

Industry Update No. 9-24 December 11, 2024

How's Business? OEM

Bishop & Associates tracks sales and profits of 13 market sectors and more than 120 companies. The objectives are to determine how selected electronic markets have performed, identify sales and profit trends for forecasting purposes, and monitor company performance within market sectors.

The following tables provide the 2023/2022 percent change in revenues, and the first nine months of 2024 versus the first nine months of 2023 sales and percent change in sales by market sector.

Market Sector	2022/2023	Nine Months	Nine Months	Percent
Market Sector	% Change	2023	2024	Change
Telecom/Datacom	1.9%	\$332,344.7	\$323,574.9	-2.6%
Automotive	13.1%	\$1,480,134.4	\$1,483,301.8	0.2%
Industrial	7.1%	\$302,396.0	\$282,075.5	-6.7%
Mil/Aero	5.5%	\$254,618.9	\$276,073.6	8.4%
Computers	-10.9%	\$273,052.7	\$288,202.4	5.5%
Peripherals	-13.6%	\$43,133.3	\$46,195.2	7.1%
Consumer	-0.3%	\$277,505.2	\$264,678.2	-4.6%
Transportation	14.9%	\$273,387.7	\$266,978.5	-2.3%
Medical	-3.7%	\$87,309.0	\$90,370.0	3.5%
Instrumentation	-5.6%	\$48,437.9	\$47,865.6	-1.2%
Semiconductors	-17.9%	\$224,303.4	\$280,880.7	25.2%
CEMs	-4.1%	\$66,787.9	\$58,848.1	-11.9%
Distribution	-10.5%	\$60,432.9	\$57,704.3	-4.5%
Total Market Sectors	3.9%	\$3,723,844.0	\$3,766,748.8	1.2%

\$ Millions

For the first nine months of 2023 versus the first nine months of 2024, six of the 13 market sectors saw year-over-year sales increase. The largest increase was in Semiconductors, where sales increased +25.2% year-over-year, followed by Mil/Aero at +8.4% and Peripherals at +7.1%.

As a note: This database is not static. Companies are acquired or go into bankruptcy; thus, their financial data is no longer available, and they are removed from the database. These types of activities occurred frequently in 2009 and 2010, and because of this, as well as additions we have made to the database, it is not possible to directly compare current numbers to numbers referenced in past Bishop "How's Business? OEMs." These analyses are meant to be used as a relative measure of market sector performance. If you have any questions about this database or specific market sectors, please feel free to contact us.

The following pages display each market sector in detail, including the companies selected for each sector.



Telecom/Datacom Equipment Sector

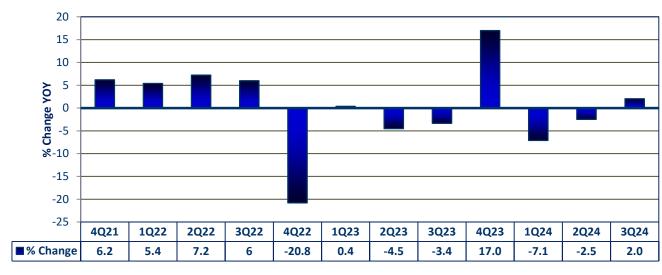
The telecom/datacom equipment sector recorded a sales increase of +1.9% in 2023. Sales for the first nine months of 2024 versus the first nine months of 2023 were down -2.6% year-over-year. Net income as a percent of sales totaled +16.9% for the period, down -20.6% year-over-year.

Telecom/Datacom Equipment Sector - Sales and Net Income

Company	2022/2023	Nine Months	Nine Months	Percent
Joinpuriy	% Change	2023	2024	Change
Cisco Systems	7.7%	\$44,442.0	\$40,185.0	-9.6%
Motorola Solutions Inc	9.5%	\$7,130.0	\$7,807.0	9.5%
Nokia	-7.0%	\$17,934.3	\$14,644.5	-18.3%
Apple (iPhone)	13.3%	\$134,808.0	\$131,481.0	-2.5%
Samsung	-8.9%	\$67,266.4	\$67,718.6	0.7%
Qualcomm	-15.5%	\$26,357.0	\$29,026.0	10.1%
Ericsson	-7.3%	\$18,075.0	\$16,658.6	-7.8%
Juniper Networks	5.0%	\$4,200.0	\$3,670.0	-12.6%
ZTE Corporation	-8.7%	\$12,132.0	\$12,384.2	2.1%
Total Sales	1.9%	\$332,344.7	\$323,574.9	-2.6%
Total Net Income		\$68,876.4	\$54,700.0	-20.6%

\$ Millions

Telecom/Datacom Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales increased +10.4%. Year-over-year, sales increased +2.0% in the third quarter.



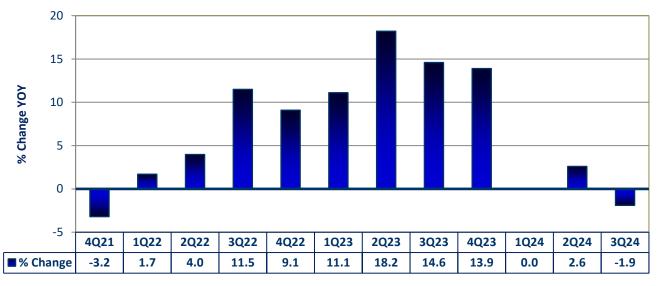
Automotive Equipment Sector

The automotive equipment sector recorded a sales increase of +13.1% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 were up +0.2% year-over-year. Net income as a percent of sales totaled +5.9% for the period, down -23.6% year-over-year.

Automotive Equipment Sector - Sales and Net Income

Company	2022/2023	Nine Months	Nine Months	Percent
o o mpany	% Change	2023	2024	Change
Borg Warner Auto	0.3%	\$12,322.0	\$10,647.0	-13.6%
Daimler	1.6%	\$111,538.1	\$116,575.0	4.5%
Ford Motor Co.	11.5%	\$130,229.0	\$136,781.0	5.0%
General Motors	9.6%	\$128,862.0	\$139,739.0	8.4%
Lear Corp.	12.4%	\$17,625.0	\$17,590.4	-0.2%
Honda	9.7%	\$101,358.0	\$107,142.8	5.7%
Toyota	14.2%	\$229,285.0	\$226,738.4	-1.1%
Volkswagon	22.3%	\$254,856.6	\$258,177.1	1.3%
Kia Motors	13.9%	\$57,993.0	\$59,398.5	2.4%
Nissan	17.1%	\$66,454.4	\$62,751.8	-5.6%
Stellantis	11.3%	\$142,457.2	\$128,276.9	-10.0%
BMW AG	12.2%	\$121,978.0	\$115,264.5	-5.5%
Tesla Auto	18.8%	\$71,606.0	\$71,983.0	0.5%
Continental AG	8.0%	\$33,570.2	\$32,236.3	-4.0%
Total Sales	13.1%	\$1,480,134.4	\$1,483,301.8	0.2%
Total Net Income		\$114,683.0	\$87,608.7	-23.6%
\$ Millions	A			

Automotive
Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales decreased -3.8%. Year-over-year, sales were down -1.9% in the third quarter.



Industrial Equipment Sector

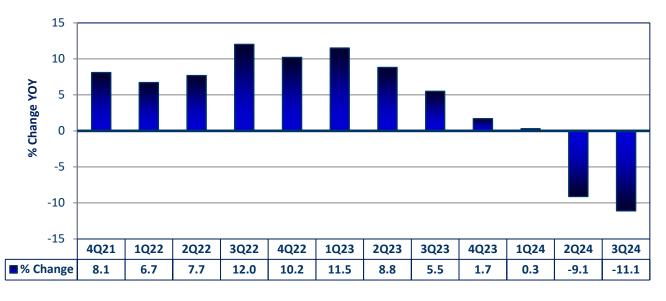
The industrial equipment sector recorded a sales increase of +7.1% in 2023. Sales for the first nine months of 2024 versus the first nine months of 2023 were down -6.7% year-over-year. Net income as a percent of sales totaled +13.1% for the period, down -12.8% year-over-year.

Industrial Equipment Sector - Sales and Net Income

Company	2022/2023 % Change	Nine Months 2023	Nine Months 2024	Percent Change
Baker Hughes	20.6%	\$18.672.0	\$20.465.0	9.6%
Caterpillar	12.8%	\$49.990.0	\$48.594.0	-2.8%
· '	1-1-11	, -,	* - 7	
Deere & Co.	9.3%	\$48,591.0	\$39,533.0	-18.6%
FMC Corp.	-22.7%	\$3,341.0	\$3,021.0	-9.6%
General Electric	-11.2%	\$48,539.0	\$35,036.0	-27.8%
Parker Hannifin	15.4%	\$15,005.0	\$15,165.0	1.1%
Schlumberger	17.6%	\$24,144.0	\$27,024.0	11.9%
ABB	8.7%	\$23,990.0	\$24,260.0	1.1%
Siemens	9.2%	\$64,711.0	\$64,087.5	-1.0%
Danaher	48.6%	\$5,413.0	\$4,890.0	-9.7%
Total Sales	7.1%	\$302,396.0	\$282,075.5	-6.7%
Total Net Income		\$42,312.3	\$36,914.8	-12.8%

\$ Millions

Industrial
Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales remained flat. Year-over-year, sales decreased -11.1% in the third quarter.



Military/Aerospace Equipment Sector

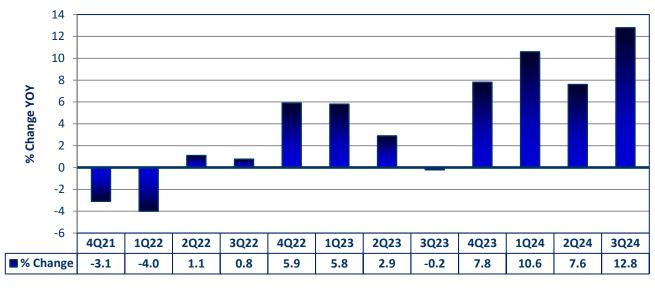
The military/aerospace equipment sector recorded a sales increase of +5.5% in 2023. Sales for the first nine months of 2024 versus the first nine months of 2023 were up +8.4% year-over-year. Net income as a percent of sales totaled +5.7% for the period, down -14.0% year-over-year.

Mil/Aero Equipment Sector - Sales and Net Income

Company	2022/2023	Nine Months	Nine Months	Percent
Sompany	% Change	2023	2024	Change
Boeing (Mil/Aero)	7.6%	\$18,187.0	\$18,507.00	1.8%
Airbus (Mil/Aero)	8.6%	\$17,263.0	\$13,586.36	-21.3%
General Dynamics	7.3%	\$30,604.0	\$34,378.00	12.3%
Honeywell	3.4%	\$27,216.0	\$28,407.00	4.4%
Lockheed Martin	2.4%	\$48,697.0	\$52,421.00	7.6%
Northrop Grumman	7.3%	\$28,652.0	\$30,347.00	5.9%
Textron	6.3%	\$9,791.0	\$10,089.00	3.0%
Raytheon Technologies Corp.	2.8%	\$48,993.0	\$59,737.00	21.9%
L-3 Harris	13.8%	\$14,079.0	\$15,802.00	12.2%
Leonardo	10.2%	\$11,136.9	\$12,799.25	14.9%
Total Sales	5.5%	\$254,618.9	\$276,073.6	8.4%
Total Net Income		\$18,451.1	\$15,872.2	-14.0%

\$ Millions

Military/Aerospace
Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales decreased -1.5%. Year-over-year, sales increased +12.8% in the third quarter.



Computer Equipment Sector

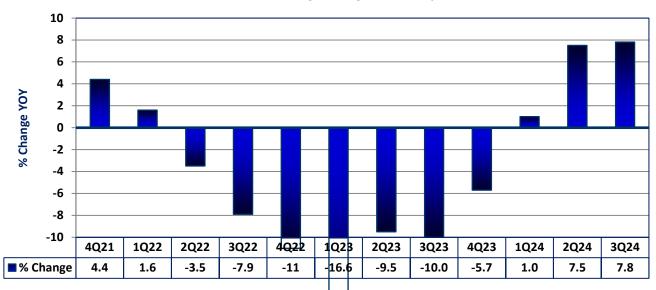
The computer equipment sector recorded a sales decrease of -10.9% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 were up +5.5% year-over-year. Net income as a percent of sales totaled +7.7% for the period, up +4.7% year-over-year.

Computer Equipment Sector - Sales and Net Income

Company	2022/2023 % Change	Nine Months 2023	Nine Months 2024	Percent Change
Apple (Computers)	-19.2%	\$40,526.0	\$41,875.0	3.3%
Dell Technologies	-12.9%	\$66,107.0	\$71,636.0	8.4%
Hewlett-Packard	-10.0%	\$40,035.0	\$40,218.0	0.5%
Hewlett Packard Enterprise	-3.3%	\$21,326.0	\$23,372.0	9.6%
IBM	2.2%	\$44,479.0	\$45,200.0	1.6%
NCR	-0.3%	\$5,894.0	\$2,449.0	-58.4%
ASUS	-14.6%	\$11,688.5	\$13,512.0	15.6%
Unisys	1.8%	\$1,457.8	\$1,463.0	0.4%
Lenovo	-15.7%	\$39,940.0	\$47,119.9	18.0%
Advantech	-10.2%	\$1,599.4	\$1,357.5	-15.1%
Total Sales	-10.9%	\$273,052.7	\$288,202.4	5.5%
Total Net Income		\$21,136.4	\$22,121.5	4.7%

\$ Millions

Computer
Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales increased +3.5%. Year-over-year, sales increased +7.8% in the third quarter.



Peripheral Equipment Sector

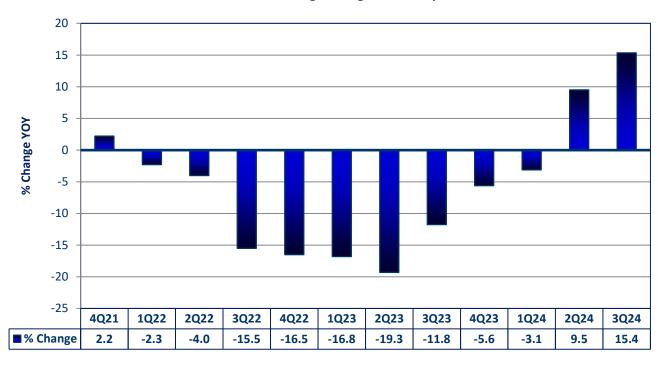
The peripheral equipment sector recorded a sales decrease of -13.6% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 were up +7.1% year-over-year. Net income as a percent of sales totaled +5.2% for the period, down -328.4% year-over-year.

Peripheral Equipment Sector - Sales and Net Income

Company	2022/2023 % Change	Nine Months 2023	Nine Months 2024	Percent Change
Western Digital	-28.5%	\$8,225.0	\$11,316.00	37.6%
Xerox	-3.2%	\$5,122.0	\$4,608.00	-10.0%
Seagate	-30.8%	\$4,916.0	\$5,710.00	16.2%
Logitech	-11.7%	\$2,990.6	\$3,216.78	7.6%
Canon	-3.4%	\$21,879.7	\$21,344.39	-2.4%
Total Sales	-13.6%	\$43,133.3	\$46,195.2	7.1%
Total Net Income		(\$1,048.5)	\$2,394.9	-328.4%

\$ Millions

Peripheral
Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales increased +2.2%. Year-over-year, sales increased +15.4% in the third quarter.



Consumer Equipment Sector

The consumer equipment sector recorded a sales decrease of -0.3% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 decreased -4.6% year-over-year. Net income as a percent of sales totaled +6.3% for the period, down -28.2% year-over-year.

Consumer Equipment Sector - Sales and Net Income

Company	2022/2023 % Change	Nine Months 2023	Nine Months 2024	Percent Change
Eastman Kodak	-15.6%	\$742.0	\$746.3	0.6%
Panasonic	-4.0%	\$45,546.9	\$42,577.0	-6.5%
Whirlpool Corp	-1.4%	\$14,369.0	\$12,471.0	-13.2%
Sony	9.8%	\$64,342.4	\$62,075.3	-3.5%
Philips	7.0%	\$14,279.1	\$14,121.7	-1.1%
Samsung	-7.2%	\$56,873.1	\$54,284.9	-4.6%
Nintendo	-5.1%	\$7,998.1	\$5,290.3	-33.9%
Apple	-1.9%	\$26,363.0	\$25,052.0	-5.0%
LG	-0.8%	\$46,991.6	\$48,059.7	2.3%
Total Sales	-0.3%	\$277,505.2	\$264,678.2	-4.6%
Total Net Income		\$23,284.4	\$16,721.5	-28.2%

\$ Millions Consumer Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales increased +3.3%. In the third quarter 2024, year-over-year sales decreased -2.2%.



Transportation Equipment Sector

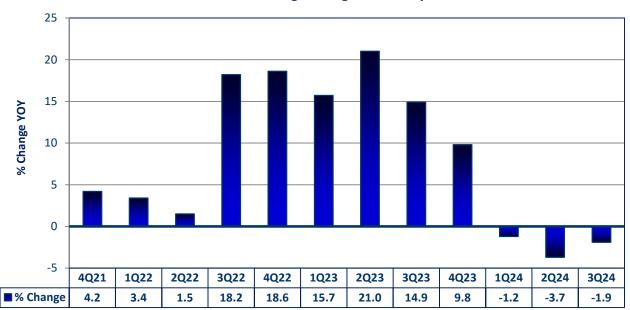
The transportation equipment sector recorded a sales increase of +14.9% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 were down -2.3% year-over-year. Net income as a percent of sales totaled +5.6% for the period, down -18.3% year-over-year.

Transportation Equipment Sector - Sales and Net Income

Company	2022/2023 % Change	Nine Months 2023	Nine Months 2024	Percent Change
Boeing (Commercial)	31.1%	\$23,420.0	\$18,099.0	-22.7%
Airbus (Commercial)	20.1%	\$34,188.6	\$35,782.0	4.7%
Bombardier	16.4%	\$4,983.9	\$5,558.1	11.5%
Cummins Engine	21.3%	\$25,522.0	\$25,655.0	0.5%
Harley-Davidson	1.4%	\$4,784.0	\$4,500.0	-5.9%
PACCAR	21.9%	\$26,065.0	\$25,760.0	-1.2%
Trinity Industries	50.9%	\$2,185.0	\$2,449.8	12.1%
Wabash Nat'l. Corp.	1.4%	\$1,940.4	\$1,529.9	-21.2%
Wabtec	15.7%	\$7,151.0	\$7,804.0	9.1%
Agco Corp.	13.9%	\$10,613.0	\$8,775.0	-17.3%
Volvo	10.5%	\$37,946.0	\$36,965.0	-2.6%
Hyundai Heavy Ind.	21.1%	\$12,067.3	\$14,108.2	16.9%
Daimler (Truck/Bus)	13.0%	\$44,381.0	\$43,231.3	-2.6%
lsuzu Motors Ltd.	2.6%	\$18,046.5	\$15,735.7	-12.8%
CRRC	0.5%	\$20,094.0	\$21,025.5	4.6%
Total Sales	14.9%	\$273,387.7	\$266,978.5	-2.3%
Total Net Income		\$18,453.3	\$15,079.8	-18.3%

\$ Millions Transportation

Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales decreased -2.0%. Year-over-year, sales decreased -1.9% in the third quarter.



Medical Equipment Sector

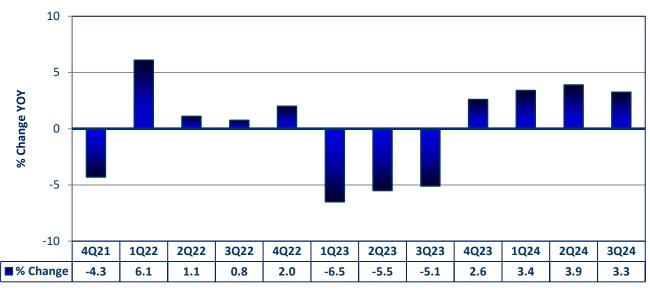
The medical equipment sector recorded a sales decrease of -3.7% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 were up +3.5% year-over-year. Net income as a percent of sales totaled +9.5% for the period, down -19.3% year-over-year.

Medical Equipment Sector - Sales and Net Income

Company	2022/2023	Nine Months	Nine Months	Percent
Company	% Change	2023	2024	Change
Becton Dickinson	2.6%	\$14,786.0	\$15,472.0	4.6%
Boston Scientific	12.3%	\$10,515.0	\$12,185.0	15.9%
Medtronic	5.0%	\$24,230.0	\$24,907.0	2.8%
Owens & Minor	3.8%	\$7,678.0	\$8,005.0	4.3%
Quest Diagnostics	-6.4%	\$6,964.0	\$7,251.0	4.1%
Baxter	-1.1%	\$11,064.0	\$10,103.0	-8.7%
Danaher	-31.5%	\$12,072.0	\$12,447.0	3.1%
Total Sales	-3.7%	\$87,309.0	\$90,370.0	3.5%
Total Net Income		\$10,613.0	\$8,560.0	-19.3%

\$ Millions

Medical
Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales increased +0.6%. Year-over-year, sales increased +3.3% in the third quarter.



Instrumentation Equipment Sector

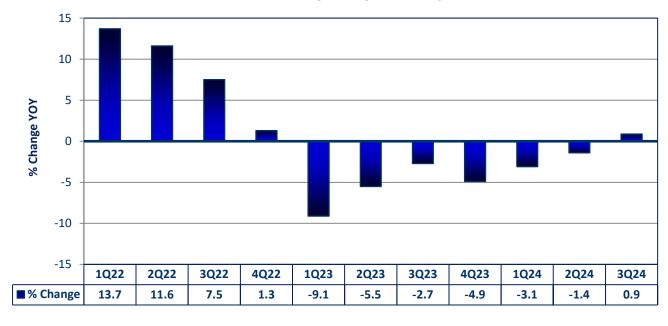
The instrumentation equipment sector recorded a sales decrease of -5.6% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 were down -1.2% year-over-year. Net income as a percent of sales totaled +15.2% for the period, down -2.0% year-over-year.

Instrumentation Equipment Sector - Sales and Net Income

Company	2022/2023 % Change	Nine Months 2023	Nine Months 2024	Percent Change
ThermoFisher Scient.	-4.6%	\$31,971.0	\$31,484.0	-1.5%
Mettler Toledo	-3.4%	\$2,853.0	\$2,827.2	-0.9%
PerkinElmer	-30.2%	\$2,054.7	\$2,025.7	-1.4%
Teradyne	-15.4%	\$2,000.2	\$2,064.7	3.2%
Agilent Technologies	-2.8%	\$5,077.0	\$4,852.0	-4.4%
Fortive	4.1%	\$4,482.0	\$4,612.0	2.9%
Total Sales	-5.6%	\$48,437.9	\$47,865.6	-1.2%
Total Net Income		\$7,404.2	\$7,252.7	-2.0%

\$ Millions

Instrumentation
Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales increased +1.1%. Year-over-year, sales increased +0.9% in the third quarter.



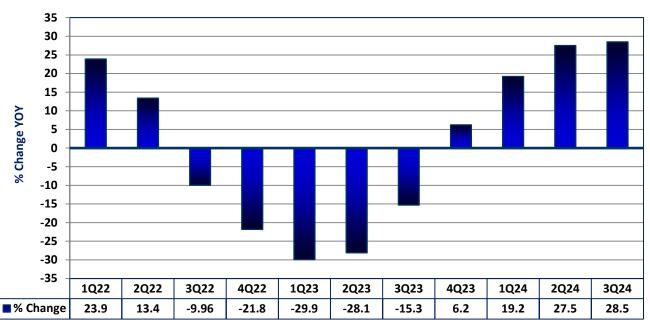
Semiconductor Equipment Sector

The semiconductor equipment sector recorded a sales decrease of -17.9% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 were up +25.2% year-over-year. Net income as a percent of sales totaled +12.8% for the period, up +94.5% year-over-year.

Semiconductor Equipment Sector - Sales and Net Income

Company	2022/2023	Nine Months	Nine Months	Percent
Company	% Change	2023	2024	Change
AMD	-3.9%	\$16,512.0	\$18,127.0	9.8%
Analog Devices	-8.0%	\$9,055.0	\$6,914.0	-23.6%
Intel	-14.0%	\$38,822.0	\$38,841.0	0.0%
Micron Tech.	-36.4%	\$11,455.0	\$20,385.0	78.0%
Texas Instruments	-12.5%	\$13,442.0	\$11,634.0	-13.5%
Taiwan Semi	-8.8%	\$49,621.4	\$63,213.6	27.4%
Infineon Tech.	10.1%	\$13,394.5	\$11,568.3	-13.6%
Microchip Tech	6.1%	\$6,776.0	\$3,730.0	-45.0%
Samsung	-34.2%	\$34,509.4	\$59,839.9	73.4%
ON Semi	-0.9%	\$6,235.0	\$5,360.2	-14.0%
Hynix	-28.5%	\$16,450.5	\$34,298.1	108.5%
Renesas	-38.2%	\$8,030.6	\$6,969.7	-38.2%
Xilinx	0.0%		*	
Total Sales	-17.9%	\$224,303.4	\$280,880.7	25.2%
Total Net Income		\$18,534.9	\$36,048.6	94.5%

Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales increased +8.8%. Year-over-year, sales increased +28.5% in the third quarter.



Contract Electronic Manufacturers (CEM) Sector

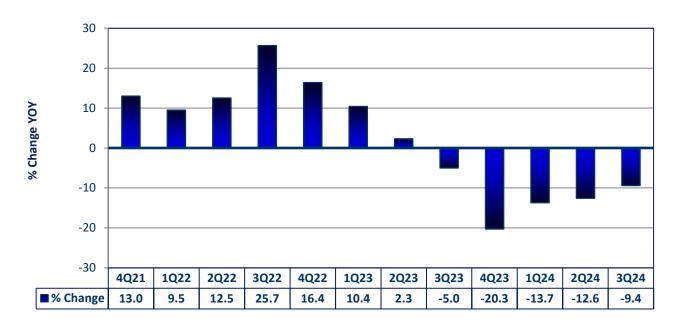
The CEM sector recorded a sales decrease of -4.1% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 decreased -11.9% year-over-year. Net income as a percent of sales totaled +4.5% for the period, up +45.6% year-over-year.

CEM Equipment Sector - Sales and Net Income

Company	2022/2023 % Change	Nine Months 2023	Nine Months 2024	Percent Change
Benchmark Elec.	-1.6%	\$2,147.6	\$1,999.3	-6.9%
Celestica	9.9%	\$5,821.4	\$7,101.5	22.0%
Flex	-1.1%	\$22,284.0	\$19,028.0	-14.6%
Jabil Circuit, Inc.	-7.9%	\$25,067.0	\$20,496.0	-18.2%
Plexus Corp.	0.3%	\$3,117.0	\$2,979.0	-4.4%
Sanmina	-0.5%	\$6,579.0	\$5,694.0	-13.5%
Venture Corp	-36.5%	\$1,771.9	\$1,550.2	-12.5%
Total Sales	-4.1%	\$66,787.9	\$58,848.1	-11.9%
Total Net Income		\$1,830.3	\$2,664.7	45.6%

\$ Millions

CEM
Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales increased +4.0%. Year-over-year, sales decreased by -9.4% in the third quarter.



Electronic Distribution Sector

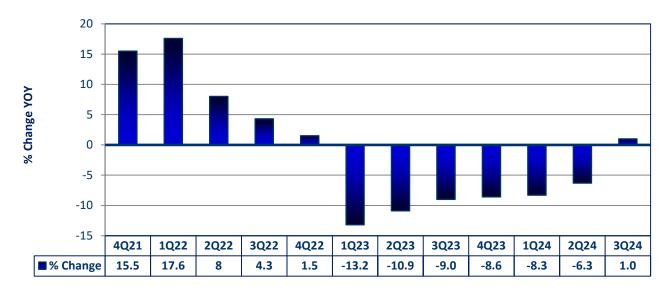
The electronic distribution sector recorded a sales decrease of -10.5% in 2023. Sales for the first nine months of 2023 versus the first nine months of 2024 decreased -4.5% year-over-year. Net income as a percent of sales totaled +1.3% for the period, down -47.0% year-over-year.

Electronic Distribution Equipment Sector - Sales and Net Income

Company	2022/2023	Nine Months	Nine Months	Percent
	% Change	2023	2024	Change
Arrow Electronics	-10.8%	\$25,258.0	\$20,640.0	-18.3%
Avnet	-2.7%	\$19,406.0	\$16,821.0	-13.3%
WPG Holdings	-17.8%	\$15,768.9	\$20,243.3	28.4%
Total Sales	-10.5%	\$60,432.9	\$57,704.3	-4.5%
Total Net Income		\$1,409.0	\$747.4	-47.0%

\$ Millions

Electronic Distribution Year-Over-Year Percentage Change in Sales by Quarter



Quarter-to-quarter (2Q24 versus 3Q24) sales increased +8.3%. Year-over-year, sales increased +1.0% in the third quarter.