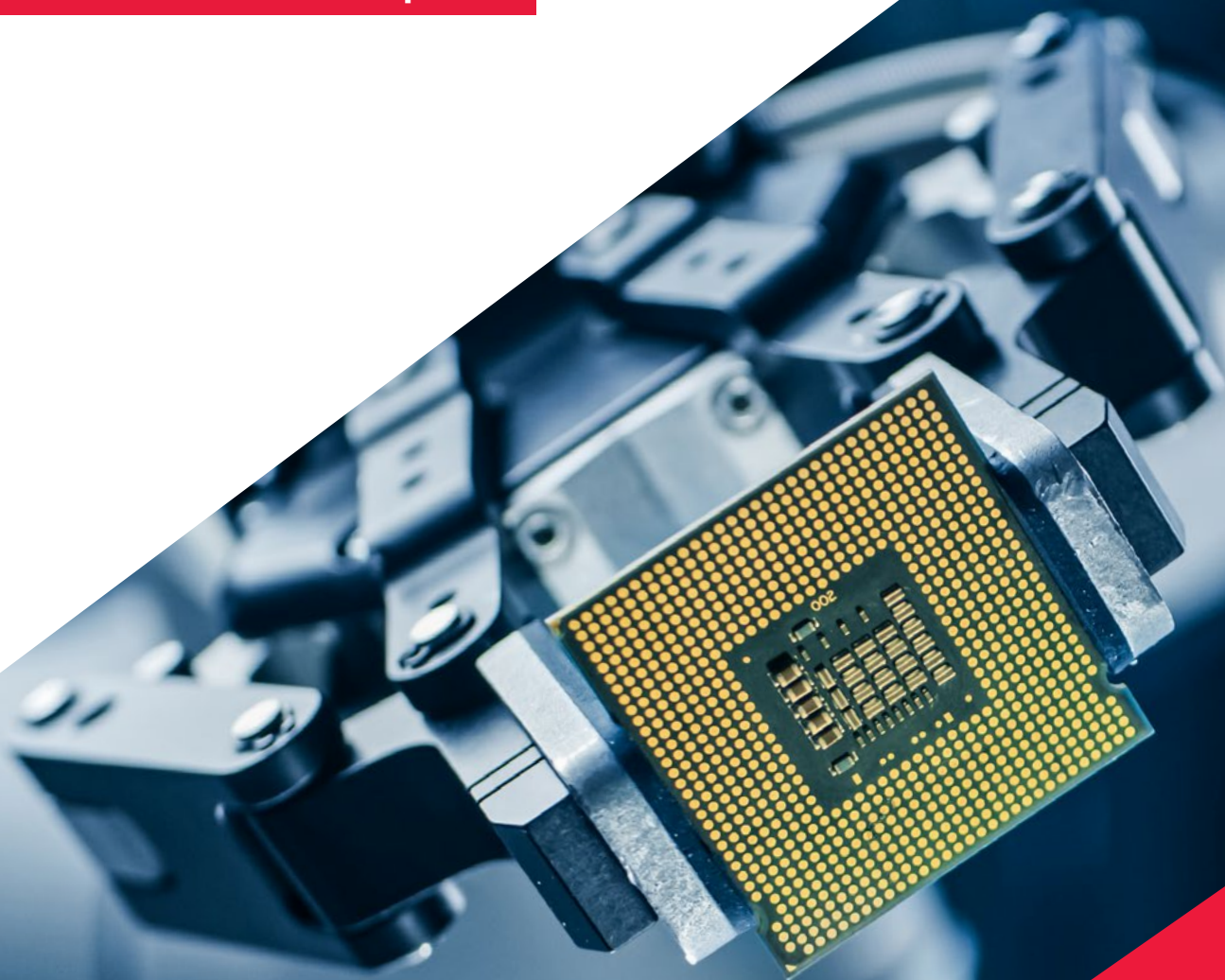


**BDO CAPITAL ADVISORS, LLC**  
Trusted Investment Bankers for the Middle Market

# Industry Insights: **Electronic Contract Manufacturing Services**

Q2 2024 M&A Market Update



## Inside this issue...

The electronic contract manufacturing services (ECMS) sector has demonstrated continued momentum in 2024, benefitting from stabilizing supply chains and resilient consumption activity. Still, participants in the ECMS sector are closely monitoring inflation trends which continue to impact operations. For the remainder of the year, ECMS players expect global shipping costs to continue to come down, labor markets to improve moderately and material costs to stay flat.

Overall M&A transaction value year-to-date (YTD) through Q2 2024 edged up compared to the same period in 2023, benefiting from a high-level of mega deals (\$1 billion+). In the face of strong earnings and cautious market optimism, well-capitalized investors, particularly corporates, continue to seek quality assets resulting in healthy multiples and steady deal flow.

While M&A activity in the broader market has weakened, demand for ECMS solutions remains healthy driven by industrial automation growth and the ECMS market's high level of fragmentation which continues to attract buyer interest. U.S. ECMS transaction volume in 1H 2024 saw an increase of 15 percent compared to the same period in the prior year, while total transaction value increased by 6 percent (S&P Capital IQ).

Strong ECMS transaction volume in recent years can be credited in part to favorable domestic legislation, which has the goal of incentivizing manufacturers to reshore production.

Specifically, the 2020 CARES Act authorized \$100 million to drive growth in domestic manufacturing of medical technology, and the 2022 CHIPS Act designated \$52 billion of reshoring incentives for chip fabricators and suppliers. Over the last twelve months (LTM) ending Q2 2024 the ECMS sector stocks gained 9 percent versus 22 percent for the broader market. ECMS companies specializing in Healthcare / Life Sciences, Consumer and Communications end markets saw outsized performance during the period. Average EV/EBITDA multiples for ECMS public companies ticked up modestly to 11.2x during the LTM period ending Q2 2024, increasing from 11.1x in 2023. Public company trading EV/EBITDA multiples were led by the Healthcare / Life Sciences end market with an LTM multiple of 16.2x.

A notable sub-sector of the broader ECMS space is the Technology Design & Manufacturing Service (TDMS) vertical. In 1H 2024, the TDMS sector gained 25 percent and 2 percent in transaction volume and transaction value, respectively, compared to the same period in the prior year. TDMS sector stocks underperformed the S&P 500 over the LTM period ending Q2 2024, losing 7 percent versus a 22 percent increase for the broader market. Price to Earnings ("P/E") ratios were led by the Healthcare / Life Sciences end market with 35.9x versus the broader TDMS Index of 36.0x, according to S&P Capital IQ.

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### Please direct inquiries to:



**VALENTINA MIDURA**  
Senior Managing Director  
617-422-7593  
[vmidura@bdocap.com](mailto:vmidura@bdocap.com)



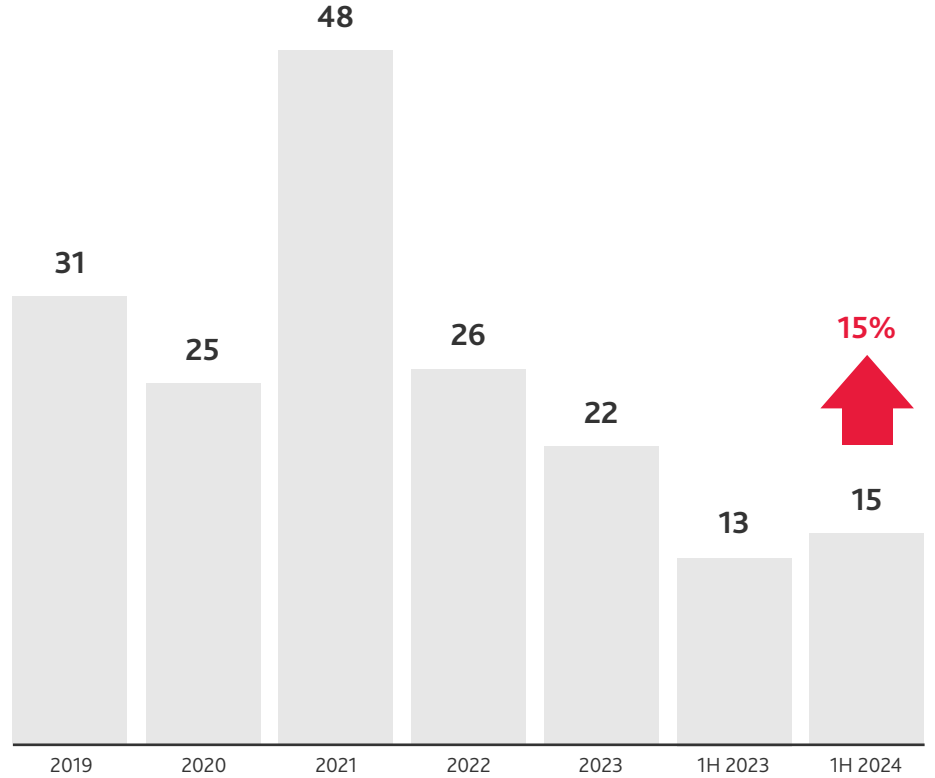
**CARLOS MEDINA**  
Associate  
617-422-0700  
[cmedina@bdocap.com](mailto:cmedina@bdocap.com)

## SECTOR M&A ACTIVITY

### M&A Transaction Volume: U.S. Electronic Contract Manufacturing Services Industry

#### Commentary

- ▶ Activity in the U.S. ECMS M&A market was relatively stable from 2019 to 2023 except for the substantial increase in 2021. The 2021 surge can largely be attributed to the overhang of transactions from the COVID-19 pandemic. From 2019 to 2023, the average annual transaction volume was 30.
- ▶ Transaction volume through 1H 2024 stood at 15 transactions, a 15 percent increase in volume from 1H 2023.

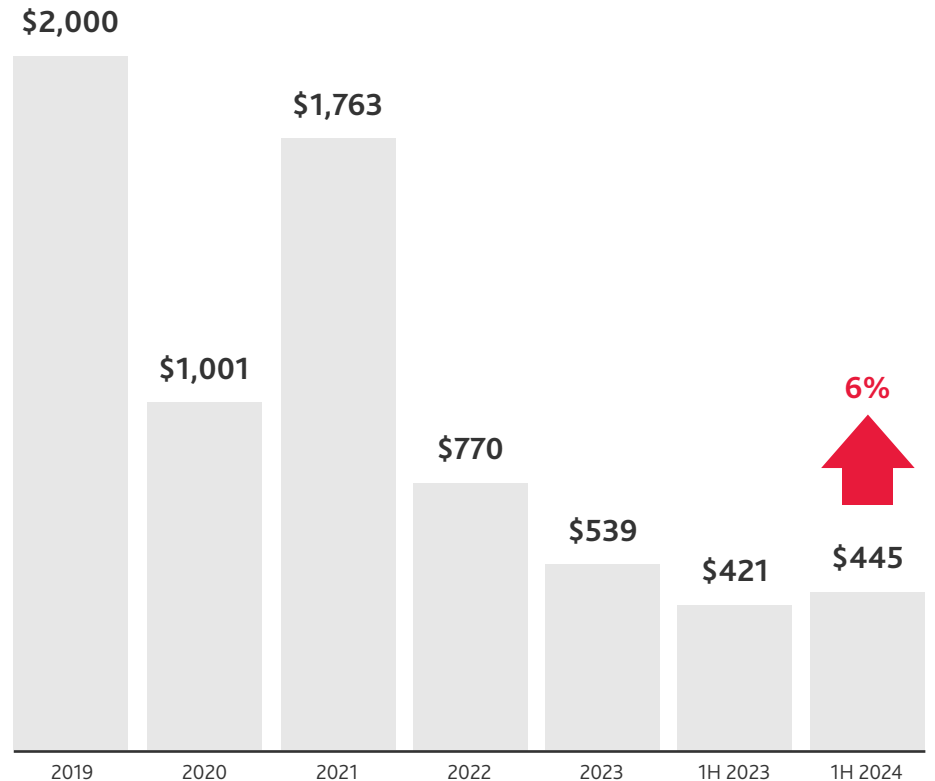


Source: S&P Capital IQ

### M&A Transaction Value (\$M): U.S. Electronic Contract Manufacturing Services Industry

#### Commentary

- ▶ Total reported deal value has fluctuated year-over-year between 2019 and 2023, primarily driven by a few outlier transactions.
- ▶ Total reported deal value in 1H 2024 rose to \$445 million from \$421 million in 1H 2023, or a 6 percent increase.
- ▶ Average announced transaction value in 1H 2024 was \$64 million, down approximately 20 percent from the same period in the prior year.



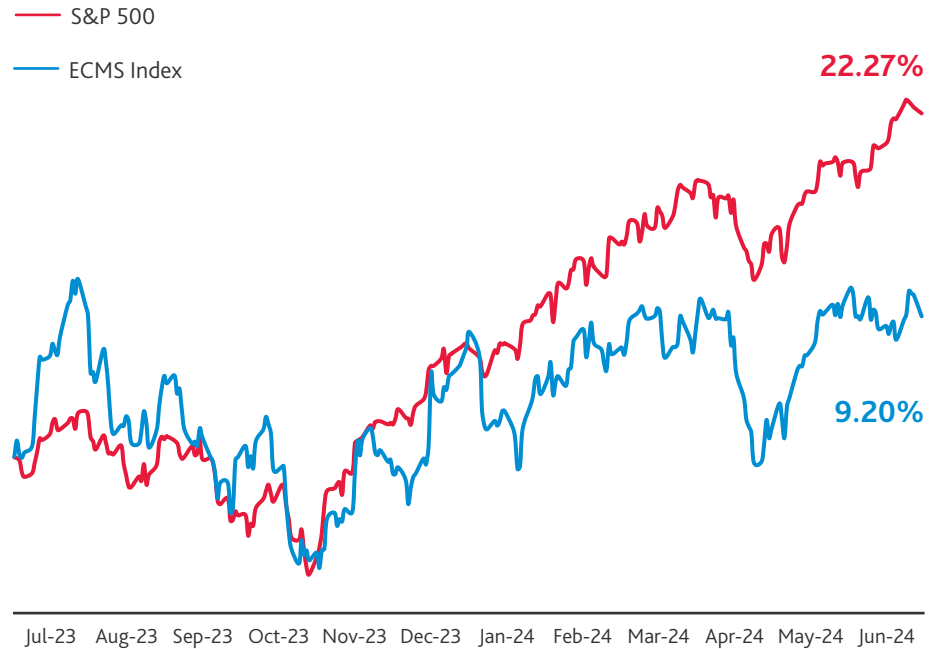
Source: S&P Capital IQ

## EQUITY TRADING TRENDS

### S&P 500 vs. Electronic Contract Manufacturing Services Index

#### Commentary

- ▶ The ECMS Index gained approximately 9 percent on an LTM basis through 1H 2024 compared to a gain of approximately 22 percent in the S&P 500 during the same period.
- ▶ ECMS sector equities continue to benefit from legislative tailwinds including the 2020 CARES Act and the 2022 CHIPS Act, which together apportioned several hundred million dollars for investment in domestic manufacturing and chip production.
- ▶ Precarious U.S. relations abroad coupled with sporadic supply chain disruption have re-ignited the importance of domestic production across all facets of manufacturing.

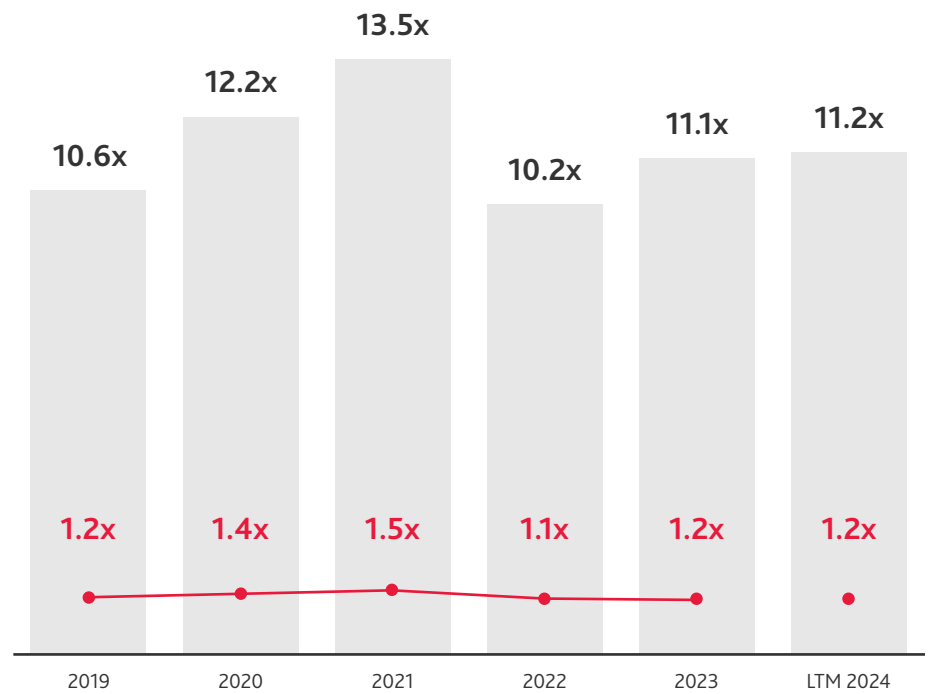


Source: S&P Capital IQ  
 Note: ECMS Index weighted by market capitalization

### Electronic Contract Manufacturing Services Index Multiples

#### Commentary

- ▶ Poor stock performance and fears of a recession put a damper on trading multiples in 2022, with the ECMS Index declining to 10.2x EV/EBITDA. Multiples recovered in 2023 and have continued the trend in the LTM Q2 2024 period.
- ▶ The average EV/EBITDA trading multiple of 11.2x as of LTM Q2 2024 stayed nearly constant with the 11.1x multiple in 2023.
- ▶ LTM EV/EBITDA trading multiples were led by the Healthcare / Life Sciences end market at 16.2x.



Source: S&P Capital IQ

■ EBITDA Multiple —●— Revenue Multiple

## EQUITY TRADING OVERVIEW

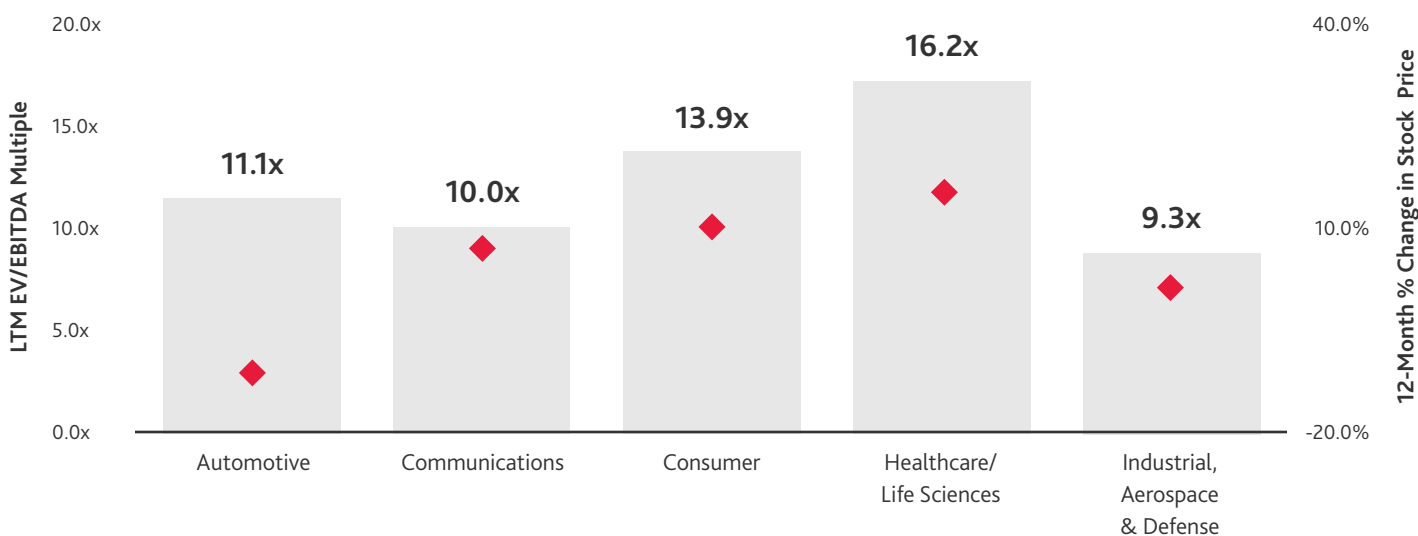
The ECMS industry has five distinct end markets including Automotive, Communications, Consumer, Healthcare / Life Sciences, and Industrial, Aerospace & Defense. The ECMS Index has seen a 24 month increase in revenue of 4.9 percent, led by the Healthcare / Life Sciences (16.0%) and Automotive (11.4%) end markets. LTM EV/EBITDA multiples are an average of 11.2x, led by Healthcare / Life Sciences (16.2x) and Consumer (13.9x). On an LTM P/E basis, the Healthcare / Life Sciences end market leads the broader Index at 35.9x versus the Index at 30.1x.

### Key Trading Statistics

End Market	Average Enterprise Value (\$mm)	Change in Revenue		Change in Stock Price		LTM		
		12 mos.	24 mos.	3 mos.	12 mos.	EV/ Revenue	EV/ EBITDA	P/E
Automotive	23,985	0.6%	11.4%	(3.3%)	(10.8%)	2.2x	11.1x	11.8x
Communications	9,804	(11.3%)	(4.1%)	4.4%	7.9%	0.7x	10.0x	23.0x
Consumer	13,902	(9.8%)	(5.3%)	(12.3%)	10.6%	0.7x	13.9x	23.4x
Healthcare / Life Sciences	10,761	4.5%	16.0%	1.7%	15.2%	3.6x	16.2x	35.9x
Industrial, Aerospace & Defense	1,419	(8.8%)	10.9%	5.8%	3.8%	1.1x	9.3x	20.6x
<b>ECMS Index</b>	<b>12,336</b>	<b>(3.9%)</b>	<b>4.9%</b>	<b>(1.9%)</b>	<b>2.0%</b>	<b>1.2x</b>	<b>11.2x</b>	<b>30.1x</b>

Source: S&P Capital IQ

### Public Company Sector Performance



Source: S&P Capital IQ

■ LTM EV/EBITDA    ◆ 12 Mos. % Change

**SECTOR SPOTLIGHT: TECHNOLOGY DESIGN & MANUFACTURING SERVICE COMPANIES**

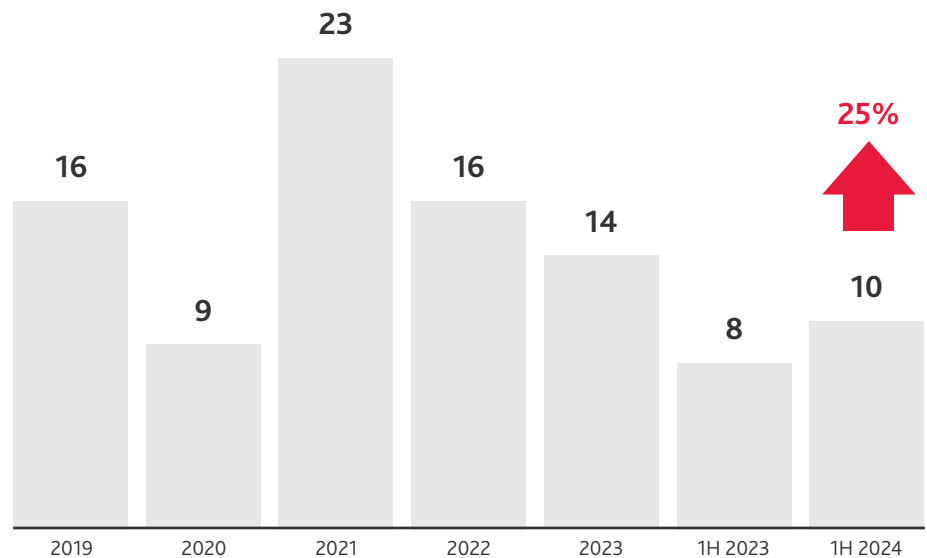
A notable sub-sector of the broader ECMS space is the Technology Design & Manufacturing Service (TDMS) vertical. In addition to offering contract manufacturing services, these organizations often function as turnkey solution providers. TDMS companies assist customers with all stages of the product lifecycle, including design & development, manufacturing, and aftermarket services.

The TDMS space can be considered quite lucrative, especially in the context of the legacy contract manufacturing business model. By offering cutting edge design services, TDMS companies de-commoditize the typical outsourced manufacturing process. This paves the way for stickier relationships with customers that are underpinned by innovation via design partnerships, rather than manufacturing bandwidth and legacy product assembly.

**M&A Transaction Volume:  
U.S. Technology  
Design & Manufacturing  
Service Industry**

**Commentary**

- ▶ Between 2019 and 1H 2024, approximately 53 percent of all ECMS transactions were companies in the TDMS vertical.
- ▶ Transaction volume in 1H 2024 stood at 10 transactions, a 25 percent increase in volume over 1H 2023.

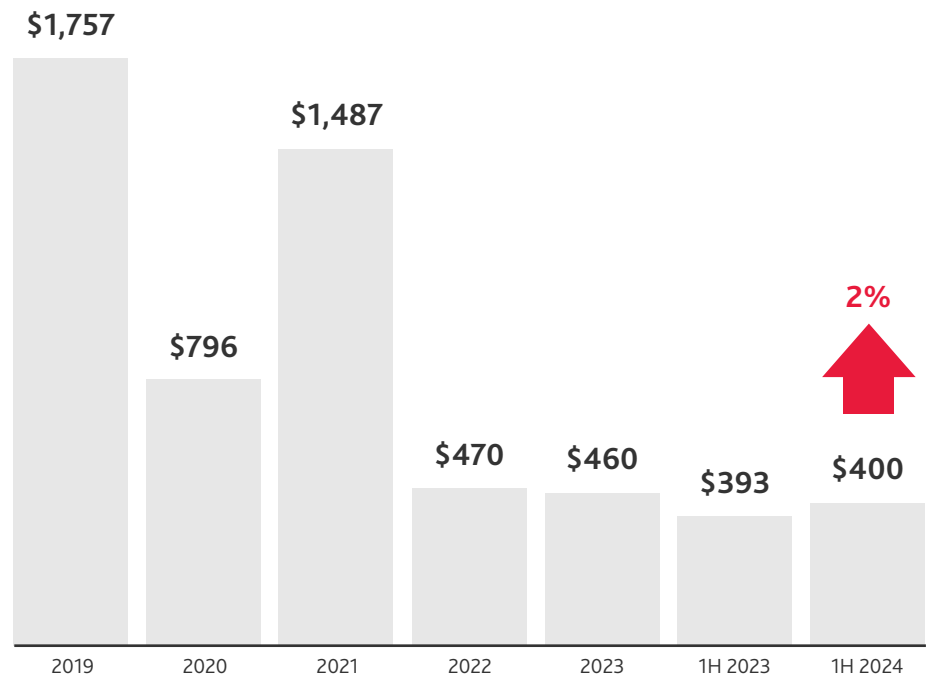


Source: S&amp;P Capital IQ

**M&A Transaction Value:  
U.S. Technology  
Design & Manufacturing  
Service Industry**

**Commentary**

- ▶ Total reported TDMS deal value in 1H 2024 increased to \$400 million from \$393 million, or 2 percent more than 1H 2023.
- ▶ Average announced transaction value in 1H 2024 was \$80 million, down 18 percent over the same period in the prior year.
- ▶ TDMS transaction value made up 90 percent of total reported deal value in the ECMS sector in 1H 2024, compared to 93 percent in 1H 2023.



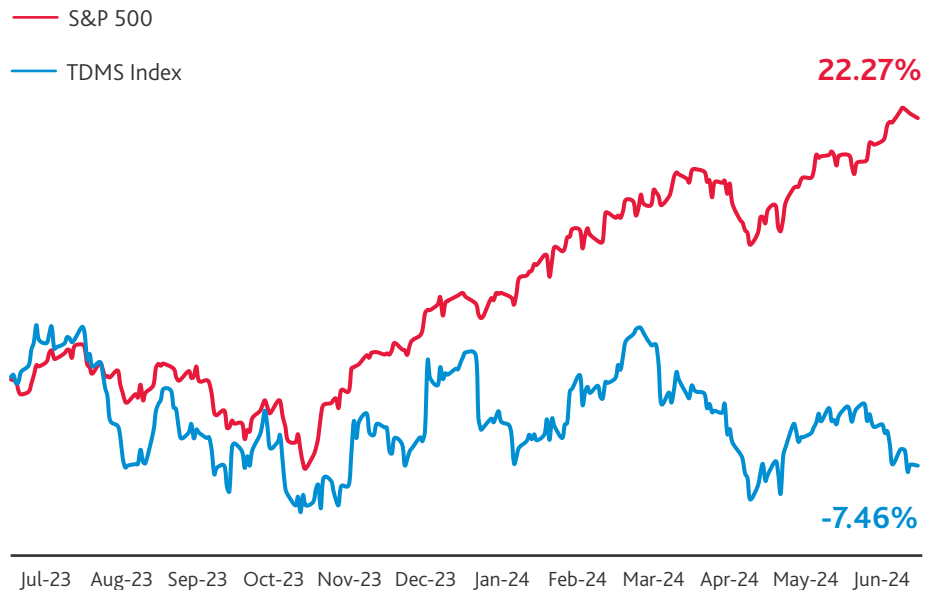
Source: S&amp;P Capital IQ

## SECTOR SPOTLIGHT: TECHNOLOGY DESIGN & MANUFACTURING SERVICE COMPANIES

### S&P 500 vs. Technology Design & Manufacturing Service Companies Index

#### Commentary

- ▶ The TDMS Index lost approximately 7 percent on an LTM basis through 1H 2024 compared to a gain of approximately 22 percent in the S&P 500 during the same period.
- ▶ Over the last twelve months, the end markets with the highest percentage stock increase were Healthcare / Life Sciences (15 percent) and Industrial, Aerospace & Defense (11 percent).
- ▶ The slump in stock performance in the last three months was primarily driven by the Consumer (-15 percent) and Automotive (-10 percent) end markets.

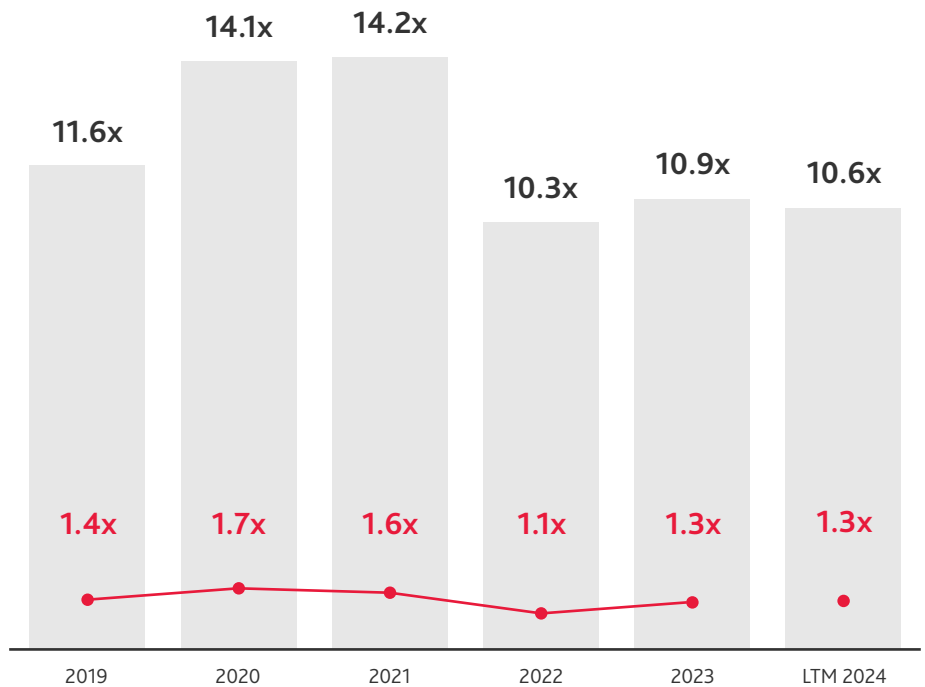


Source: S&P Capital IQ  
 Note: TDMS Index weighted by market capitalization

### Technology Design & Manufacturing Service Companies Index Multiples

#### Commentary

- ▶ TDMS companies have historically garnered higher valuations than traditional ECMS providers due to their value-added design capabilities. From 2019 - 2022, TDMS companies traded on average 1.0x higher than the broader ECMS market.
- ▶ The average EV/EBITDA trading multiple as of LTM Q2 2024 decreased modestly to 10.6x from 10.9x in 2023, a decrease of approximately 3 percent.
- ▶ LTM EV/EBITDA trading multiples were led by the Healthcare / Life Sciences end market at 16.2x.



Source: S&P Capital IQ  
 Legend: ■ EBITDA Multiple —●— Revenue Multiple

## SECTOR SPOTLIGHT: TECHNOLOGY DESIGN & MANUFACTURING SERVICE COMPANIES

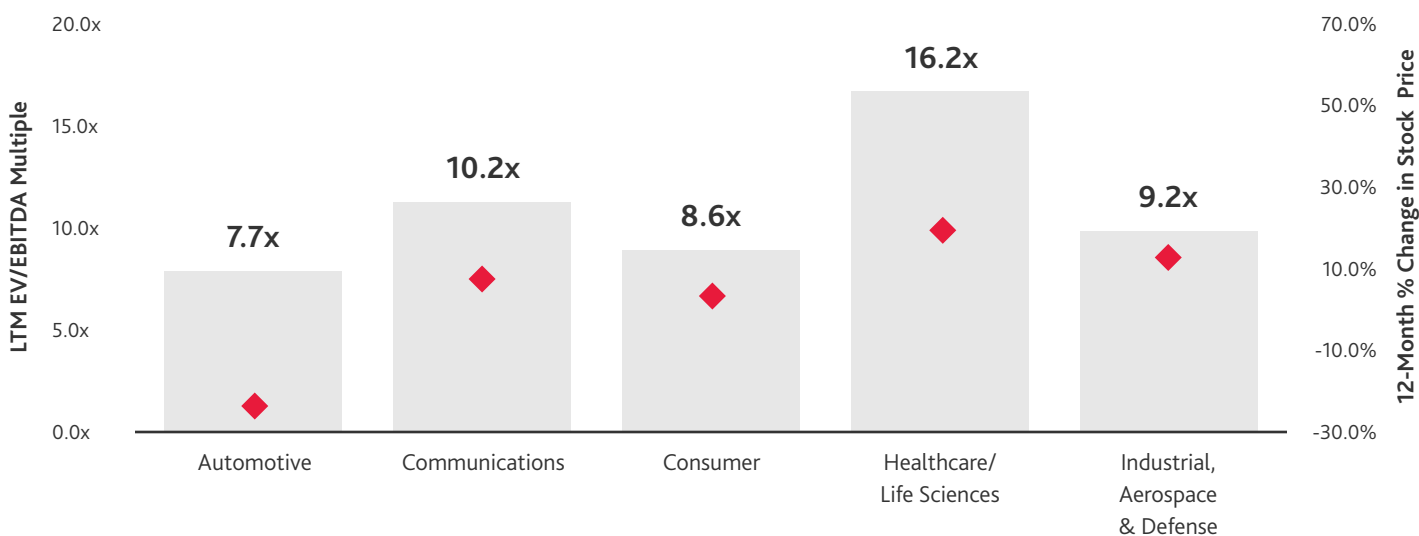
The TDMS Index is broken into five end markets including Automotive, Communications, Consumer, Healthcare / Life Sciences, and Industrial, Aerospace & Defense. The TDMS Index has seen a 24 month increase in revenue of 11.9%, led by the Automotive (23.4%), Healthcare / Life Sciences (16.0%) and Industrial, Aerospace & Defense (9.2%) end markets. LTM EV/EBITDA multiples traded at an average of 10.6x, led by Healthcare / Life Sciences (16.2x) and Communications (10.2x). On an LTM P/E basis, the TDMS Index traded at 36.0x, led by the Healthcare / Life Sciences (35.9x) end market.

### Equity Trading Statistics

End Market	Average Enterprise Value (\$mm)	Change in Revenue		Change in Stock Price		LTM		
		12 mos.	24 mos.	3 mos.	12 mos.	EV/ Revenue	EV/ EBITDA	P/E
Automotive	15,538	5.1%	23.4%	(10.1%)	(24.7%)	1.0x	7.7x	9.2x
Communications	8,643	(13.9%)	0.2%	6.7%	7.1%	0.8x	10.2x	24.0x
Consumer	11,315	(13.0%)	(4.8%)	(15.2%)	4.6%	0.5x	8.6x	23.7x
Healthcare / Life Sciences	10,761	4.5%	16.0%	1.7%	15.2%	3.6x	16.2x	35.9x
Industrial, Aerospace & Defense	1,743	(10.2%)	9.2%	6.2%	11.2%	1.1x	9.2x	21.1x
<b>TDMS Index</b>	<b>9,542</b>	<b>(2.0%)</b>	<b>11.9%</b>	<b>(3.5%)</b>	<b>0.7%</b>	<b>1.3x</b>	<b>10.6x</b>	<b>36.0x</b>

Source: S&P Capital IQ

### Public Company Sector Performance



Source: S&P Capital IQ

■ LTM EV/EBITDA    ◆ 12 Mos. % Change















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## BDO CAPITAL ADVISORS SENIOR M&A PROFESSIONALS:



**VALENTINA MIDURA**  
Senior Managing Director  
617-422-7593  
[vmidura@bdocap.com](mailto:vmidura@bdocap.com)



**PATRICK BISCEGLIA**  
Managing Director  
617-239-4115  
[pbisceglia@bdocap.com](mailto:pbisceglia@bdocap.com)



**BILL SHIRY**  
Managing Director  
312-233-1856  
[wshiry@bdocap.com](mailto:wshiry@bdocap.com)



**BLAKE HEAD**  
Managing Director, ESOP  
Advisory Group Head  
404-979-7122  
[bhead@bdocap.com](mailto:bhead@bdocap.com)



**SCOTT LEACH**  
Director, ESOP Advisory  
760-525-2506  
[scleach@bdocap.com](mailto:scleach@bdocap.com)



**MARIA THIEL**  
Director, ESOP Advisory  
615-493-5698  
[mthiel@bdocap.com](mailto:mthiel@bdocap.com)

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