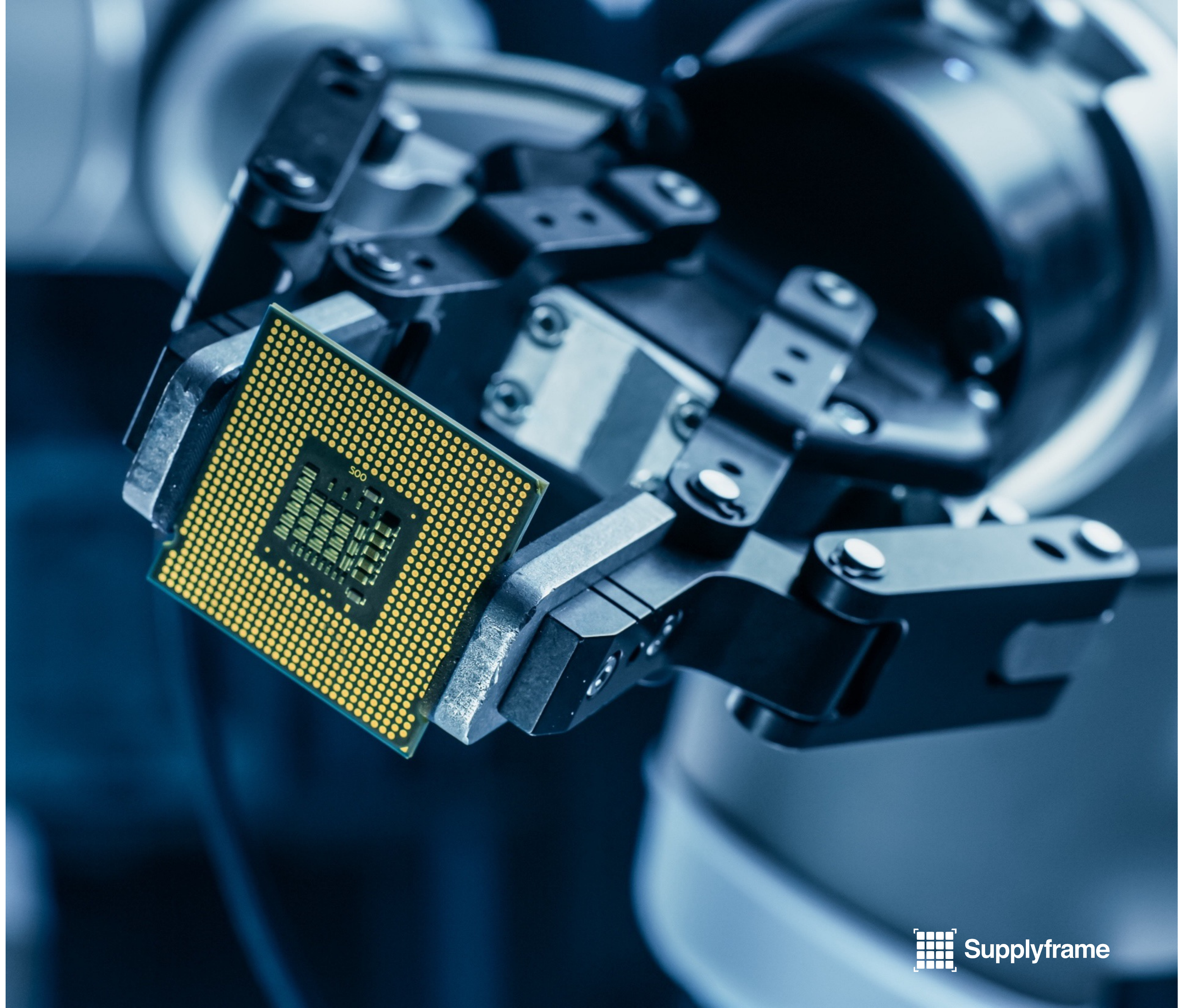


Supplyframe  
Design-to-Source  
Intelligence

## Design-to-Source Monthly Insights

March 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

MARCH 2024

- Global design activities remained flat in March, while global sourcing activities increased +18% month-over-month. Compared to 2022, global design activities grew +3% and global sourcing activities contracted -27%
- The APAC region observed strong uptick in both design and sourcing activities in March as much of the region returned to normal business operations after the Lunar New Year holiday
- The Americas and EMEA regions observed a month-over-month decrease in design activities, while sourcing activities increased in the Americas and decreased slightly in the EMEA region
- Calendar Q1 2024, closed with global design activities remaining flat quarter-over-quarter due to a slower than expected start in January, while global sourcing activities increased +4% quarter-over-quarter

## Q2 2024 outlook

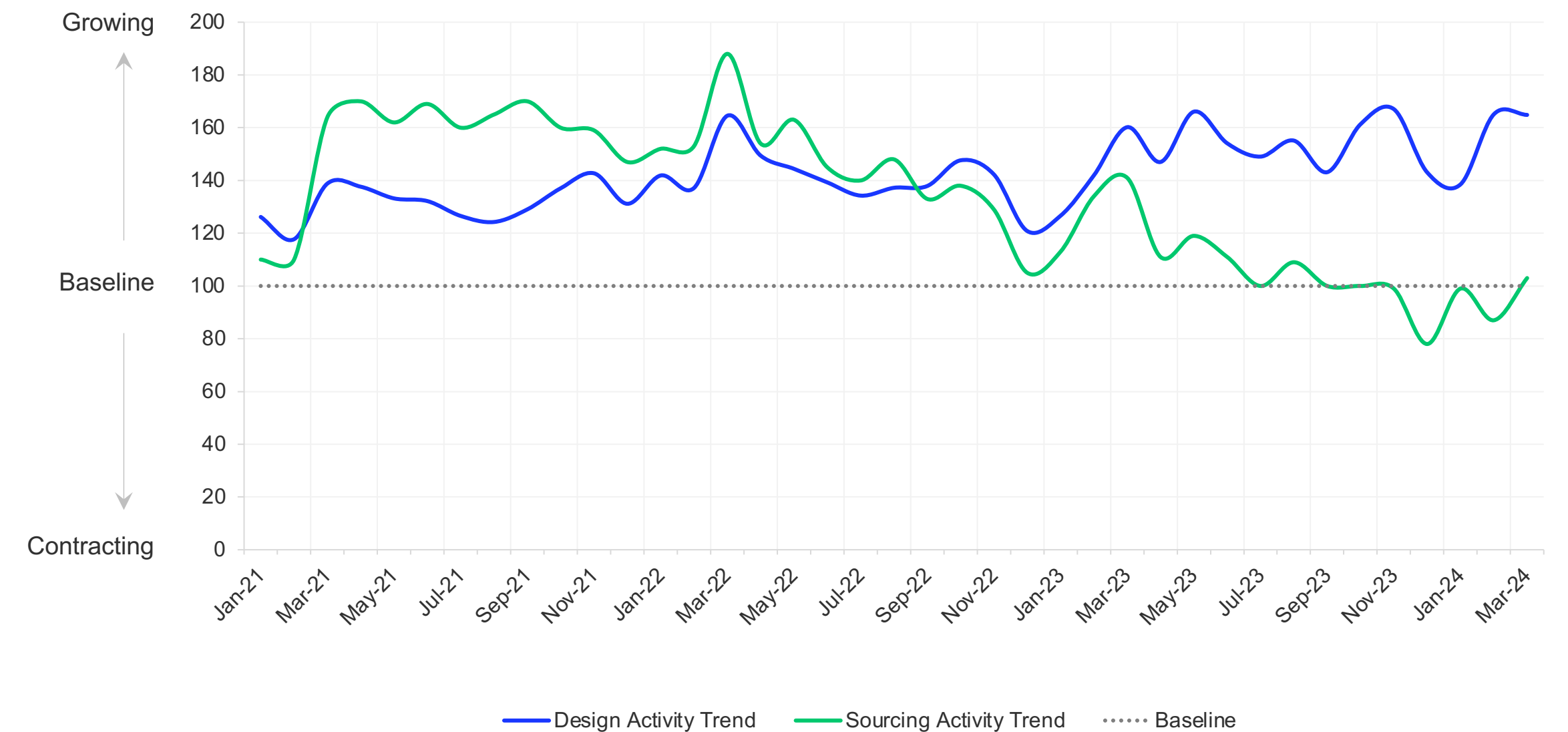
- Global design activities are projected to grow between +5% to +8% quarter-over-quarter driven by growth in activities from the Americas and APAC regions
- Global sourcing activities are projected to decrease between -1% to -5% quarter-over-quarter driven by decrease in activities in the Americas and EMEA regions

## Global Performance

**Design Activities** ⚡ **-0.1% M/M**  
⚡ **+2.9% Y/Y**

**Sourcing Activities** ⚡ **+17.7% M/M**  
⚡ **-27.3% 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

MARCH 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 remained flat month-over-month but grew +3% compared to prior year.**

The EMEA and Americas regions observed decreases in month-over-month design activities, while the APAC region observed +18% growth in design activities.

Growth in month-over-month design activities in the APAC region were driven primarily by the following countries/territories: China (+75%); South Korea (+17%), Taiwan (+45%), and Vietnam (+100%). Growth in activities were seen across all product categories in these countries as business resumed normal operations after the Lunar New Year holiday.

Design activities decreased -6% and -11% in EMEA and the Americas regions, respectively. In EMEA, Germany, the United Kingdom, Spain, and Turkey were the top countries that recorded month-over-month decrease in activities. On the other hand, Italy, France, Poland, and Switzerland observed an average of +5% month-over-month growth in design activities.

Globally, design activities for interconnects (+3%); passives (+9%); power (+5%); sensors (+18%); and memory (+8%) were all up compared to prior year in March.

For calendar Q2 2024, we anticipate global design activities to grow between +5% to +8% quarter-over-quarter.

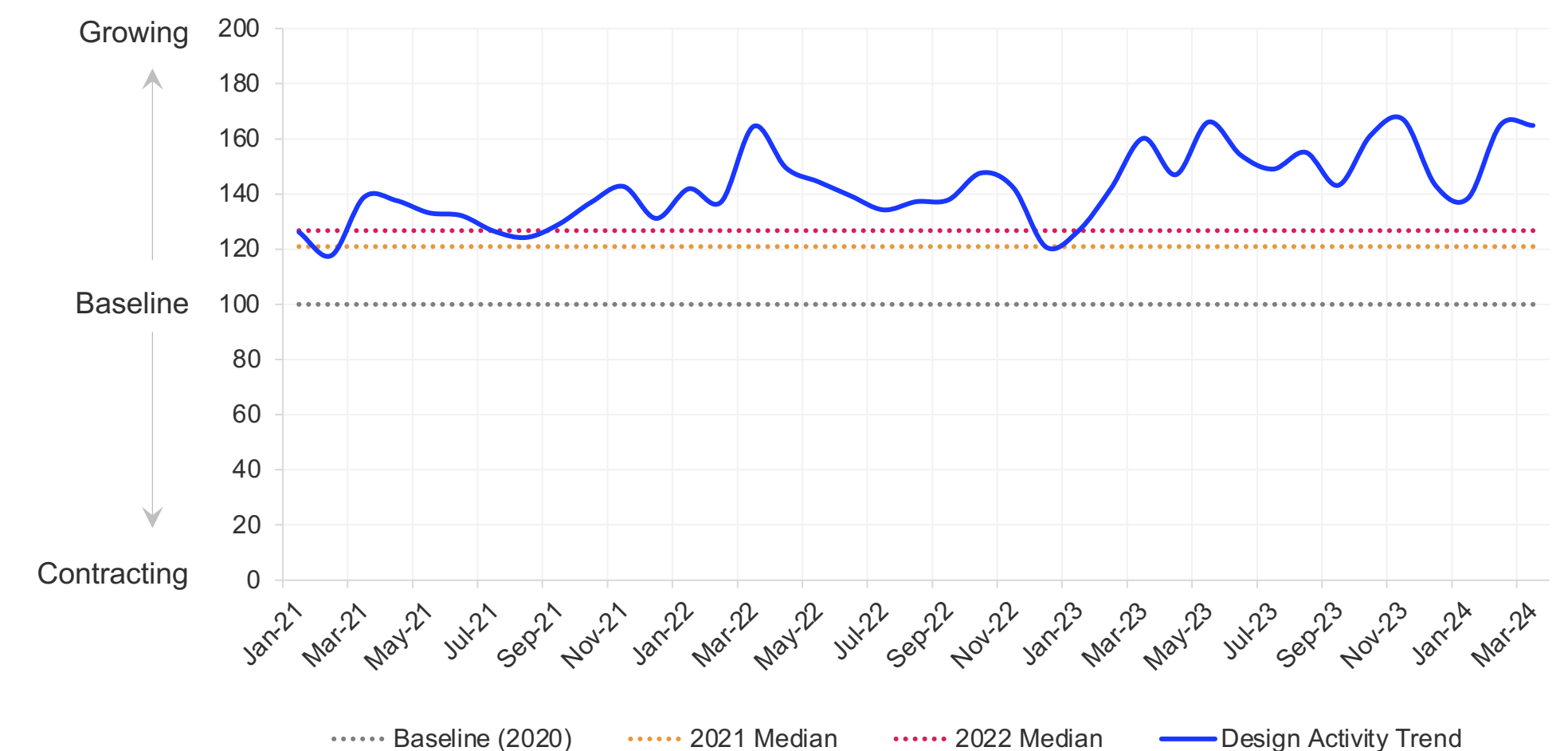
Table 1. Design Activity Summary

		vs. Prior Month	vs. Prior Year	6mo. CMGR
<b>Global</b>		-0.1%	2.9%	2.4%
Region	Design Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
EMEA	100.0	-6%	3%	3%
APAC	70.2	18%	9%	2%
AMER	44.1	-11%	-5%	1%

## Top 10 Countries / Territories

Country / Territory	Design Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
United States	100.0	-11%	-7%	2%
China (incl. Hong Kong)	68.7	75%	-4%	2%
India	54.7	-1%	43%	5%
Germany	44.7	-11%	4%	1%
United Kingdom	31.1	-13%	-8%	2%
Italy	27.0	5%	-3%	3%
France	26.8	1%	9%	3%
Republic of Korea	20.6	17%	26%	2%
Japan	19.0	-1%	-13%	-2%
Spain	17.5	-4%	1%	4%

Chart 2. Global Design Activity Trends



# Design Activity: Americas Trends

MARCH 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

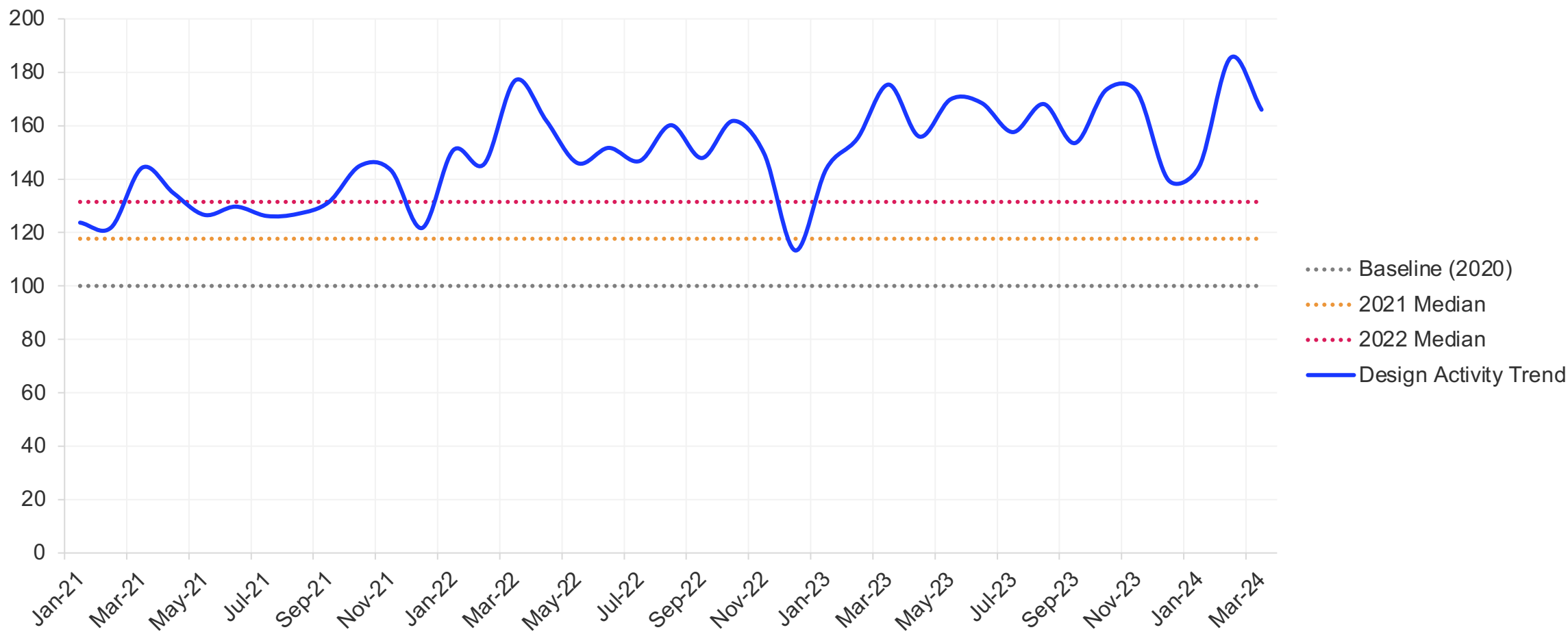


Table 2. Top 15 Product Categories in Americas

Product Class	Design Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	-4%	-6%	2%
Capacitors	57.6	-19%	-7%	2%
Resistors	55.9	-18%	0%	3%
Power Circuits	54.9	-18%	-3%	0%
Diodes	37.9	-10%	-13%	2%
Transistors	27.4	-7%	-16%	1%
Optoelectronics	25.3	-5%	-5%	2%
Terminal Blocks	23.9	-7%	5%	5%
Microcontrollers and Processors	22.1	-5%	-15%	1%
Inductors	18.9	-6%	38%	3%
Drivers And Interfaces	17.1	-8%	-15%	-1%
Amplifier Circuits	15.6	-17%	-12%	0%
Switches	14.9	-5%	-13%	3%
Signal Circuits	13.8	-14%	-11%	-1%
Logic	13.6	-17%	-19%	-2%



# Design Activity: EMEA Trends

MARCH 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

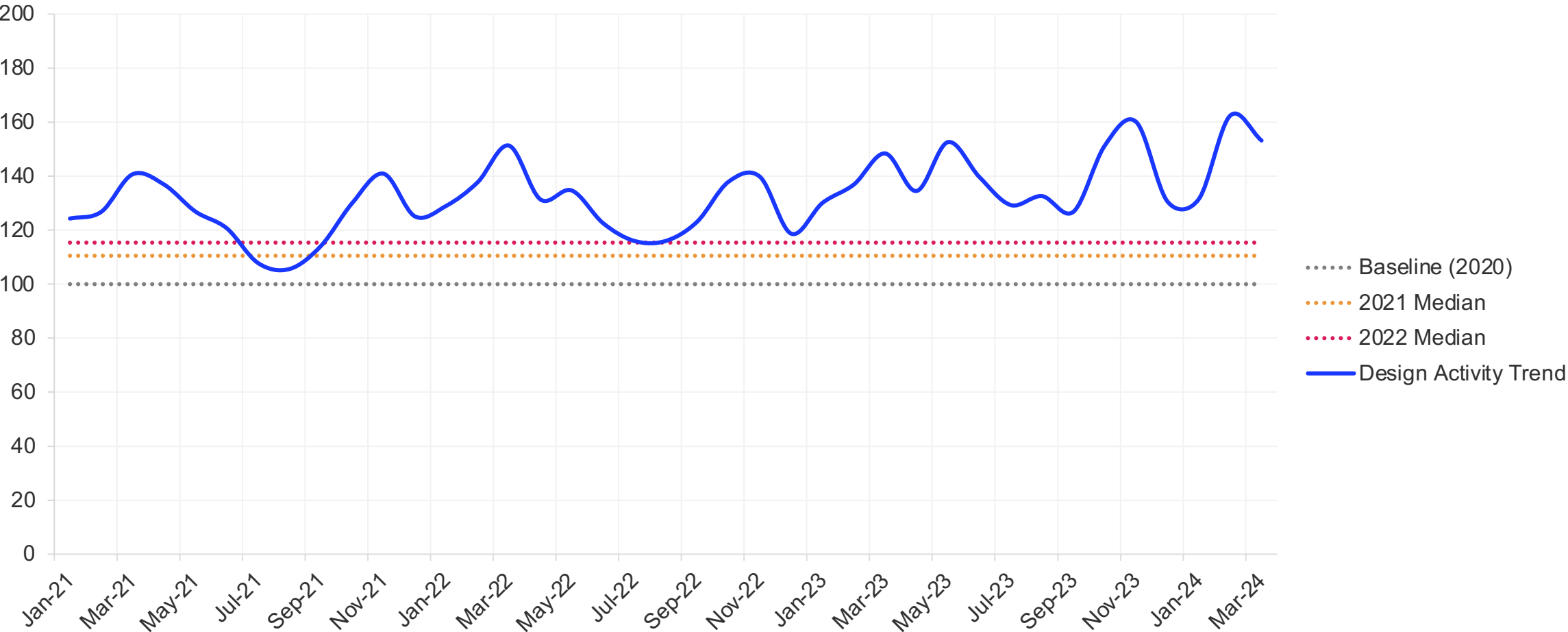


Table 3. Top 15 Product Categories in EMEA

Product Class	Design Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	-5%	6%	3%
Power Circuits	64.3	-7%	4%	3%
Capacitors	56.3	-9%	-1%	4%
Resistors	52.3	-7%	0%	5%
Diodes	43.8	-8%	-1%	2%
Transistors	31.5	-6%	-4%	3%
Microcontrollers and Processors	28.1	-5%	2%	3%
Terminal Blocks	27.0	-11%	7%	2%
Optoelectronics	26.0	-1%	-5%	3%
Inductors	24.8	-6%	37%	4%
Drivers And Interfaces	19.1	-9%	-2%	2%
Amplifier Circuits	17.4	-8%	-2%	3%
Signal Circuits	16.5	-5%	6%	4%
Logic	15.5	-3%	-6%	2%
Switches	15.1	9%	11%	4%

# Design Activity: APAC Trends

MARCH 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

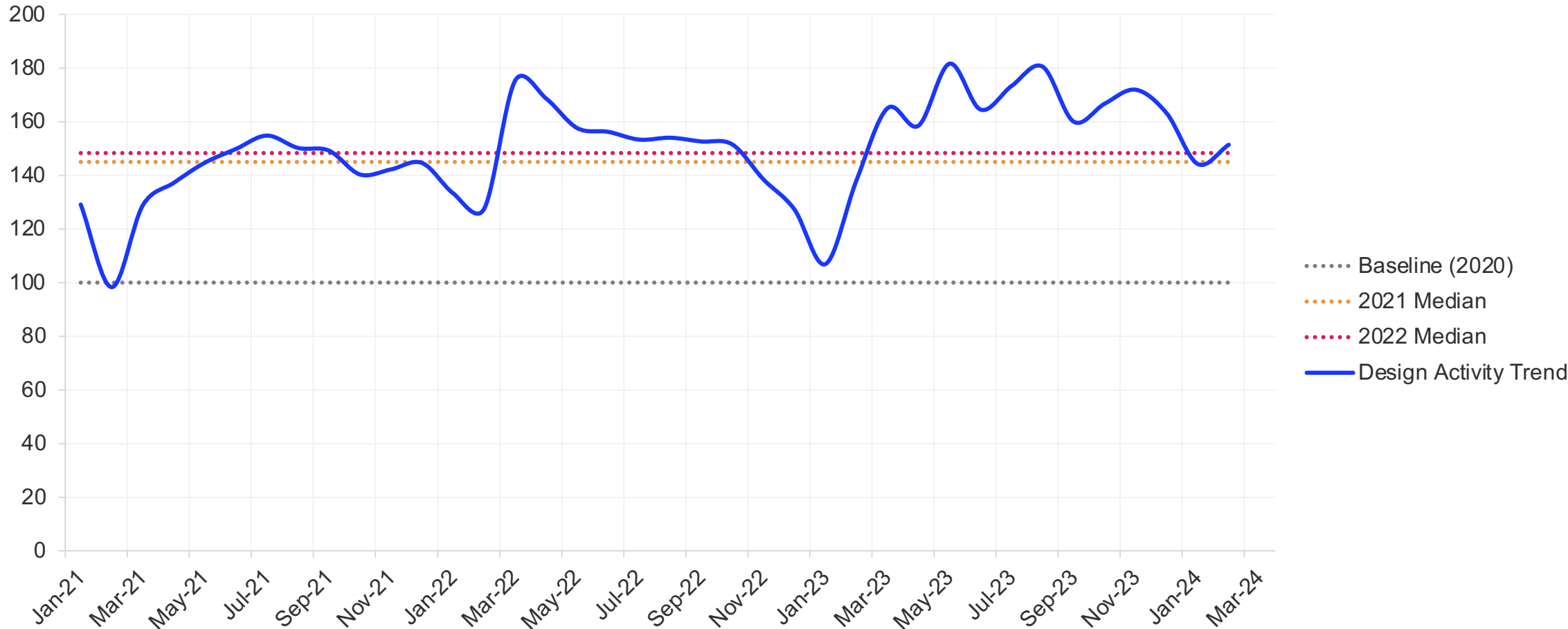


Table 4. Top 15 Product Categories in APAC

Product Class	Design Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	14%	4%	2%
Power Circuits	81.1	37%	18%	3%
Capacitors	67.1	20%	19%	2%
Resistors	60.2	26%	32%	4%
Diodes	55.4	14%	11%	2%
Transistors	37.4	4%	-1%	0%
Microcontrollers and Processors	31.8	12%	-11%	1%
Optoelectronics	25.6	14%	-2%	2%
Drivers And Interfaces	24.8	11%	-1%	1%
Inductors	23.3	18%	39%	3%
Logic	23.2	49%	13%	3%
Amplifier Circuits	23.2	21%	-6%	0%
Signal Circuits	17.7	11%	-22%	-1%
Terminal Blocks	15.4	-5%	8%	2%
Filters	14.7	15%	12%	1%

# Sourcing Activity Overview

MARCH 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 activity trend improved in March, growing +18% month-over-month.

Sourcing activities grew +35% and +4% month-over-month in the APAC and Americas region, respectively.

Countries driving the growth in APAC included China (+75%); South Korea (+17%), Taiwan (+45%), and Vietnam (+100%). In the Americas, the United States (+4%); Canada (+5%); Mexico (+4%); and Brazil (+16%) drove the positive month-over-month trend in the region.

The EMEA region observed a -2% month-over-month decrease in sourcing activities. Within the region, the following top countries observed month-over-month decrease in activities: Germany (-3%); France (-2%); Spain (-18%); Poland (-22%); and (Netherlands (-11%). On the other hand, Italy, Israel, and the United Kingdom observed an average of +3% month-over-month increase in sourcing activities.

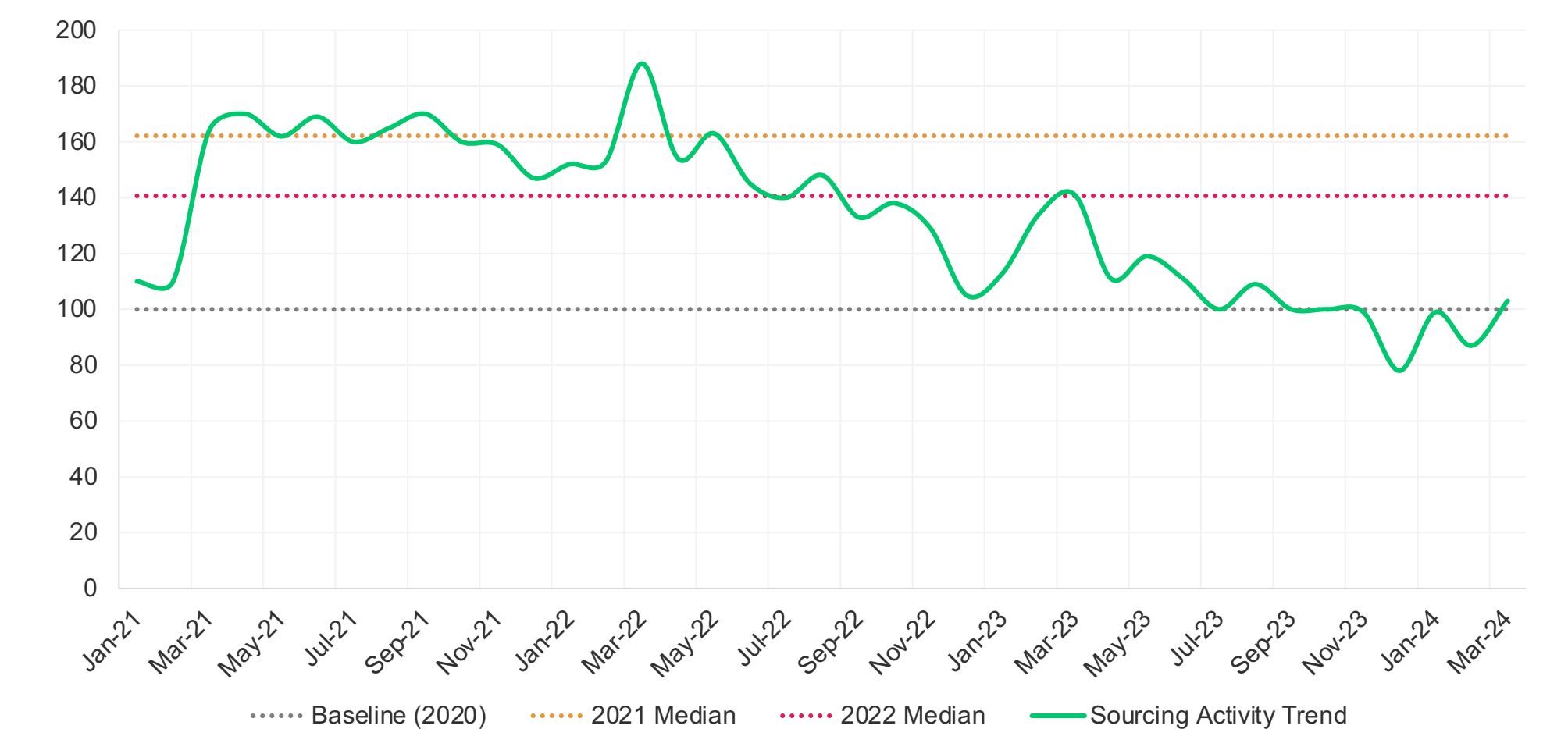
Globally, all product categories observed month-over-month increase in sourcing activities. Among the product categories, the following groups observed the largest growth in demand: memory (+31%); embedded processors and controllers (+20%); discrete semiconductors (+20%); and power (+20%).

For calendar Q2 2024, global sourcing activities are projected to decrease between -1% to -5% quarter-over-quarter following seasonal trends.

Table 5. Sourcing Activity Summary

		vs. Prior Month	vs. Prior Year	6mo. CMGR
<b>Global</b>		17.7%	-27.3%	0.4%
Region	Sourcing Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
APAC	100.0	+35.4%	-18.5%	1.4%
AMER	52.9	+4.3%	-30.7%	-0.6%
EMEA	31.7	-1.8%	-42.4%	-1.0%
Top 10 Countries / Territories				
Country / Territory	Sourcing Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
China (incl. Hong Kong)	100.0	+68%	-17%	2%
United States	76.2	+4%	-32%	-1%
India	24.1	-6%	-25%	-1%
Republic of Korea	19.8	+4%	-22%	1%
Germany	12.8	-3%	-43%	0%
Taiwan	12.2	+46%	-23%	2%
Canada	9.0	+5%	-23%	2%
Malaysia	7.5	+32%	+8%	4%
Singapore	7.1	+22%	-5%	-1%
France	6.3	-2%	-43%	0%

Chart 6. Global Sourcing Activity Trends





# Sourcing Activity: Americas Trends

MARCH 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

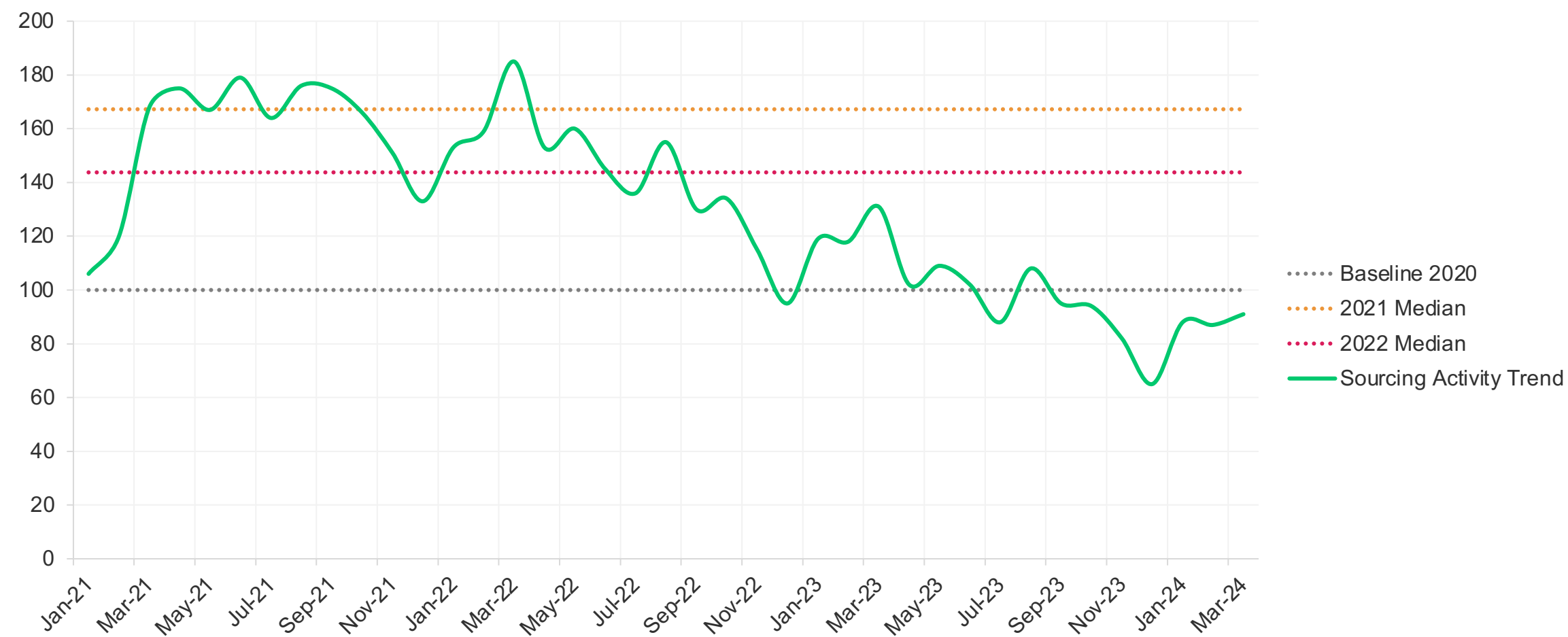


Table 6. Top 15 Product Categories in Americas

Product Class	Sourcing Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	2%	-13%	1%
Capacitors	77.8	0%	-19%	1%
Resistors	73.7	6%	-20%	2%
Power Circuits	44.9	7%	-47%	-3%
Diodes	41.2	6%	-27%	-2%
Connector Support	36.9	16%	-9%	2%
Transistors	31.4	5%	-48%	-4%
Microcontrollers and Processors	23.4	-2%	-63%	-6%
Terminal Blocks	21.3	10%	-22%	1%
Optoelectronics	20.5	6%	-23%	1%
Inductors	20.2	3%	4%	4%
Logic	15.5	5%	-34%	-1%
Amplifier Circuits	15.4	3%	-49%	-5%
Drivers And Interfaces	14.9	4%	-51%	-2%
Memory	12.0	14%	-42%	-2%

# Sourcing Activity: EMEA Trends

MARCH 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

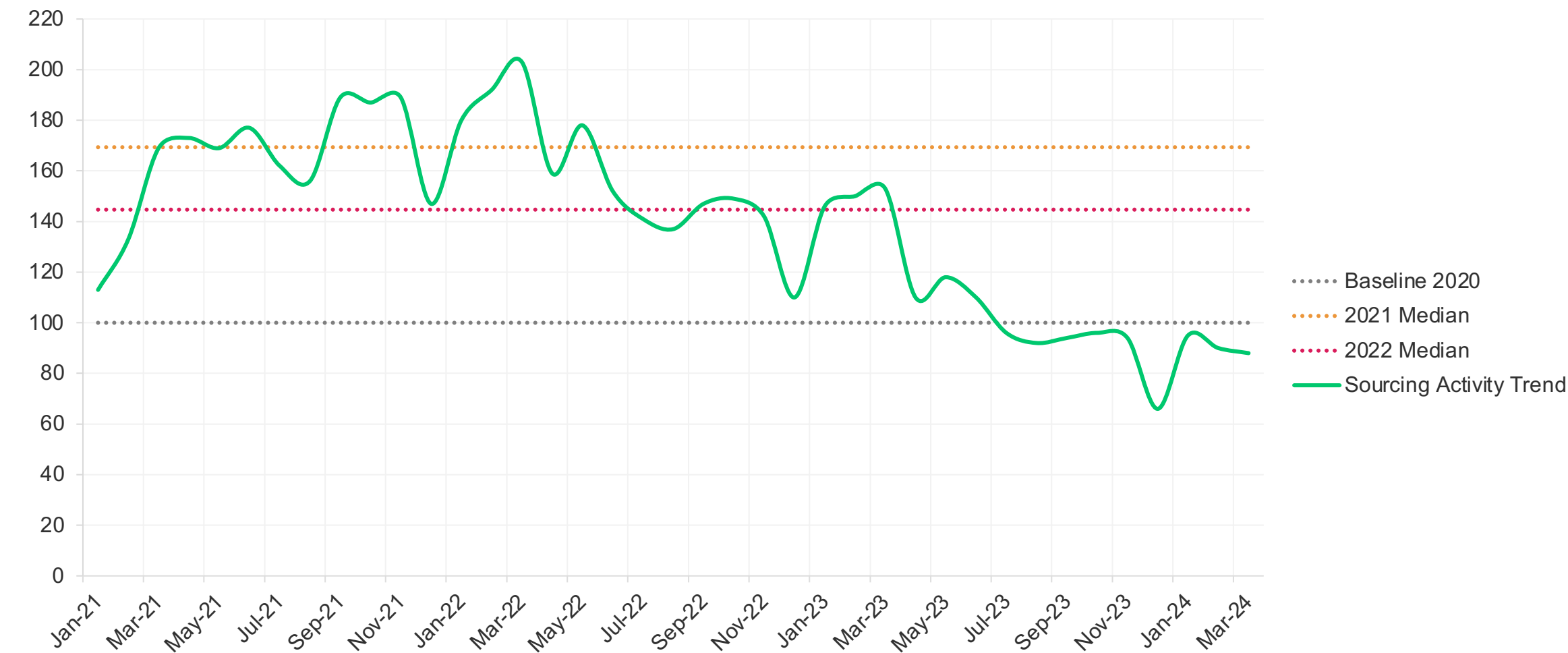


Table 7. Top 15 Product Categories in EMEA

Product Class	Sourcing Activity Index	M/M%	Y/Y %	6mo. CMGR
Capacitors	100.0	1%	-25%	0%
Connectors	99.9	2%	-21%	2%
Resistors	85.0	3%	-25%	1%
Power Circuits	74.9	-1%	-56%	-3%
Diodes	60.9	0%	-44%	-2%
Transistors	51.9	-3%	-58%	-4%
Microcontrollers and Processors	46.2	-5%	-65%	-5%
Inductors	33.3	-8%	-4%	4%
Optoelectronics	31.5	-4%	-38%	0%
Amplifier Circuits	30.0	-8%	-53%	-5%
Connector Support	28.4	3%	-17%	3%
Drivers And Interfaces	27.1	-14%	-60%	-3%
Logic	22.0	1%	-41%	0%
Memory	19.1	0%	-57%	-4%
Filters	18.8	-10%	-14%	3%



# Sourcing Activity: APAC Trends

MARCH 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

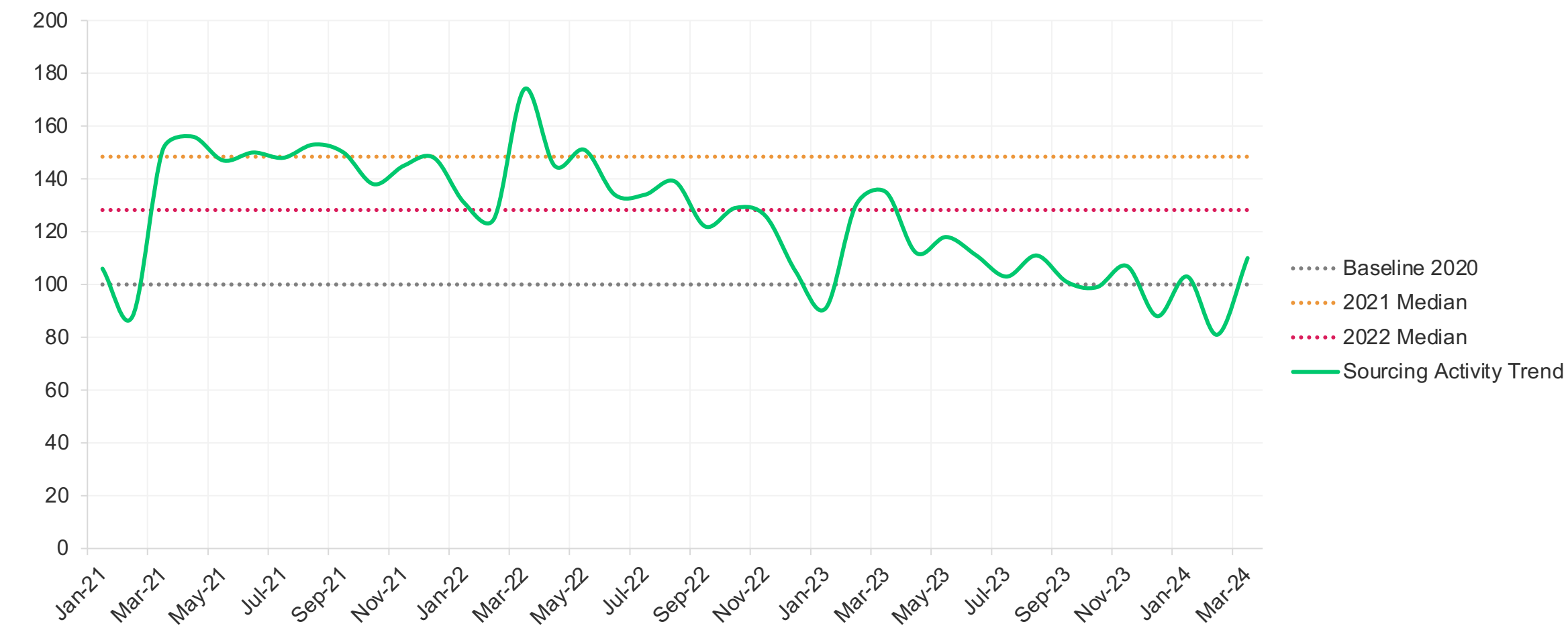


Table 8. Top 15 Product Categories in APAC

Product Class	Sourcing Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	38%	13%	4%
Capacitors	78.7	28%	11%	3%
Power Circuits	67.4	35%	-37%	0%
Resistors	62.2	35%	1%	3%
Diodes	55.7	36%	-19%	1%
Transistors	52.7	39%	-36%	-1%
Microcontrollers and Processors	52.1	39%	-47%	-2%
Connector Support	29.2	40%	18%	4%
Inductors	26.2	22%	26%	5%
Drivers And Interfaces	25.0	33%	-47%	0%
Optoelectronics	24.0	38%	-8%	2%
Amplifier Circuits	23.4	26%	-34%	-1%
Memory	21.9	50%	-33%	0%
Logic	20.4	27%	-24%	1%
Converters	17.4	43%	-33%	-2%



# Recap

MARCH 2024

- In March, global design activities remained flat while global sourcing activities improved month-over-month
- The APAC region observed growth in month-over-month activities as the region returned to normal business operations after the Lunar New Year holiday
- Global design activities for interconnects (+3%); passives (+9%); power (+5%); sensors (+18%); and memory (+8%) increased compared to prior year
- Globally, all product categories observed month-over-month increase in sourcing activities. Among the product categories, the following groups observed the largest growth in demand: memory (+31%); embedded processors and controllers (+20%); discrete semiconductors (+20%); and power (+20%)
- Calendar Q1 2024, closed with global design activities remaining flat quarter-over-quarter due to a slower than expected start in January, while global sourcing activities increased +4% quarter-over-quarter
- For Q2 2024, global design activities are projected to grow between +5% to +8% quarter-over-quarter, while global sourcing activities are expected to decrease between -1% to -5% following seasonal trends

