Worldwide distribution suffers a **-8.5%** hit to revenues in 2023 - decline is broad-based across distributors and markets

Updated unique research on the Top Worldwide Authorized Distributors

his report is the latest update of the true, original "Top 50 Worldwide Authorized Distributors" research that was published for the first-time in 2021. Once again, the goal of the research conducted to develop the data presented in this article is to include the major authorized distributors from all three regions. Given the dominating presence of Asia as a distribution market, a second goal was to provide total revenue data for the top electronics component country markets in Asia. According to the research presented in this article, Asia saw its share of the worldwide market of the Top 50 authorized distributors slip once again as it contracted from 70.8% in 2022 to 68.9% in 2023. The Americas and EMEA distribution markets both expanded their share of the worldwide market with EMEA growing by 1.5% and Americas by 0.3% each to account for 13.2% and 16.0% market share, respectively. Still, 36 out of the top 50 authorized distributors are



Dale Ford - ECIA chief analyst



headquartered in Asia and account for 56.8% of 2023 distribution revenues in this analysis.

The publication of this update is a continuation of a plan to develop additional research on the electronic component distribution markets. ECIA provides its members and the industry with a wide range of highly valuable research including detailed sizing of component total available market (TAM) and distribution total available market (DTAM) for the Americas, EMEA and Asia for selected key categories. In addition, it provides data on the Americas Top 50 Authorized Distributors, component lead times, bookings trends, electronics component industry sentiment, best practices for key distribution activities such as environmental compliance, cybersecurity, China tariff avoidance and recovery, paperless certificate of compliance, and much more.

The top 50 worldwide authorized distributor research methodology and results

s a standard note regarding the publication of the Top 50 worldwide authorized distributors, the task of identifying and sizing the top authorized distributors around the world presents significant challenges beyond the research developed for the Americas Authorized Distributor data. For example, participation in surveys by industry companies is a well understood practice (if not always supported) by Americas and European companies. The same is not true in Asia where personal relationships and communication are key to gathering helpful information. Surveys have a very low participation rate in Asia. In addition, most companies headquartered in China

are private and not easily accessible for communication. However, some major players have gone public in recent years which sheds valuable light on their activities and revenues. Given these and other issues, the methodology pursued for this research needs to be explained briefly.

- 1. Surveys were used to gather information for this research and every effort was made to identify contacts at all companies to invite participation in the survey. As anticipated, the level of participation by companies headquartered in Asia was low. However, a number of companies headquartered in Asia continued to participate in the research.
- 2. To expand the data captured in this report, extensive research of published financial data for all public companies was pursued. A number of private companies also provide extremely helpful top-level financial data.
- 3. Input from major manufacturers and distributors was solicited to both identify top distributors and provide guidance on the revenues of private companies. Roughly 100 companies were identified for consideration in the top 50. Companies were excluded both for falling below the top 50 and because they were engaged as a broker instead of authorized distribution.

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4. Finally, web-based secondary research was a source of additional data that supported modeling and analysis used to create estimates in areas where surveys or published data was not available.

The tables and figures presented in this report have been created based on the methodology described above.

Distributors faced an extra challenging year as market and economic headwinds pushed the distribution market into negative growth territory. China was a particular challenge with a substantial impact given its 42% share of the global distribution market. China distribution market revenues declined by double digits falling 16.8% in 2023. Taiwan, Malaysia/Singapore, and Japan also experienced declining revenue of 5.3%,

0.2%, and 1.5%, respectively. On the bright side, emerging markets in Vietnam and India grew by double digits at 17.2% and 13.3%, respectively. South Korea also achieved growth of 2.1%. The small Australia/New Zealand market experienced a double-digit decline. Overall, Asia saw its distribution revenue take a hit of -10.9% in 2023. Americas authorized distribution revenue also declined in 2023 falling 6.8% in 2023. The European market is the only region to achieve growth in 2023 as it expanded by 2.4%.

Total worldwide revenue for the Top 50 authorized distributors fell from \$194.6 B in 2022 to \$178.0 B in 2023, a drop of \$16.6 billion. Only eleven of the top 50 distributors were able to grow their revenue in 2023. The highest growth in 2023 was achieved by Kanematsu at 19.4% followed by FDH Electronics with growth of 19.2%. RS Group, DAC/ Heilind, and Marubun were the only other distributors to achieve double digit growth in 2023. The biggest hit to growth was suffered by Smart-Core Holdings with sales slumping by -43.3% in 2023. On a worldwide basis, there was no meaningful change in the mix of revenues by component type. Semiconductors sustained their commanding share of the market at 78.6% Every end-market for distribution saw a contraction in 2023 with Mobile Communication Devices and Consumer Electronics falling the farthest with declines of -15.6% and -19.3% respectively in 2023. By virtue of limiting its decline in revenue to only -3.3%, Industrial Automation replaced Mobile **Communication Devices** as the largest distribution end-market in 2023 driving \$34.2B in revenue.

Emerging markets in Vietnam and India grew by double digits at 17.2% and 13.3%, respectively



2022 revenue 0.6% 2.3% | ,0.3% share by headquarters location 11.4% Total Revenue = \$194.6 B Americas 15.1% 40.6% Taiwan China 🗾 Japan 29.7% Europe South Korea Singapore Revenue Region Number (\$M) Share Americas 12 78,915 40.6% Taiwan 57,845 China 19 29,290 15.1% Europe 2 4,457 2.3% Singapore 611 0.3% 1 50 194.558 100.0% τοται

2023 revenue 0.6% 2.8% 0.3% share by headquarters location 12.2% Total Revenue = \$178.0 B 13.4% 40.4% Americas Taiwan China 🗾 Japan 30.4% Europe South Korea Singapore Revenue Region Numbe (\$M) Share Americas 12 71,929 40.4% 30.4% China 19 23,772 13.4% Europe 2 5,034 2.8% 0.6 499 0.3% Sinaapore 1 50 178.030 100.0% τοται

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Top 10 Americas sales

Rank 2023	Company	. ,	(\$ Millions)	. ,	(Percent)
1	Arrow Electronics, Inc.	7,954.7	9,592.5	(17.1)	27.5
2	Avnet	6,611.9	6,605.7	0.1	22.8
3	Digi-Key	2,390.0	2,800.0	(14.6)	8.3
4	TTI	2,070.0	2,000.0	3.5	7.2
5	Future Electronics	2,000.0	2,535.0	(21.1)	6.9
6	Mouser Electronics	1,657.2	1,731.9	(4.3)	5.7
7	Wesco	1,223.6	1,244.4	(1.7)	4.2
8	RS Group	1,149.5	865.8	32.8	4.0
9	DAC / Heilind	947.0	837.3	13.1	3.3
10	Sager	441.0	459.0	(3.9)	1.5
	Others	2,498.1	2,397.7	4.2	8.6
	TOTAL TOP 50	28,943.0	31,069.3	(6.8)	100.0

Top 10 EMEA sales

Rank 2023	Company	. ,	2022 Worldwide (\$ Millions)		(Percent)
1	Avnet	9,391.9	8,635.1	8.8	35.6
2	Arrow Electronics, Inc.	8,074.9	7,628.0	5.9	30.6
3	RS Group	2,119.4	1,902.7	11.4	8.0
4	Future Electronics	1,425.0	1,638.0	(13.0)	5.4
5	TTI	1,300.0	1,155.0	12.6	4.9
6	Rutronik	1,230.0	1,200.0	2.5	4.7
7	Mouser Electronics	1,220.3	1,329.0	(8.2)	4.6
8	Digi-Key	1,080.0	1,700.0	(36.5)	4.1
9	Nexty Electronics	215.0	227.3	(5.4)	0.8
10	Macnica	100.6	113.5	(11.4)	0.4
	Others	237.2	245.9	(3.5)	0.9
	TOTAL TOP 50	26,394.3	25,774.4	2.4	100.0

Top 10 Asian sales

Rank 2023	Company	2023 Worldwide (\$ Millions)	2022 Worldwide (\$ Millions)		
1	WPG	21,107.9	22,722.9	(7.1)	17.2
2	WT Microelectronics	19,095.9	19,192.2	(0.5)	15.6
3	Avnet	9,573.4	11,087.6	(13.7)	7.8
4	Arrow Electronics, Inc.	9,390.3	11,567.5	(18.8)	7.7
5	Macnica	6,636.7	6,424.6	3.3	5.4
6	CECport	4,882.3	6,435.4	(24.1)	4.0
7	Supreme Electronics	4,646.0	5,542.7	(16.2)	3.8
8	Nexty Electronics	4,050.0	4,504.8	(10.1)	3.3
9	EDOM Technology	3,379.6	3,915.5	(13.7)	2.8
10	S.A.S. Dragon	2,830.0	3,155.1	(10.3)	2.3
	Others	37,100.9	43,165.7	(14.1)	30.2
	TOTAL TOP 50	122,692.9	137,714.1	(10.9)	100.0

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Worldwide revenue share by rank 2022 2.7% 5.3% 7.9% Total Revenue = \$194.6 B 4.9% 2.6% 2023 7.8% Total Revenue = \$178.0 B Top 5 Rank 6 to 10 Rank 11 to 20 Rank 21 to 30 Rank 31 to 40 Rank 41 to 50

Rank	Revenue	Share	Growth
Тор 5	98,583.1	55.4%	-5.3%
6 to 10	23,630.2	13.3%	-19.4%
11 to 20	28,677.3	16.1%	-5.3%
21 to 30	13,842.0	7.8%	-10.1%
31 to 40	8,731.4	4.9%	-15.1%
41 to 50	4,566.3	2.6%	-11.7%
TOTAL	178,030.2	100.0%	-8.5%

The top five worldwide distributors achieved a minor increase in their share of total worldwide revenues among the Top 50 to 55.4%. The top five also managed to limit their decline in 2023 revenues compared to other groups with a drop of 5.3%. The strongest performance among the Top 5 came from Macnica with an increase of 4.0%. Avnet captured the crown as the largest authorized distributor in 2023 with \$25.58 B in revenue, passing Arrow Electronics with \$25.42

B in revenue. A close race! There are a notable number of electronic component distributors with significant revenues that did not achieve ranking in the Top 50. If it is assumed that the Top 50 account for 90% of all worldwide authorized distribution revenue, the global electronic component authorized distributor market would be estimated at \$198 B in 2023.

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									n (Percent	:)	
							г			-	
Rank 2023	Rank 2022	Company	Type*	Headquarters	2023 Worldwide (\$ Millions)	Growth 2023/2022 (Percent)	Share of Top 50 Total Sales (Percent)	Americas	EMEA	Asia	
1	2	Avnet (1)	1	USA	25,577.2	-2.9	14.37	25.9	36.7	37.4	
2	1	Arrow Electronics, Inc.	1	USA	25,419.9	-11.7	14.28	31.3	31.8	36.9	
3	3	WPG	1	Taiwan	21,544.9	-6.7	12.10	1.8	0.2	98.0	
4	4	WT Microelectronics	1	Taiwan	19,095.9	-0.5	10.73	0.0	0.0	100.0	
5	5	Macnica	1	Japan	6,945.2	4.0	3.90	3.0	1.4	95.6	
6	6	Future Electronics	1	Canada	5,165.0	-20.5	2.90	38.7	27.6	33.7	
7	8	Supreme Electronics	1	Taiwan	4,886.9	-16.4	2.74	4.9	0.0	95.1	
8	7	CECport	1	China	4,882.3	-24.1	2.74	0.0	0.0	100.0	
9	10	Nexty Electronics (2)	1	Japan	4,550.0	-9.9	2.56	6.3	4.7	89.0	
10	9	Digi-Key	3	USA	4,146.0	-24.6	2.33	57.6	26.0	16.3	
11	13	TTI	2	USA	3,780.0	3.6	2.12	54.8	34.4	10.8	
12	11	Mouser Electronics	3	USA	3,680.8	-9.9	2.07	45.0	33.2	21.8	
13	15	RS Group	1	U.K.	3,592.1	16.8	2.02	32.0	59.0	9.0	
14 15		EDOM Technology	1	Taiwan China	3,430.8	-13.9 -10.3	1.93	1.3 0.6	0.2	98.5 99.4	
16	14 20	S.A.S. Dragon Kanematsu	2		2,845.7 2,539.4	-10.3	1.60 1.43	0.0	0.0	100.0	
10	18	Restar Group (3)	2	Japan Japan	2,339.4	-8.4	1.43	0.0	0.0	99.9	
18		WeiKeng	1	Taiwan	2,276.0	-3.5	1.28	0.0	0.0	100.0	
19	16	Techtronics 泰科源	1	China	2,270.0	-18.2	1.27	0.0	0.0	100.0	
20	17	Ryosan	1	Japan	1,990.5	-22.9	1.12	3.8	0.0	96.2	
21	22	Alltek Technology Corp	1	Taiwan	1,798.5	-11.4	1.01	0.0	0.0	100.0	
22	21	Shannon Semi	1	China	1,594.4	-22.1	0.90	0.0	0.0	100.0	
23	26	Rutronik	1	Germany	1,442.0	4.4	0.81	3.5	85.3	11.2	
24	23	Gain Hero 蓝源实业	1	China	1,380.0	-18.1	0.78	0.0	0.0	100.0	
25	24	WISEWHEEL 唯时信	2	China	1,350.0	-18.2	0.76	0.0	0.0	100.0	
26	33	Marubun	2	Japan	1,327.3	12.1	0.75	0.5	0.3	99.2	
27	25	IngDan Innovation (Cogobuy.com 科通芯城)	1	China	1,254.2	-11.5	0.70	0.0	0.0	100.0	
28	28	Ryoden	1	Japan	1,241.1	-6.0	0.70	2.2	1.2	96.6	
29	35	DAC / Heilind	2	USA	1,231.0	12.4	0.69	76.9	8.0	15.0	
30	30	Wesco	1	USA	1,223.6	-1.7	0.69	100.0	0.0	0.0	
31	36	Shenlei Technology (SUNRAY 新蕾科技)	1	China	1,159.5	7.8	0.65	0.0	0.0	100.0	
32		Zenitron	4	Taiwan	1,045.8	-22.2	0.59	0.0	0.0	100.0	
	34	SaMT	2	South Korea	985.9	-16.5	0.55	0.0	0.0	100.0	
34	32	Xiamen Holder Electronics 信和达 (Xiamen Xinheda Electronics)	4	China	960.0	-19.0	0.54	0.0	0.0	100.0	
35 36	39	SIIX	1	Japan	854.9	4.0 -29.6	0.48	9.4	4.6	86.0	
30	31 37	Wuhan P&S Information Technology 力源信息 Best of Best Holdings (4) 好上好控股	1	China China	840.1 817.9	-29.6	0.47 0.46	0.0	0.0	100.0 100.0	
		Smart-Core Holdings 芯智控股	1	China	724.7	-43.3	0.40	0.0	0.0	100.0	
		Tianhe Galaxy	1	China	690.0	-18.4	0.41	0.0	0.0	100.0	
		Nanjing Sunlord Electronics 南京商络	2	China	652.7	-9.3	0.37	0.0	0.0	100.0	
		ROAD WELL 路必康	1	China	610.0	-19.1	0.34	0.0	0.0	100.0	
		Master Electronics	1	USA	539.0	-14.2	0.30	74.6	0.0	25.4	
		YITOA 英唐智控	2	China	526.2	-8.5	0.30	0.0	0.0	100.0	
		Shenzhen Huaxinke Technology (HXK) 华信科	1	China	510.0	-22.0	0.29	0.0	0.0	100.0	
		Serial Microelectronics	1	Singapore	499.3	-18.3	0.28	0.0	0.0	100.0	
		Sager	2	• •	441.0	-3.9	0.25	100.0	0.0	0.0	
		FDH Electronics (5)	2	USA	394.0	19.2	0.22	89.0	6.0	5.0	
48	47	Glorison 荣采集团	2	China	360.0	-19.1	0.20	0.0	0.0	100.0	
49	48	Upstar Technology 博思达	2	China	355.0	-19.3	0.20	0.0	0.0	100.0	
50	51	bisco industries	1	USA	331.8	8.4	0.19	95.3	2.1	2.6	
		TOTAL			178,030.2	-8.5	100.00	16.3	14.8	68.9	

Sales Share by

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		Sale: Compor	s Share I nent (Per	oy rcent)				
Semiconductor (Active)	Passive Component	Electro- Mechanical	Interconnect	Computer / Systems	Power & Batteries	Other	Offer design services?	Website allows purchase of parts?
 84.5	3.1	2.3	7.7	1.7	0.3	0.5	Y	Y
78.5	4.7	3.6	5.7	4.0	-	3.5	Y	Y
91.8	2.2	1.0	2.6	0.7	1.7	0.1	Y	Y
100.0	-	-	-	-	-	-	Y	Y
97.8	-	-	-	-	2.2	-	Υ	Y
70.0	10.0	8.0	8.0	1.0	3.0	-	Y	Y
95.1	1.7	3.2	-	-	-	-	N	N
98.5	0.6	-	0.4	-	-	0.5	Y	Y
85.0 40.3	4.0 19.7	3.0	5.0 17.9	1.0 4.6	-	2.0	Y	Y Y
40.3	50.0	11.0 6.0	44.0	4.6	6.4	0.1	N Y	Y
38.0	17.0	12.0	21.0	6.0	4.0	2.0	N	Y
7.7	3.3	10.8	15.1	-	2.0	61.1	Y	Y
98.3	-	-	-	1.7	-	-	Y	Y
87.0	5.5	7.1	-	-	-	0.4	Y	N
74.0	6.0	9.0	7.5	-	-	3.5	Y	Ν
44.0	1.0	17.0	18.0	4.0	5.0	11.0	Ν	Y
94.8	2.5	-	2.7	-	-	-	Y	Ν
95.0	5.0	-	-	-	-	-	Y	Y
74.2	-	18.3	-	-	3.0	4.5	Y	Ν
100.0	-	-	-	-	-	-	Y	Ν
100.0	-	-	-	-	-	-	N	N
42.3 78.0	29.7 2.0	10.4	- 0.5	17.6 12.0	-	-	Y Y	N N
39.0	2.0	8.5	21.3	3.3	-	7.5 7.9	Y	Y
100.0	- 20.0	- 0.5	-		-	7.5	Y	N
100.0	-	_	-	-	-	-	N	N
88.0	12.0	-	-	-	-	-	Ν	Ν
-	-	22.0	78.0	-	-	-	Y	Y
-	-	70.0	10.0	-	-	20.0	Y	Y
80.0	-	-	-	-	-	20.0	Ν	Ν
100.0	-	-	-	-	-	-	Ν	Y
27.0	23.0	22.0	28.0	-	-	-	Ν	Y
85.0	3.0	-	3.0	3.0	-	6.0	Y	N
95.0	-	-	-	-	-	5.0	Y	N
95.0	4.0	-	1.0	-	-	-	Y	N
67.0 100.0	6.0	7.0	6.0	4.0	-	10.0	Y Y	Y Y
54.0	11.0	14.0	16.0	-	-	5.0	Y	N
54.3	45.6	-	0.1	-	_	-	Y	N
61.0	8.0	9.0	14.0	-	-	8.0	Y	N
10.0	17.3	25.9	38.8	5.0	-	3.0	Y	Y
93.0	7.0	-	-	-	-	-	N	N
57.5	29.0	6.0	7.5	-	-	-	Y	Y
86.0	3.5	5.0	3.0	-	-	2.5	Ν	Y
-	-	34.0	23.0	-	34.0	9.0	Y	Y
-	-	26.0	74.0	-	-	-	Y	Y
18.0	82.0	-	-	-	-	-	N	Y
82.0	8.0	-	10.0	-	-	-	Y	N
1.0	20.0 5.4	40.0 4.2	20.0 6.6	1.0	2.0 0.9	16.0 2.8	Y	Y
78.6	- 5.4	4.2	0.0	1.6	0.9	2.0		

Top 50 worldwide authorized distributors

The final tables of this report present the complete list of Top 50 Worldwide Authorized Distributors for 2023 along with Top 10 rankings for individual component categories and top sales growth. Revenues for the Top 50 distributors are presented for eight Asian countries that drive a large share of global electronics equipment production: Mainland China/Hong Kong, Taiwan, Japan, Malaysia/Singapore, India, South Korea, Vietnam, and Australia/ New Zealand. Continuing its historic dominance, China accounted for 60.3% of

2023 revenues. However, this is a notable decline from the 64.6% share it commanded in 2022. The next largest country markets are Taiwan with 12.2% share and Japan with 11.0% share in 2023. The size of the emerging India and Vietnam distribution markets is a common question. Based on the research for this report, the top 50 distributors account for \$4.3 B in India and \$3.1 B in Vietnam in 2023, a significant jump in revenues compared to 2022.

Average exchange rates used to convert to a common US dollar basis

Curency	2020	2021	2022	2023
Chinese Yuan (¥)	6.898	6.452	6.725	7.067
Hong Kong Dollar (HK\$)	7.756	7.770	7.831	7.819
Taiwan Dollar (NT\$)	29.454	27.916	29.762	31.133
Japanese Yen (¥)	106.78	109.78	131.37	140.52
Korean Won (₩)	1,179.2	1,145.1	1,292.2	1,305.4

*Type of Distributor: 1 = Broadline; 2 = Specialized;

3 = High Service/E-Catalog; 4 = Limited Line

(1) Avnet includes Farnell

(2) Nexty Electronics includes Toyota Tsusho and Tomen

(3) Restar Group includes UKC Electronics and Restar Electronics

(4) Best of Best Holdings includes Honestar & AsiaCom

Technology Alliance

(5) BJG+Electro Enterprises

Top 10 global sales by category

g Top 10 semiconductor (active) sales

Rank 202	Company	2023 Worldwide (\$ Millions)	2022 Worldwide (\$ Millions)		
1	Avnet	21,612.7	20,009.6	8.0	15.4
2	Arrow Electronics, Inc.	19,954.6	22,742.5	(12.3)	14.3
3	WPG	19,776.1	21,553.6	(8.2)	14.1
4	WT Microelectronics	19,095.9	19,192.2	(0.5)	13.6
5	Macnica	6,792.4	5,743.4	18.3	4.9
6	CECport	4,809.0	6,338.9	(24.1)	3.4
7	Supreme Electronics	4,646.0	5,603.3	(17.1)	3.3
8	Nexty Electronics	3,867.5	4,292.7	(9.9)	2.8
9	Future Electronics	3,615.5	4,465.5	(19.0)	2.6
10	EDOM Technology	3,372.4	3,919.1	(13.9)	2.4
	Others	32,427.4	37,165.4	(12.7)	23.2
	TOTAL TOP 50	139,969.6	151,026.3	(7.3)	100.0

ຕ	Top 10 electro-mech	anical so	ales		
Rank 2023	Company	2023 Worldwide (\$ Millions)	2022 Worldwide (\$ Millions)		
1	Arrow Electronics, Inc.	921.5	921.2	0.0	12.3
2	Wesco	856.5	871.1	(1.7)	11.4
3	Avnet	577.5	868.8	(33.5)	7.7
4	Digi-Key	456.5	550.0	(17.0)	6.1
5	Mouser Electronics	441.7	408.5	8.1	5.9
6	Future Electronics	413.2	585.0	(29.4)	5.5
7	RS Group	387.9	338.4	14.6	5.2
8	Restar Group	387.9	473.5	(18.1)	5.2
9	Ryosan	365.2	439.1	(16.8)	4.9
10	DAC / Heilind	270.8	241.0	12.4	3.6
	Others	2,436.4	2,692.3	(9.5)	32.4
	TOTAL TOP 50	7,515.2	8,388.9	(10.4)	100.0

ខ	Top 10 power & ba	tteries sale	s		
Rank 2023	Company	2023 Worldwide (\$ Millions)	2022 Worldwide (\$ Millions)		
1	WPG	366.3	341.7	7.2	23.4
2	Digi-Key	266.6	330.0	(19.2)	17.0
3	Future Electronics	155.0	195.0	(20.5)	9.9
4	Macnica	152.8	333.9	(54.2)	9.8
5	Sager	149.9	151.5	(1.0)	9.6
6	Mouser Electronics	147.2	122.6	20.1	9.4
7	Restar Group	114.1	124.6	(8.4)	7.3
8	Avnet	76.7	131.6	(41.7)	4.9
9	RS Group	71.8	61.5	16.8	4.6
10	Ryosan	59.7	77.5	(22.9)	3.8
	Others	6.6	6.1	8.4	0.4
	TOTAL TOP 50	1,566.8	1,876.0	(16.5)	100.0

Top 10 passive component sales

Rank 20:	Company	2023 Worldwide (\$ Millions)	2022 Worldwide (\$ Millions)		
1	TTI	1,890.0	1,752.0	7.9	19.8
2	Arrow Electronics, Inc.	1,188.4	1,381.8	(14.0)	12.5
3	Digi-Key	816.7	1,155.0	(29.3)	8.6
4	Avnet	787.5	1,184.8	(33.5)	8.3
5	Mouser Electronics	625.7	735.4	(14.9)	6.6
6	Future Electronics	516.5	682.5	(24.3)	5.4
7	WPG	474.0	415.6	14.0	5.0
8	Rutronik	428.3	414.3	3.4	4.5
9	Nanjing Sunlord Electronics 南京商络	297.4	294.6	1.0	3.1
10	Glorison 荣采集团	295.2	369.4	(20.1)	3.1
	Others	2,215.7	2,673.0	(17.1)	23.2
	TOTAL TOP 50	9,535.3	11,058.3	(13.8)	100.0

33	Top 10 interconnect	sales			
Rank 2023	Company	2023 Worldwide (\$ Millions)	2022 Worldwide (\$ Millions)		Share of Top 50 Total Sales (Percent)
1	Avnet	1,960.0	2,948.8	(33.5)	16.8
2	тті	1,663.2	1,679.0	(0.9)	14.2
3	Arrow Electronics, Inc.	1,448.9	1,439.4	0.7	12.4
4	DAC / Heilind	960.2	854.4	12.4	8.2
5	Mouser Electronics	773.0	735.4	5.1	6.6
6	Digi-Key	740.2	935.0	(20.8)	6.3
7	WPG	549.4	461.8	19.0	4.7
8	RS Group	542.4	461.4	17.5	4.6
9	Future Electronics	413.2	507.0	(18.5)	3.5
10	Restar Group	410.8	448.6	(8.4)	3.5
	Others	2,231.7	2,475.4	(9.8)	19.1
	TOTAL TOP 50	11,693.0	12,946.1	(9.7)	100.0

33	Top 10 computer/system/other product sales							
Rank 2023	Company	2023 Worldwide (\$ Millions)	2022 Worldwide (\$ Millions)					
1	Arrow Electronics, Inc.	1,016.8	1,151.5	(11.7)	36.2			
2	Avnet	434.8	526.6	(17.4)	15.5			
3	Rutronik	253.8	248.6	2.1	9.0			
4	Mouser Electronics	220.8	204.3	8.1	7.9			
5	Digi-Key	190.7	220.0	(13.3)	6.8			
6	Gain Hero 蓝源实业	165.6	244.3	(32.2)	5.9			
7	WPG	142.2	138.5	2.6	5.1			
8	Restar Group	91.3	124.6	(26.7)	3.3			
9	EDOM Technology	58.3	63.7	(8.5)	2.1			
10	Future Electronics	51.7	65.0	(20.5)	1.8			
	Others	181.8	218.6	(16.8)	6.5			
	TOTAL TOP 50	2,807.8	3,205.7	(12.4)	100.0			

S	👷 Top 10 distributors by sales growth						
Rank 2023	Company		2022 Worldwide (\$ Millions)				
1	Kanematsu	2,539.4	2,126.3	19.4			
2	FDH Electronics	394.0	330.7	19.2			
3	RS Group	3,592.1	3,076.2	16.8			
4	DAC / Heilind	1,231.0	1,095.4	12.4			
5	Marubun	1,327.3	1,184.4	12.1			
6	bisco industries	331.8	306.0	8.4			
7	Shenlei Technology (SUNRAY 新蕾科技)	1,159.5	1,075.7	7.8			
8	Rutronik	1,442.0	1,381.0	4.4			
9	SIIX	854.9	822.0	4.0			
10	Macnica	6,945.2	6,678.4	4.0			
	Others	158,213.0	176,481.6	(10.4)			
	TOTAL TOP 50	178,030.1	194,557.7	(8.5)			



Top 50 Asian authorized distributors

		—		2023 Revenue (\$ Millions)									
Rank 2023		2023 Asia Total (\$ Millions)	Growth 2023/2022 (%)	Share of Top 50 Total Sales (%)	Mainland China / Hong Kong	Taiwan	Japan	South Korea	India	Vietnam	Malaysia / Singapore	Australia / New Zealand	Other Asian Countries
<u>~</u>	Company											٩ ۷	
1	WPG	21,107.9	(7.1)	17.20	16,303.9	3,150.2	102.5	297.5	510.0	276.3	297.5	-	170.0
2	WT Microelectronics	19,092.1	(0.5)	15.56	10,336.6	2,511.1	-	1,374.9	1,279.4	1,355.8	1,565.9	-	668.4
3	Avnet	9,573.4	(13.7)	7.80	4,480.3	1,579.6	1,177.5	315.9	603.1	478.7	440.4	220.2	277.6
4	Arrow Electronics, Inc.	9,390.3	(18.8) 3.3	7.65 5.41	4,858.9	1,172.7 394.2	600.4	262.7	722.4 63.7	478.5	469.1	431.6	394.0 391.4
5	Macnica	6,636.7 4,883.3			1,453.1		4,102.4				231.9		391.4
6	CECport Supreme Electronics	4,883.3	(24.1) (16.2)	3.98 3.79	3,511.3 3,614.3	1,054.6 991.9	-	-	-	-	317.3 39.8	-	-
8	Nexty Electronics	4,040.0	(10.2)	3.30	1,215.0	364.5	1,417.5	133.7	445.5	-	283.5	-	190.4
9	EDOM Technology	3,379.6	(10.1)	2.75	1,899.3	1,081.5	1,417.5	20.3	67.6	101.4	175.7	_	33.8
10	S.A.S. Dragon	2,830.0	(10.3)	2.73	2,738.6	37.2	-	- 20.3	1.5	101.4	175.7	-	22.9
10	Kanematsu	2,539.4	19.4	2.07	406.3	198.1	1,472.8	101.6	111.7	106.7	73.6	_	68.6
12	Restar Group	2,280.0	(8.4)	1.86	615.6	273.6	946.2	228.0	-	102.6	79.8	-	34.2
13	WeiKeng	2,276.0	(3.5)	1.86	1,857.2	280.5		-	-	-	138.3	-	-
14	Techtronics 泰科源	2,260.0	(18.2)	1.84	2,180.9	- 200.0	-	-	-	-	79.1	-	-
15	Ryosan	1,914.5	(23.4)	1.56	512.9	114.9	1,030.2	23.0	45.9	_	134.0	-	53.6
16	Alltek Technology Corp	1,798.5	(11.4)	1.47	987.2	707.9	-	-		-	76.3	-	27.0
17	Future Electronics	1,740.0	(25.2)	1.42	946.6	128.8	92.2	71.3	80.0	73.1	278.4	69.6	-
18	Shannon Semi	1,594.4	(22.1)	1.30	1,594.4	-	-	-	-	-	-	-	-
19	Gain Hero 蓝源实业	1,380.0	(18.1)	1.12	738.3	248.4	138.0	_	89.7	_	165.6	-	-
20	WISEWHEEL 唯时信	1,350.0	(18.2)	1.10	1,350.0	-	-	-	-	-	-	-	-
21	Marubun	1,317.3	12.0	1.07	118.6	92.2	922.1	131.7	_	_	32.9	_	19.8
22	IngDan Innovation (Cogobuy.com 科通芯城)	1,254.2	(11.5)	1.02	1,254.2	-	-	-	-	-	-	-	-
23	Ryoden	1,199.3	(6.0)	0.98	129.5	34.8	997.8	_	_	12.0	19.2	-	6.0
24	Shenlei Technology (SUNRAY 新蕾科技)	1,159.5	7.8	0.95	1,159.5	-	-	-	-	-	-	-	-
25	Zenitron	1,045.8	(22.2)	0.85	873.0	130.0	9.4	-	_	_	13.6	-	19.9
26	SaMT	985.9	(16.5)	0.80	325.4	-	-	660.6	-	-	-	-	-
27	Xiamen Holder Electronics 信和达	960.0	(19.0)	0.78	960.0	-	-	-	-	-	-	-	-
28	Wuhan P&S Information Technology 力源信息	840.1	(29.6)	0.68	747.7	50.4	-	-	-	-	25.2	-	16.8
29	Best of Best Holdings	817.9	(14.0)	0.67	752.4	40.9	-	-	-	-	24.5	-	_
30	Mouser Electronics	803.3	(21.6)	0.65	329.4	48.2	120.5	72.3	80.3	8.0	72.3	48.2	24.1
31	SIIX	735.5	4.5	0.60	224.3	139.7	237.6	-	-	45.6	53.0	-	35.3
32	Smart-Core Holdings 芯智控股	724.7	(43.3)	0.59	704.3	-	0.9	-	-	-	16.4	-	3.1
33	Tianhe Galaxy	690.0	(18.4)	0.56	690.0	-	-	-	-	-	-	-	-
34	Digi-Key	676.0	(32.4)	0.55	263.6	33.8	94.6	60.8	54.1	6.8	67.6	47.3	47.3
35	Nanjing Sunlord Electronics 南京商络	652.7	(9.3)	0.53	652.0	0.7	-	-	-	-	-	-	0.1
36	ROAD WELL 路必康	610.0	(19.1)	0.50	567.3	-	-	-	-	-	42.7	-	-
37	YITOA 英唐智控	526.2	(8.5)	0.43	526.2	-	-	-	-	-	-	-	-
38	Shenzhen Huaxinke Technology (HXK) 华信科	510.0	(22.0)	0.42	510.0	-	-	-	-	-	-	-	-
39	Serial Microelectronics	499.3	(18.3)	0.41	324.5	25.0	2.0	39.9	30.0	20.0	44.9	-	13.0
40	ТТІ	410.0	(17.2)	0.33	225.5	16.4	-	12.3	20.5	8.2	94.3	4.1	28.7
41	Glorison 荣采集团	360.0	(19.1)	0.29	295.2	36.0	-	-	28.8	-	-	-	-
42	Upstar Technology 博思达	355.0	(19.3)	0.29	355.0	-	-	-	-	-	-	-	-
	RS Group	323.3	5.0	0.26	49.5	29.7	48.8	16.2	13.6	7.1	19.4	90.5	48.5
44	DAC / Heilind	185.0	11.3	0.15	131.4	25.9	-	0.9	11.5	0.9	14.1	-	0.4
45	Rutronik	162.0	13.3	0.13	121.5	4.9	-	4.9	13.0	3.2	13.0	-	1.6
46	Master Electronics	137.0	(27.3)	0.11	95.9	-	-	-	-	-	41.1	-	-
47	FDH Electronics	19.7	47.5	0.02	7.9	-	-	7.9	-		3.9	-	-
48	bisco industries	8.6	(57.3)	0.01	1.1	0.5	0.5	0.5	1.1	0.5	0.5	1.1	2.6
49	Wesco	-	-	-	-	-	-	-	-	-	-	-	-
50	Sager	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	122,690.2	(10.9)	100.00	73,927.9	14,998.6	13,514.1	3,836.9	4,318.7	3,123.0	5,459.5	912.6	2,598.8

Top 10 mainland China / Hong Kong sales

Rank 202	Company	2023 China Total (\$ Millions)	Growth 2023/2022 (Percent)	Share of Top 50 Total Sales (Percent)
1	WPG	16,303.9	(10.1)	22.03
2	WT Microelectronics	10,336.6	(14.9)	13.97
3	Arrow Electronics, Inc.	4,858.9	(23.4)	6.57
4	Avnet	4,480.3	(17.5)	6.05
5	Supreme Electronics	3,614.3	(13.3)	4.88
6	CECport	3,511.3	(36.2)	4.75
7	S.A.S. Dragon	2,738.6	(7.6)	3.70
8	Techtronics 泰科源	2,180.9	(18.3)	2.95
9	EDOM Technology	1,899.3	(15.2)	2.57
10	WeiKeng	1,857.2	(4.9)	2.51
	Others	22,214.2	(18.8)	30.02
	TOTAL TOP 50	73,995.7	(16.8)	100.00

" Top 10 Japan sales

Rank 202:	Company	2023 Japan (\$ Millions)	Growth 2023/2022 (Percent)	Share of Top 50 Total Sales (Percent)
1	Macnica	4,102.4	21.2	30.36
2	Kanematsu	1,472.8	15.1	10.90
3	Nexty Electronics	1,417.5	(7.5)	10.49
4	Avnet	1,177.5	(12.9)	8.71
5	Ryosan	1,030.2	(26.9)	7.62
6	Ryoden	997.8	(6.3)	7.38
7	Restar Group	946.2	(5.0)	7.00
8	Marubun	922.1	13.6	6.82
9	Arrow Electronics, Inc.	600.4	(13.5)	4.44
10	SIIX	237.6	3.5	1.76
	Others	609.6	(22.5)	4.51
	TOTAL TOP 50	13,514.1	(0.2)	100.00

Top 10 India sales

Rank 202	Company	2023 India (\$ Millions)	Growth 2023/2022 (Percent)	Share of Top 50 Total Sales (Percent)
1	WT Microelectronics	1,279.4	85.2	29.94
2	Arrow Electronics, Inc.	722.4	(13.2)	16.90
3	Avnet	603.1	(10.8)	14.11
4	WPG	510.0	26.9	11.93
5	Nexty Electronics	445.5	(10.1)	10.42
6	Kanematsu	111.7	22.2	2.61
7	Gain Hero 蓝源实业	89.7	(11.3)	2.10
8	Mouser Electronics	80.3	30.7	1.88
9	Future Electronics	80.0	(23.6)	1.87
10	EDOM Technology	67.6	56.9	1.58
	Others	283.7	4.6	6.64
	TOTAL TOP 50	4,273.5	13.3	100.00

ក្ល Top 10 Vietnam sales

Rank 202	Company	2023 Vietnam (\$ Millions)	Growth 2023/2022 (Percent)	Share of Top 50 Total Sales (Percent)
1	WT Microelectronics	1,355.8	72.3	43.73
2	Avnet	478.7	(10.1)	15.44
3	Arrow Electronics, Inc.	478.5	(15.6)	15.43
4	WPG	276.3	37.4	8.91
5	Kanematsu	106.7	22.3	3.44
6	Restar Group	102.6	3.0	3.31
7	EDOM Technology	101.4	(31.9)	3.27
8	Future Electronics	73.1	(23.4)	2.36
9	SIIX	45.6	8.0	1.47
10	Serial Microelectronics	20.0	(18.3)	0.64
	Others	61.9	1.7	2.00
	TOTAL TOP 50	3,100.4	17.2	100.00

Top 10 Taiwan sales

Rank 202	Company	2023 Taiwan (\$ Millions)	Growth 2023/2022 (Percent)	Share of Top 50 Total Sales (Percent)
1	WPG	3,150.2	(1.1)	21.00
2	WT Microelectronics	2,511.1	(11.4)	16.74
3	Avnet	1,579.6	(5.7)	10.53
4	Arrow Electronics, Inc.	1,172.7	(11.8)	7.82
5	EDOM Technology	1,081.5	(10.0)	7.21
6	CECport	1,054.6	63.9	7.03
7	Supreme Electronics	991.9	(25.3)	6.61
8	Alltek Technology Corp	707.9	9.8	4.72
9	Macnica	394.2	(6.5)	2.63
10	Nexty Electronics	364.5	(12.1)	2.43
	Others	1,990.4	(7.5)	13.27
	TOTAL TOP 50	14,998.6	(5.3)	100.00

e	Top 10 Malaysia / Singapore	sales		
Rank 2023	Company	2023 Malaysia/ Singapore (\$ Millions)	Growth 2023/2022 (Percent)	Share of Top 50 Total Sales (Percent)
1	WT Microelectronics	1,565.9	45.7	28.68
2	Arrow Electronics, Inc.	469.1	(15.5)	8.59
3	Avnet	440.4	(11.7)	8.07
4	CECport	317.3	9.6	5.81
5	WPG	297.5	8.5	5.45
6	Nexty Electronics	283.5	(12.6)	5.19
7	Future Electronics	278.4	(20.2)	5.10
8	Macnica	231.9	(25.5)	4.25
9	EDOM Technology	175.7	(15.3)	3.22
10	Gain Hero 蓝源实业	165.6	(10.7)	3.03
	Others	1,234.2	(16.2)	22.61
	TOTAL TOP 50	5,459.5	(1.5)	100.00

Top 10 South Korea sales

g

Rank 202	Company	2023 South Korea (\$ Millions)	Growth 2023/2022 (Percent)	Share of Top 50 Total Sales (Percent)
1	WT Microelectronics	1,374.9	32.7	35.83
2	SaMT	660.6	(16.5)	17.22
3	Avnet	315.9	(13.7)	8.23
4	WPG	297.5	8.5	7.75
5	Arrow Electronics, Inc.	262.7	(12.6)	6.85
6	Restar Group	228.0	(8.4)	5.94
7	Nexty Electronics	133.7	(12.7)	3.48
8	Marubun	131.7	12.0	3.43
9	Kanematsu	101.6	(4.5)	2.65
10	Mouser Electronics	72.3	(11.8)	1.88
	Others	258.0	(8.0)	6.72
	TOTAL TOP 50	3,836.9	2.1	100.00

	Top 8 Australia /New Zealan	d sales		
~		2023		
Rank 2023		Australia/ New		Share of
õ		Zealand	Growth	Top 50
Ē		Total		Total Sales
å	Company	(\$ Millions)	(Percent)	(Percent)
1	Arrow Electronics, Inc.	431.6	(15.2)	47.29
2	Avnet	220.2	(9.7)	24.13
3	RS Group	90.5	8.9	9.92
	Future Electronics	69.6	(21.3)	7.63
5	Mouser Electronics	48.2	(5.9)	5.28
	Digi-Key	47.3	(21.1)	5.18
7	ТТІ	4.1	(17.2)	0.45
8	bisco industries	1.1	(57.3)	0.13
	Others	-		-
	TOTAL TOP 50	912.6	(12.5)	100.00