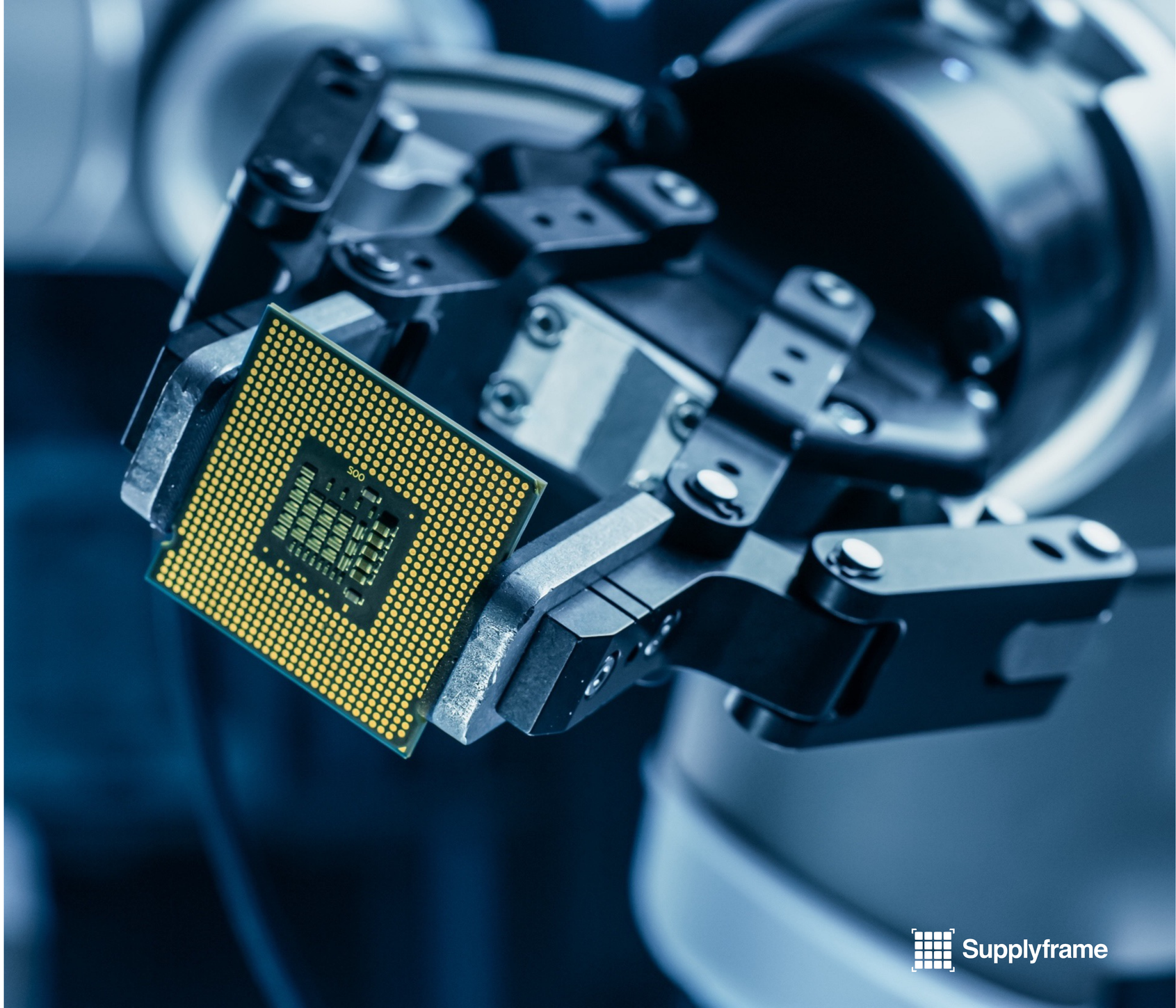
Supplyframe
Design-to-Source
Intelligence

Design-to-Source Monthly Insights

June 2024



Methodology

The following report was compiled using data available from Supplyframe's Design to Source Intelligence (DSI) Network. The DSI Network consists of more than 70+ web properties, attracting 11M+ engineers and procurement professionals from around the world on a monthly basis. Engineers and procurement professionals visit and interact with the DSI Network specifically for their work (research, consider, design, and buy), enabling Supplyframe to understand design trends, sourcing trends, and extrapolate indicators of overall market conditions and trends.

What this report provides the advertiser?

1. A proxy for *"market"* condition by evaluating trends in engineering design activities and procurement sourcing activities
2. Understand what product categories are in demand by engineers and buyers
3. Anticipate future sourcing demand based on where design activities are concentrated (categories and regions)

Customers can leverage the insights provided in this report to support the development of their Go-To-Market strategy, as well as campaign planning and execution to drive their organization's objectives.

To protect sensitive information, as well as provide a mechanism for insights - we have normalized and indexed much of the data used in this analyses. There are two specific indices utilized to provide trend and comparative insights:

Design Activity Index

Based on part level activity by engineers on the DSI Network. Activities included are related to part evaluation and part placement in designs via EDAs. Activities, are normalized, weighted, and scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum volume of activities in the given data set. A value of 50 reflects half of the maximum value in the given data set.

Sourcing Activity Index

Based on part level activity by buyers on the DSI Network. Activities included are related to buy clicks on the the DSI Network. Index is scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum value in the given data set. A value of 50 reflects half of the maximum value in the given data set.

What We Saw Across The Network

JUNE 2024

June performance:

- Following seasonality, both global design and sourcing activities observed month-over-month decreases in activities across Supplyframe's Design-to-Source network

- Global design activities decreased -9% month-over-month but continued to show signs of growth versus prior year. The decrease in month-over-month design activities were observe across all regions with APAC observing the largest decrease in activities (-12%). The decrease in activities were observed across all product categories

- Global sourcing activities decreased -8% month-over-month and -24% year-over-year. Similar to design activities, global sourcing activities decreased across all regions and product categories

Q2 2024 Performance

- Global design activities grew +8% quarter-over-quarter while global sourcing activities decreased by -8% quart-over-quarter

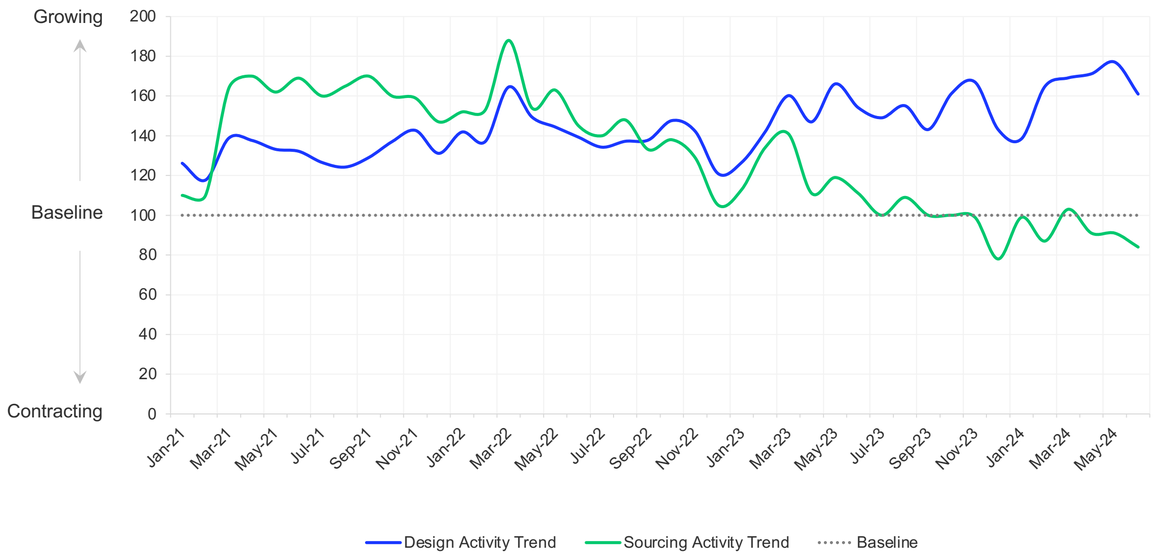
Q3 2024 outlook

- For calendar Q3, global design activities are expected to decrease -5% quarter-over-quarter, while global sourcing activities are expected to decrease -8% quarter-over-quarter

Global Performance

Design Activities	-9.2% M/M	+4.4% Y/Y
Sourcing Activities	-7.6% M/M	-24.1% Y/Y

Chart 1. Design and Sourcing Activity Trends



How to read this chart:
Design and sourcing activities have been baselined to 2020 monthly median. Baseline is indicated as a value of 100. Above the baseline indicates growth, while below the baseline indicates decrease in activities.

Design Activity Overview

JUNE 2024

Design Activity Index

Based on part level activity by engineers on the DSI Network. Activities included are related to part evaluation and part placement in designs via EDAs. Activities, are normalized, weighted, and scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum volume of activities in the given data set. A value of 50 reflects half of the maximum value in the given data set.

Global design activities decreased -9% month-over-month, but grew +4% vs. prior year

Global design activities continued to remain strong in the month of June. Following seasonality, design activities decreased month-over-month but continued to exhibit signs of growth compared to prior year. While all regions observed decrease in activities compared to the prior month, the EMEA and APAC regions both observed year-over-year growth in design activities. The Americas remained relatively flat year-over-year.

In the EMEA region, passives (+10%); embedded processors and controllers (+10%); optoelectronics (+10%); rf and wireless (+24%); and circuit protection devices (+14%) observed the largest year-over-year growth in design activities.

In the APAC region, interconnects (+7%); discrete semiconductors (+6%); memory (+6%); and rf and wireless (+25%) components observed the largest year-over-year growth in design activities. Embedded processors an controllers and circuit protection devices both observed the largest year-over-year decline in activities (-10%).

In the Americas region, memory (+16%) and rf and wireless (+34%) components observed the largest growth in design activities. Power and discrete semiconductor devices observed moderate year-over-year growth (+5%), while sensors (-33%) and electromechanicals (-12%) devices observed the largest year-over-year decrease in design activities for June.

For calendar Q3, global design activities are expected to decrease -5% quarter-over-quarter with the largest decrease in design activities anticipated in the EMEA region. The Americas region is expected to see a nominal drop in design activities, while the APAC region is expected to remain flat vs. prior quarter.

Table 1. Design Activity Summary

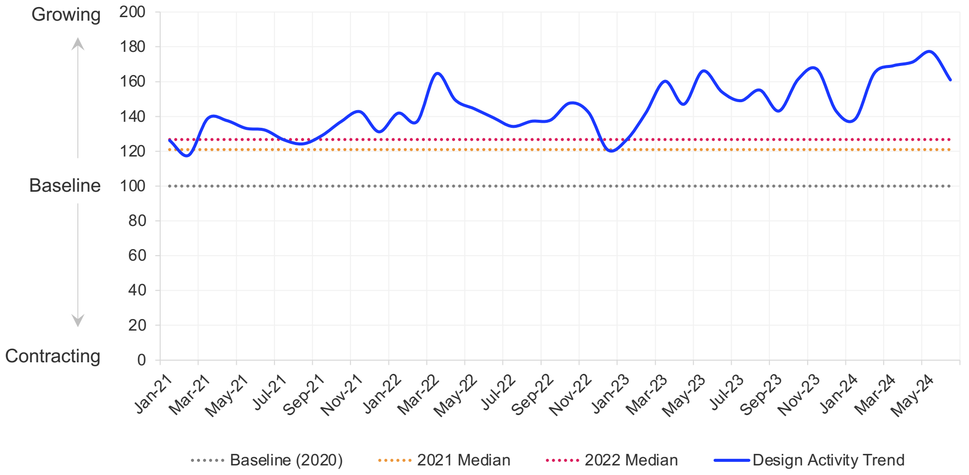
	vs. Prior Month	vs. Prior Year	6mo. CMGR
Global	-9.2%	4.4%	2.0%

Region	Design Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
EMEA	100.0	-10%	8%	2%
APAC	68.4	-12%	4%	1%
AMER	45.0	-4%	-1%	3%

Top 10 Countries / Territories

Country / Territory	Design Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
United States	100.0	-6%	-6%	2%
China (incl. Hong Kong)	66.5	-12%	-2%	0%
Germany	49.8	-2%	3%	3%
India	49.4	-11%	5%	1%
United Kingdom	32.2	-4%	7%	5%
France	29.1	8%	14%	5%
Italy	24.7	-33%	9%	2%
Japan	21.1	4%	-22%	-1%
Republic of Korea	20.9	-12%	16%	0%
Spain	18.0	-10%	-4%	7%

Chart 2. Global Design Activity Trends



Design Activity: Americas Trends

JUNE 2024

Design Activity Index

Based on part level activity by engineers on the DSI Network. Activities included are related to part evaluation and part placement in designs via EDAs. Activities, are normalized, weighted, and scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum volume of activities in the given data set. A value of 50 reflects half of the maximum value in the given data set.

Following data provides a breakdown of design activities across the DSI Network in the Americas region.

Chart 3. Americas Design Activity Trends

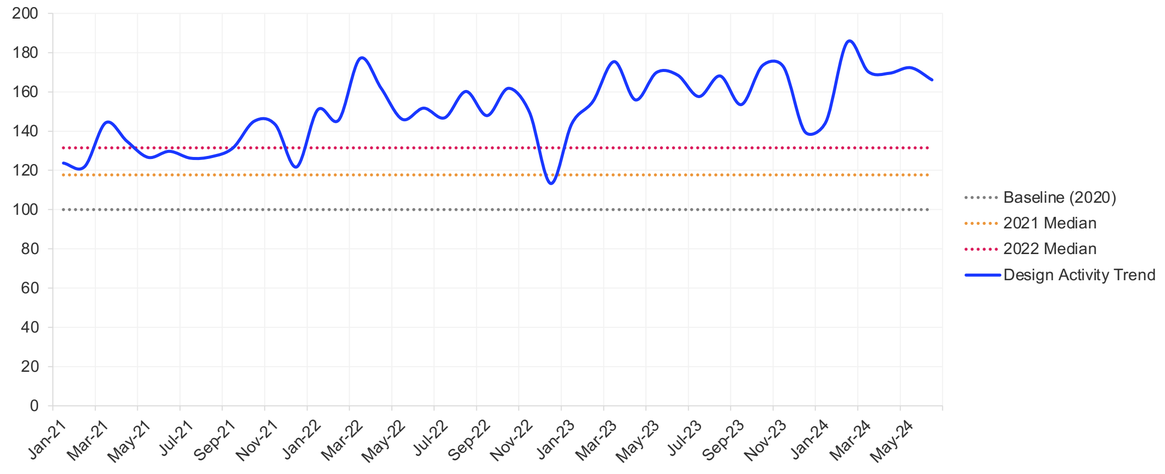


Table 2. Top 15 Product Categories in Americas

Product Class	Design Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	-6%	-5%	3%
Power Circuits	62.5	5%	6%	5%
Capacitors	53.9	-5%	-5%	1%
Resistors	52.4	-1%	1%	2%
Diodes	42.0	11%	10%	4%
Transistors	27.8	3%	-1%	3%
Microcontrollers and Processors	24.8	2%	3%	4%
Optoelectronics	23.1	-5%	-7%	2%
Terminal Blocks	20.8	-7%	-5%	1%
Inductors	18.4	-5%	-9%	3%
Drivers And Interfaces	16.4	-4%	-18%	2%
Amplifier Circuits	15.7	1%	5%	3%
Signal Circuits	15.2	-8%	-2%	2%
Logic	14.6	-16%	-11%	3%
Switches	14.6	-6%	-4%	4%

Design Activity: EMEA Trends

JUNE 2024

Design Activity Index

Based on part level activity by engineers on the DSI Network. Activities included are related to part evaluation and part placement in designs via EDAs. Activities, are normalized, weighted, and scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum volume of activities in the given data set. A value of 50 reflects half of the maximum value in the given data set.

Following data provides a breakdown of design activities across the DSI Network in the EMEA region.

Chart 4. EMEA Design Activity Trends

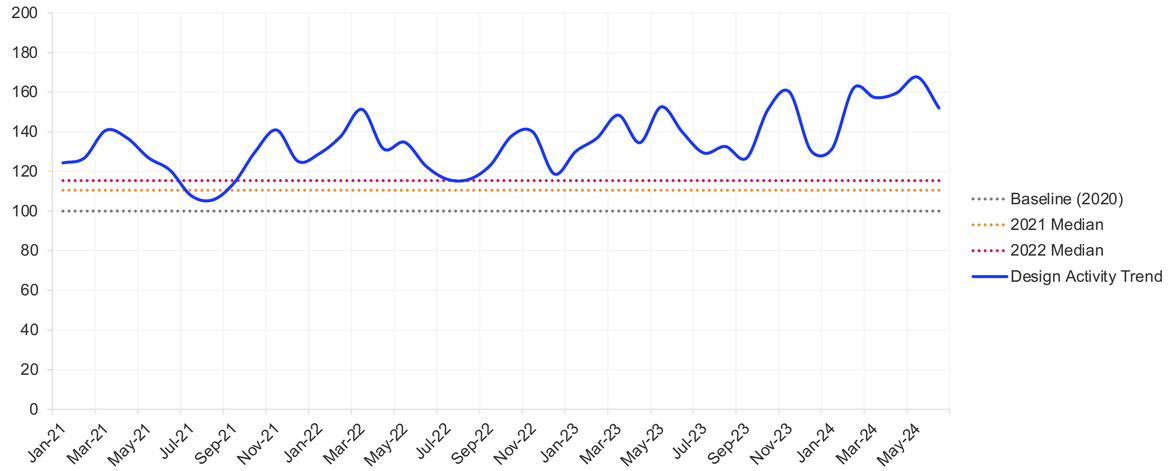


Table 3. Top 15 Product Categories in EMEA

Product Class	Design Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	-8%	3%	3%
Power Circuits	64.6	-10%	10%	2%
Capacitors	58.6	-15%	8%	2%
Resistors	56.8	-8%	10%	3%
Diodes	46.1	-5%	6%	2%
Transistors	32.5	-5%	5%	1%
Microcontrollers and Processors	28.1	-10%	10%	2%
Optoelectronics	26.6	-8%	10%	1%
Inductors	26.5	-1%	14%	4%
Terminal Blocks	24.9	-10%	-4%	2%
Drivers And Interfaces	20.2	-13%	1%	2%
Amplifier Circuits	17.8	-15%	0%	3%
Logic	16.9	-5%	13%	3%
Signal Circuits	16.6	-2%	10%	3%
Switches	14.5	-5%	15%	2%

Design Activity: APAC Trends

JUNE 2024

Design Activity Index

Based on part level activity by engineers on the DSI Network. Activities included are related to part evaluation and part placement in designs via EDAs. Activities, are normalized, weighted, and scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum volume of activities in the given data set. A value of 50 reflects half of the maximum value in the given data set.

Following data provides a breakdown of design activities across the DSI Network in the APAC region.

Chart 5. APAC Design Activity Trends

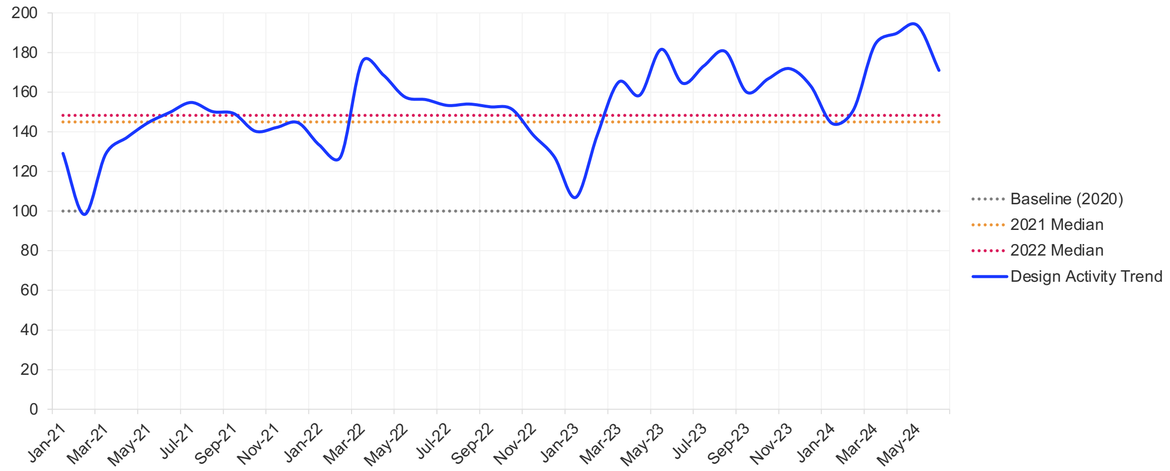


Table 4. Top 15 Product Categories in APAC

Product Class	Design Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	-11%	6%	1%
Power Circuits	72.0	-10%	2%	0%
Capacitors	58.3	-15%	-2%	0%
Diodes	53.5	-9%	10%	2%
Resistors	49.3	-21%	0%	1%
Transistors	35.7	-11%	-1%	1%
Microcontrollers and Processors	32.4	-16%	-10%	1%
Optoelectronics	25.2	-8%	2%	0%
Drivers And Interfaces	24.5	-10%	4%	-1%
Inductors	22.3	-2%	3%	1%
Amplifier Circuits	21.9	-12%	0%	0%
Logic	19.2	-7%	-3%	1%
Signal Circuits	16.4	-20%	0%	-1%
Terminal Blocks	15.1	-9%	9%	1%
Filters	14.1	-17%	7%	0%

Sourcing Activity Overview

JUNE 2024

Sourcing Activity Index

Based on part level activity by buyers on the DSI Network. Activities included are related to buy clicks on the the DSI Network. Index is scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum value in the given data set. A value of 50 reflects half of the maximum value in the given data set.

Global sourcing activities decreased -8% month-over-month and -24% year-over-year.

Like global design activities, global sourcing activities observed month-over-month decrease in activities aligned to seasonality. While global sourcing activities remained well below levels seen between 2020 to 2022, it continued to remain stable for the twelfth consecutive month this year, indicating that the market may have reached the bottom and stabilized. All regions observed decrease in sourcing activities.

While all regions exhibited signs for decreasing sourcing activities, the following countries have fared better than others in the last six months as measured by their compounded monthly growth over the same period: the United States (+3%); Germany (+4%); Singapore (+7%); Canada (+2%); and France (+2%). Growth in sourcing activities over the last six months in these countries were driven by the following groups of product categories: passive (+5%); interconnects (+5%); electromechanicals (+4%); optoelectronics (+3%); and circuit protection devices (+4%).

For calendar Q3 2024, global sourcing activities are projected to decrease -8% quarter-over-quarter. Decrease in activities are expected across all regions, however EMEA is projected to experience the largest decrease in sourcing activities.

Table 5. Sourcing Activity Summary

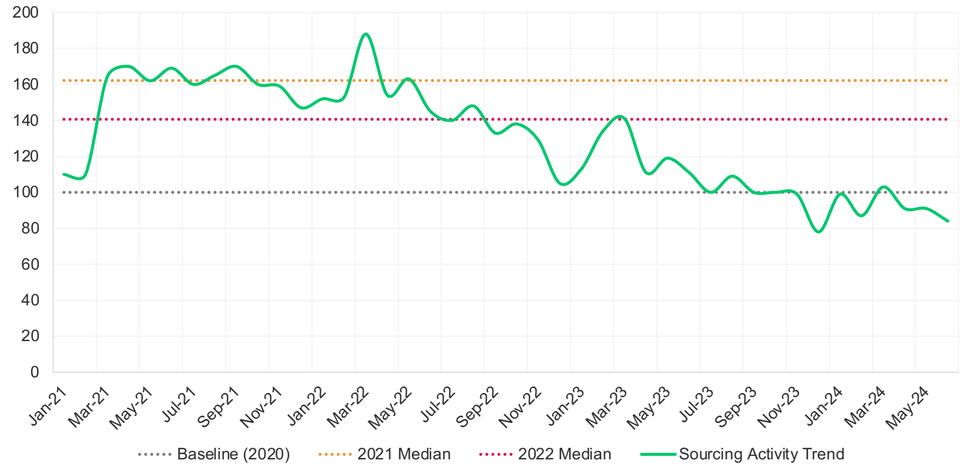
	vs. Prior Month	vs. Prior Year	6mo. CMGR
Global	-7.6%	-24.1%	1.3%

Region	Sourcing Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
APAC	100.0	-7.5%	-19.2%	0.4%
AMER	54.2	-7.2%	-25.2%	2.8%
EMEA	31.1	-8.5%	-35.2%	1.4%

Top 10 Countries / Territories

Country / Territory	Sourcing Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
China (incl. Hong Kong)	100.0	-6%	-16%	-1%
United States	83.6	-6%	-25%	3%
India	29.1	-6%	-29%	1%
Republic of Korea	21.3	-2%	-26%	1%
Germany	13.6	5%	-32%	4%
Taiwan	11.7	-18%	-28%	0%
Singapore	9.1	-10%	18%	7%
Canada	8.2	-18%	-32%	2%
Malaysia	7.8	-20%	-6%	1%
France	6.5	12%	-38%	2%

Chart 6. Global Sourcing Activity Trends



Sourcing Activity: Americas Trends

JUNE 2024

Sourcing Activity Index

Based on part level activity by buyers on the DSI Network. Activities included are related to buy clicks on the the DSI Network. Index is scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum value in the given data set. A value of 50 reflects half of the maximum value in the given data set.

Following data provides a breakdown of sourcing activities across the DSI Network in the Americas region.

Chart 7. Americas Sourcing Activity Trends

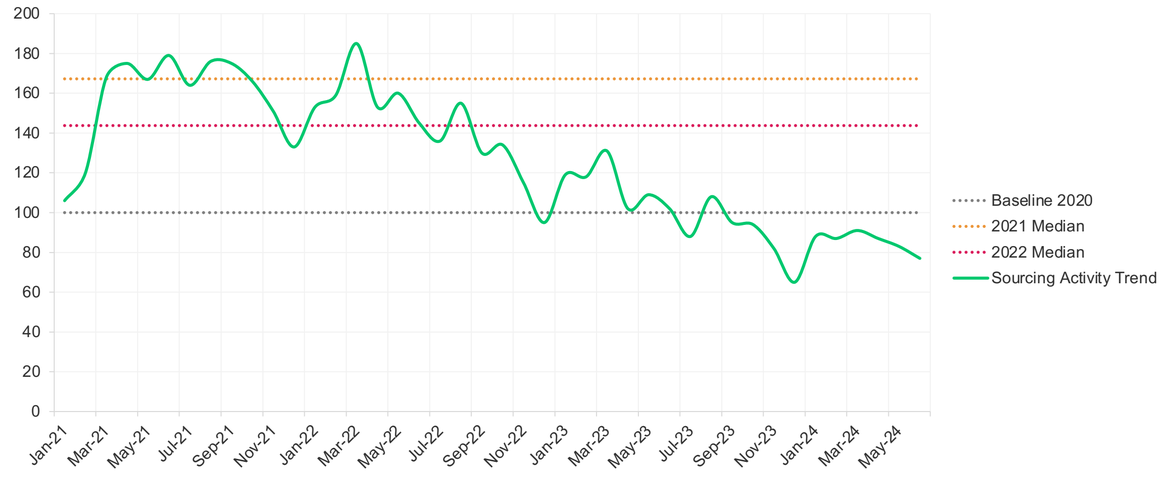


Table 6. Top 15 Product Categories in Americas

Product Class	Sourcing Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	-4%	-8%	5%
Capacitors	75.7	-8%	-16%	4%
Resistors	72.0	-1%	-8%	4%
Power Circuits	40.0	-13%	-43%	0%
Connector Support	36.6	3%	-3%	5%
Diodes	34.9	-13%	-29%	1%
Transistors	26.7	-11%	-40%	1%
Microcontrollers and Processors	20.2	-6%	-58%	-1%
Terminal Blocks	19.3	-9%	-21%	2%
Inductors	18.6	-10%	2%	5%
Optoelectronics	18.3	-6%	-20%	3%
Amplifier Circuits	16.7	-6%	-43%	4%
Logic	12.8	-9%	-38%	0%
Drivers And Interfaces	12.5	-15%	-47%	0%
Memory	10.5	-10%	-40%	2%

Sourcing Activity: EMEA Trends

JUNE 2024

Sourcing Activity Index

Based on part level activity by buyers on the DSI Network. Activities included are related to buy clicks on the the DSI Network. Index is scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum value in the given data set. A value of 50 reflects half of the maximum value in the given data set.

Following data provides a breakdown of sourcing activities across the DSI Network in the EMEA region.

Chart 8. EMEA Sourcing Activity Trends

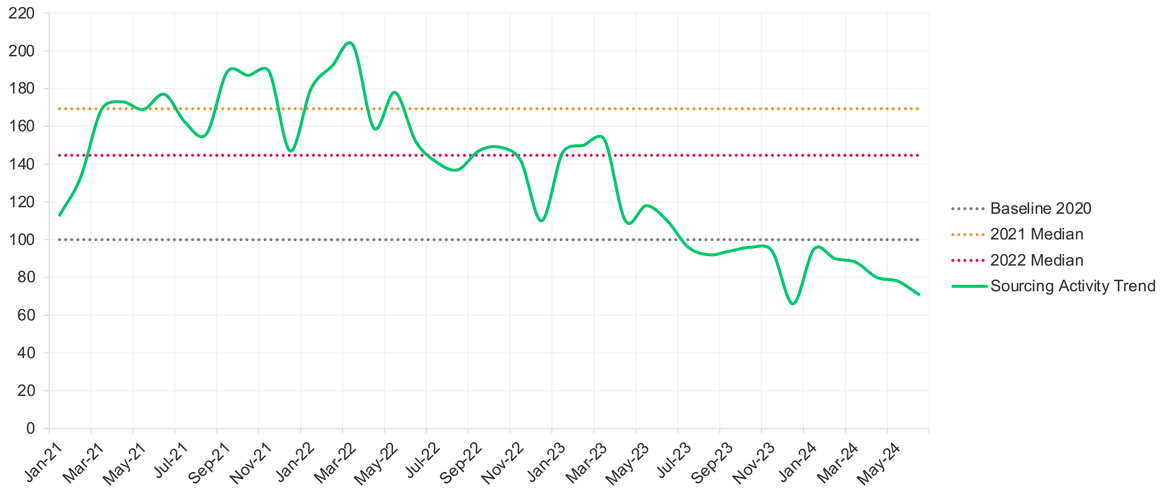


Table 7. Top 15 Product Categories in EMEA

Product Class	Sourcing Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	-4%	-11%	4%
Capacitors	97.3	-9%	-20%	3%
Resistors	81.9	-9%	-14%	4%
Power Circuits	64.4	-12%	-50%	-1%
Diodes	53.1	-5%	-41%	1%
Transistors	43.5	-11%	-51%	-1%
Microcontrollers and Processors	41.0	-11%	-56%	0%
Optoelectronics	29.4	-6%	-28%	2%
Inductors	29.3	-4%	-10%	5%
Connector Support	28.8	3%	-9%	3%
Amplifier Circuits	26.8	-19%	-51%	-3%
Drivers And Interfaces	24.0	-14%	-53%	0%
Filters	16.9	-9%	-11%	4%
Memory	16.7	-6%	-49%	-1%
Terminal Blocks	15.9	-5%	-21%	5%

Sourcing Activity: APAC Trends

JUNE 2024

Sourcing Activity Index

Based on part level activity by buyers on the DSI Network. Activities included are related to buy clicks on the the DSI Network. Index is scored on a scale of 0 – 100.

Index scores are relative to the dimensions of data being included in the analyses (ie. Country, manufacturer, categories). A value of 100 reflects maximum value in the given data set. A value of 50 reflects half of the maximum value in the given data set.

Following data provides a breakdown of sourcing activities across the DSI Network in the APAC region.

Chart 9. APAC Sourcing Activity Trends

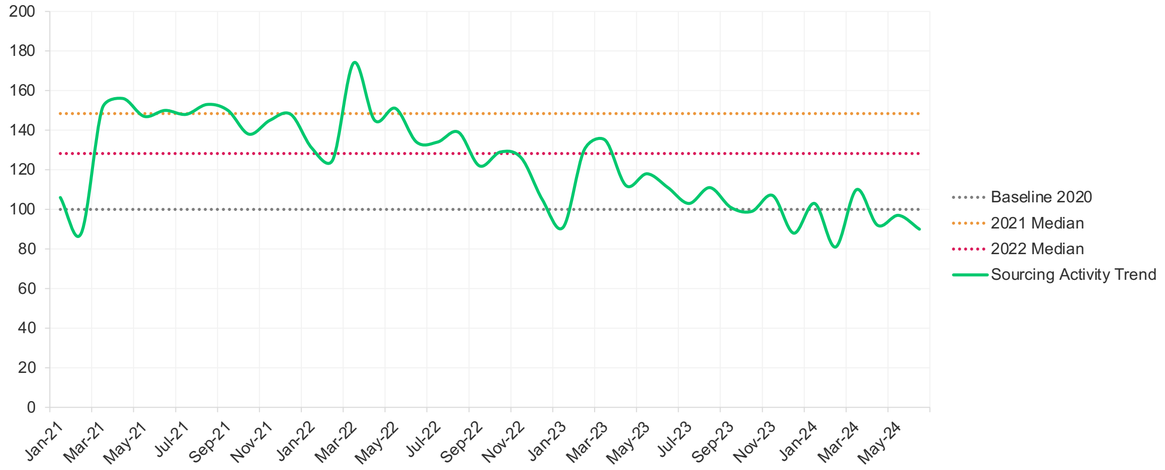


Table 8. Top 15 Product Categories in APAC

Product Class	Sourcing Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	-6%	7%	2%
Capacitors	85.1	-6%	2%	3%
Power Circuits	68.2	-5%	-31%	0%
Resistors	59.7	-7%	-12%	2%
Microcontrollers and Processors	48.7	-4%	-42%	-1%
Diodes	47.2	-13%	-27%	-2%
Transistors	43.5	-14%	-37%	-3%
Connector Support	29.0	-3%	5%	2%
Inductors	25.5	-10%	17%	4%
Optoelectronics	23.4	-10%	-15%	1%
Drivers And Interfaces	22.9	-10%	-36%	-2%
Amplifier Circuits	20.0	-10%	-51%	-2%
Memory	19.0	-11%	-38%	-2%
Converters	17.4	-6%	-32%	-1%
Logic	17.3	-11%	-26%	-2%

Recap

JUNE 2024

- Following seasonality, global design and sourcing activities decreased month-over-month in June. Global design activities decreased -9% month-over-month, while global sourcing activities decreased -8% month-over-month

- Both global design and sourcing activities have remained stable for the past twelve month, indicating that the market has stabilized

- For calendar Q2, global design activities grew +8% quarter-over-quarter, while global sourcing activities decreased by -8% quarter-over-quarter

- For calendar Q3, global design activities are projected to decrease -5% quarter-over-quarter, while global sourcing activities are projected to decrease -8% quart-over-quarter