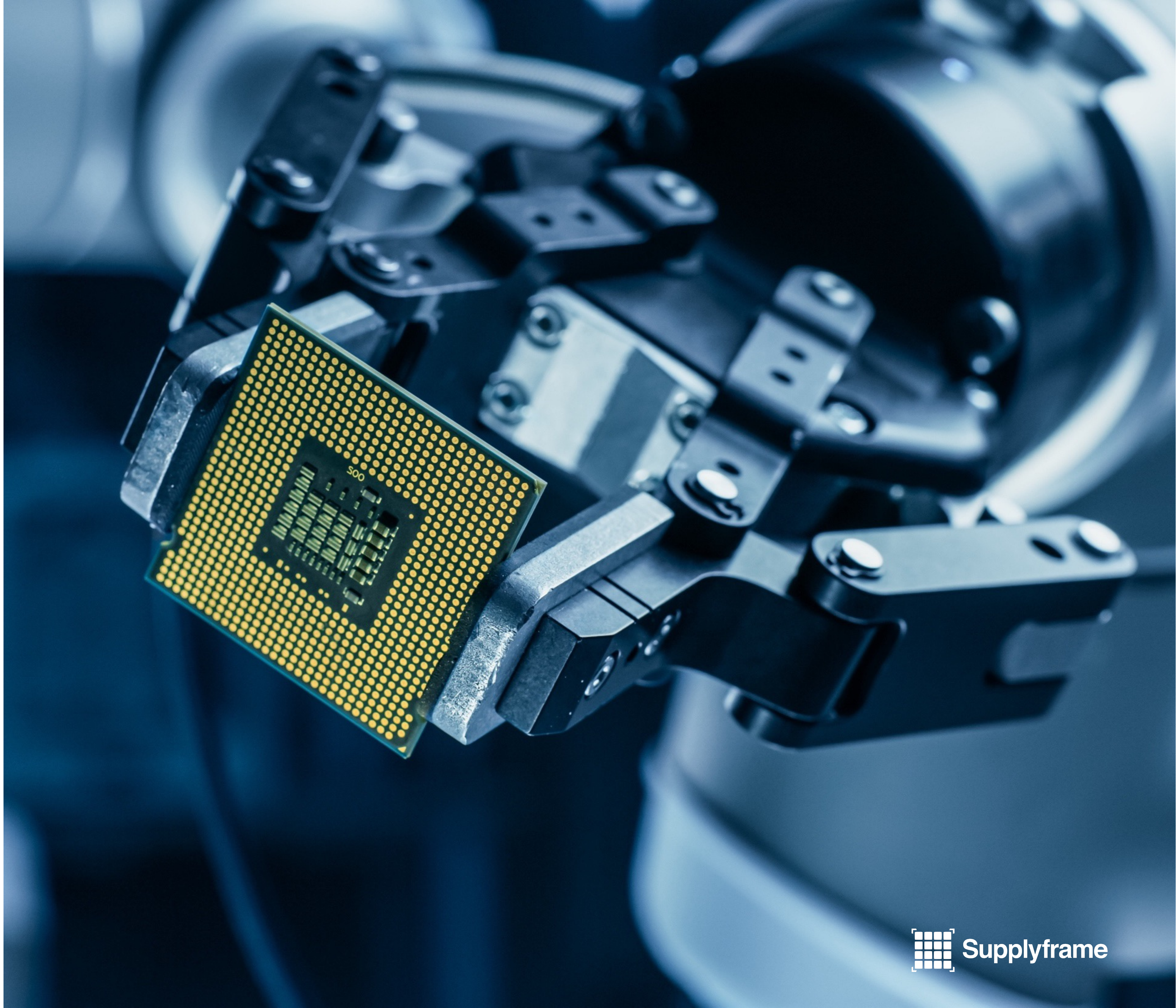


Supplyframe  
Design-to-Source  
Intelligence

## Design-to-Source Monthly Insights

July 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

JULY 2024

## July performance:

- Global design and sourcing activities both increased month-over-month, performing better than expected. Seasonally, design and sourcing activities have decreased from June to July due to lower activity levels in these months across the Americas and EMEA regions. However, this year both regions observed month-over-month increase in activities

- Global design activities increased +6% month-over-month and +14% year-over-year. Growth was observed across the APAC and Americas regions, while the EMEA region remained flat
- Global sourcing activities increased +7% month-over-month but remained -10% below last year. Growth was seen across all regions for the month
- Global design and sourcing activities continued to show signs of stability, highlighting that the market may have stabilized and will soon show signs of recovery

## Q3 2024 outlook

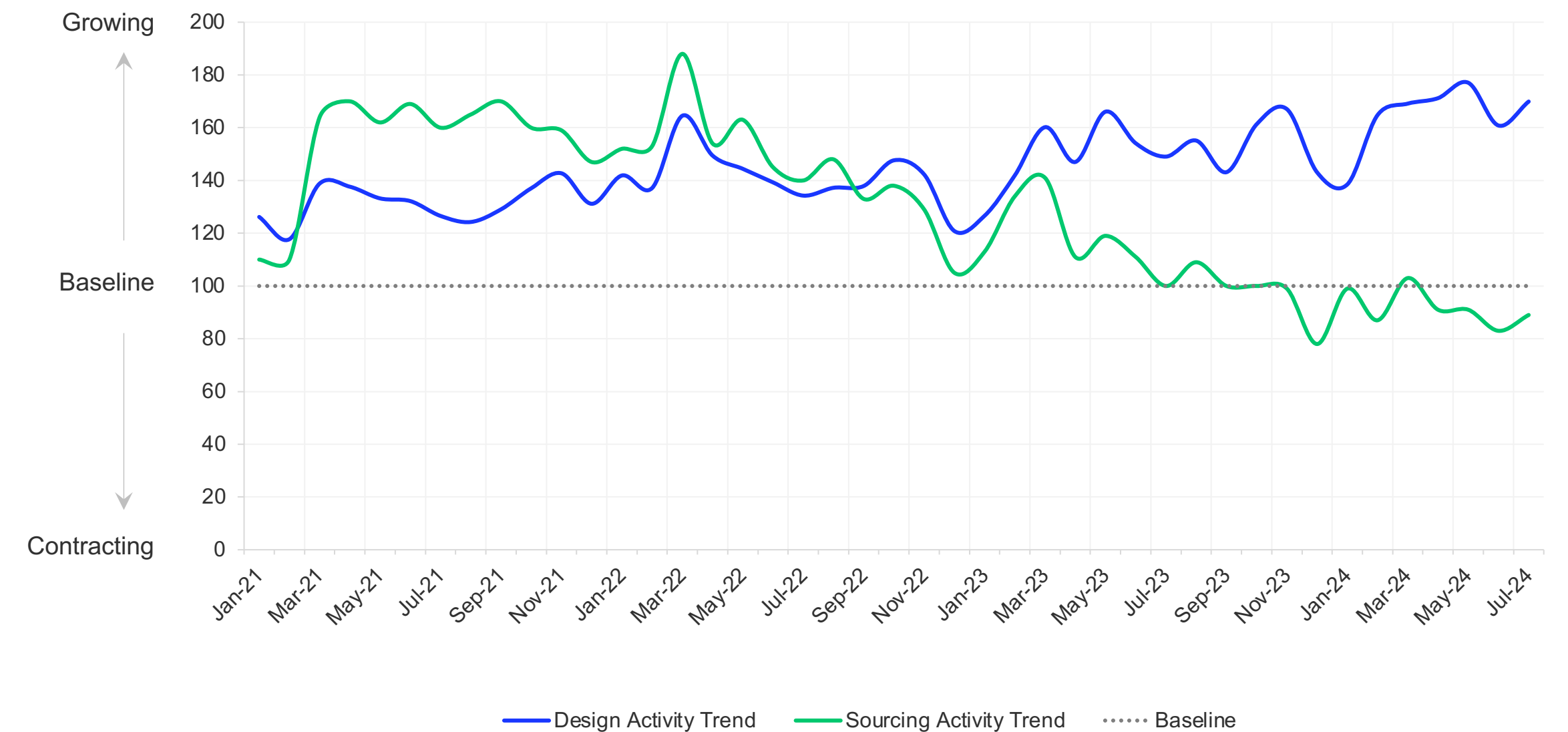
- For calendar Q3, global design activities are expected to decrease -5% quarter-over-quarter, while global sourcing activities are expected to decrease -8% quarter-over-quarter

## Global Performance

**Design Activities** ⬆️ +5.6% M/M  
⬆️ +14.0% Y/Y

**Sourcing Activities** ⬆️ +7.2% M/M  
⬇️ -10.2% 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

JULY 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 increased +6% month-over-month and +14% year-over-year.**

Design activities continued to remain strong and consistent across all regions in July. Activities increased across all regions with the APAC region observing the largest increase in design activities (+17%). The EMEA and Americas regions also outperformed previously years in design activity. June to July, these regions historically have observed decrease in activities in the summer months. This year however, design activity remained flat month-over-month in EMEA and increased +1% in the Americas. Compared to prior year, all regions observed growth in design activities.

In the APAC region, the following countries observed strong growth in design activities, as well as the largest volume of activities: China (+11%); India (+17%); South Korea (+23%); Japan (+7%); and Taiwan (+35%). In these countries, the following product categories drove the growth and volume trends: connectors (+16%); power circuits (+18%); capacitors (+28%); diodes (+8%); and resistors (+23%).

In the EMEA region, the following countries drove the growth and activity volume trends: Germany (+6%); the United Kingdom (+3%); Italy (+9%); Turkey (+21%); and Poland (+4%). The top product categories in these countries included: connectors (+17%); power circuits (+11%); capacitors (+12%); and resistors (+5%).

In the Americas, the top product categories driving volume and growth included: connectors (+5%); capacitors (+2%); resistors (+2%); optoelectronics (+9%); and inductors (+6%).

Design activities for discrete semiconductors remained flat month-over-month globally, while embedded processors and controllers observed a +3% increase in activities globally. Compared to prior year, both product groups increased in design activities.

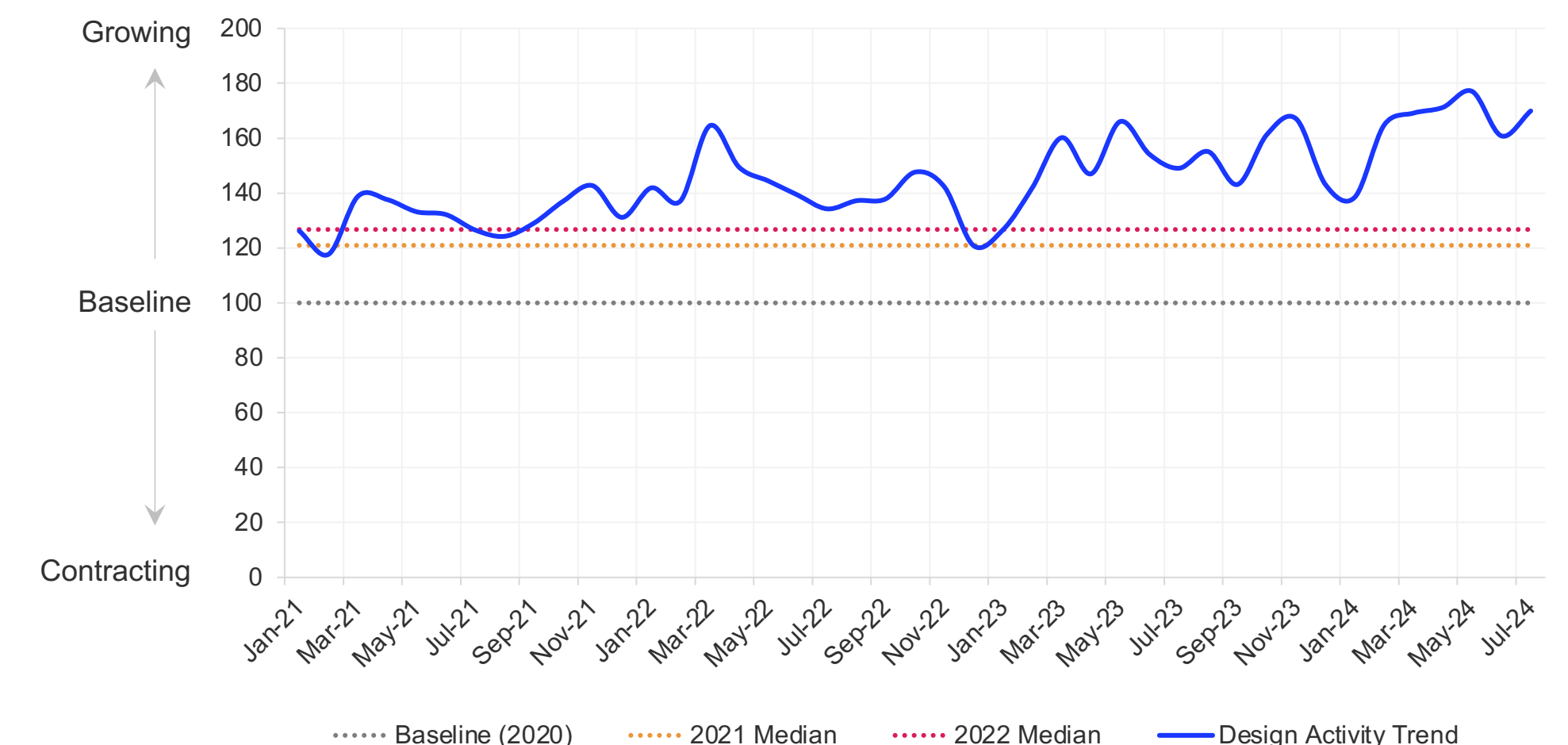
Table 1. Design Activity Summary

		vs. Prior Month	vs. Prior Year	6mo. CMGR
<b>Global</b>		5.6%	14.0%	0.7%
<b>Region</b>	<b>Design Activity Index</b>	<b>vs. Prior Month</b>	<b>vs. Prior Year</b>	<b>6mo. CMGR</b>
EMEA	100.0	0%	17%	0%
APAC	79.8	17%	15%	3%
AMER	45.3	1%	6%	-1%

## Top 10 Countries / Territories

Country / Territory	Design Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
United States	100.0	3%	3%	-1%
China (incl. Hong Kong)	71.5	11%	11%	1%
India	56.3	17%	21%	4%
Germany	51.3	6%	25%	0%
United Kingdom	32.3	3%	4%	0%
France	26.3	-7%	12%	0%
Italy	26.2	9%	17%	2%
Republic of Korea	25.1	23%	36%	2%
Japan	22.0	7%	-12%	2%
Taiwan	20.5	35%	48%	5%

Chart 2. Global Design Activity Trends



# Design Activity: Americas Trends

JULY 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

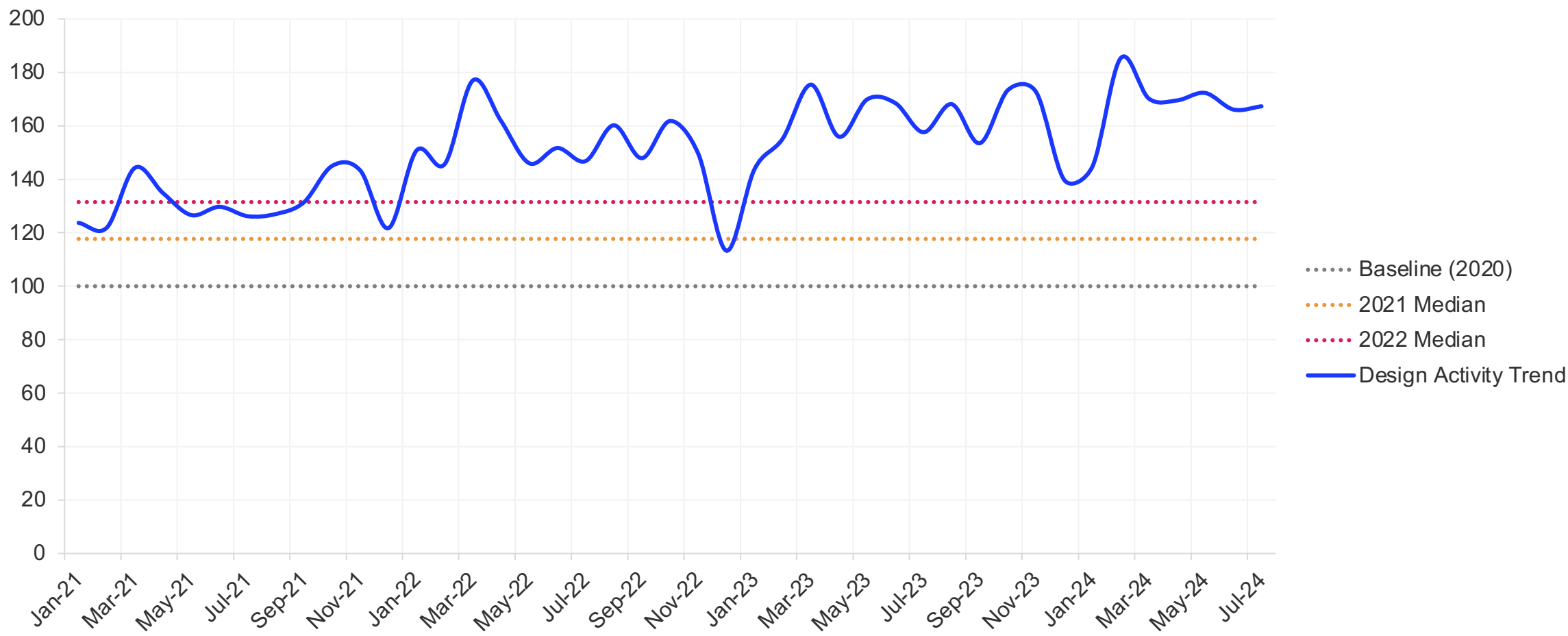


Table 2. Top 15 Product Categories in Americas

Product Class	Design Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	5%	3%	-1%
Power Circuits	55.2	-8%	2%	-1%
Capacitors	52.4	2%	5%	-2%
Resistors	50.9	2%	2%	-2%
Diodes	36.7	-8%	13%	-1%
Transistors	25.2	-5%	-10%	-3%
Optoelectronics	24.1	9%	9%	0%
Microcontrollers and Processors	21.8	-8%	7%	0%
Terminal Blocks	19.6	-1%	18%	-2%
Inductors	18.6	6%	15%	0%
Drivers And Interfaces	16.4	5%	-18%	-2%
Amplifier Circuits	13.9	-8%	2%	-3%
Switches	13.8	-1%	0%	-1%
Signal Circuits	13.2	-9%	-10%	-1%
Logic	13.1	-6%	-2%	-1%

# Design Activity: EMEA Trends

JULY 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

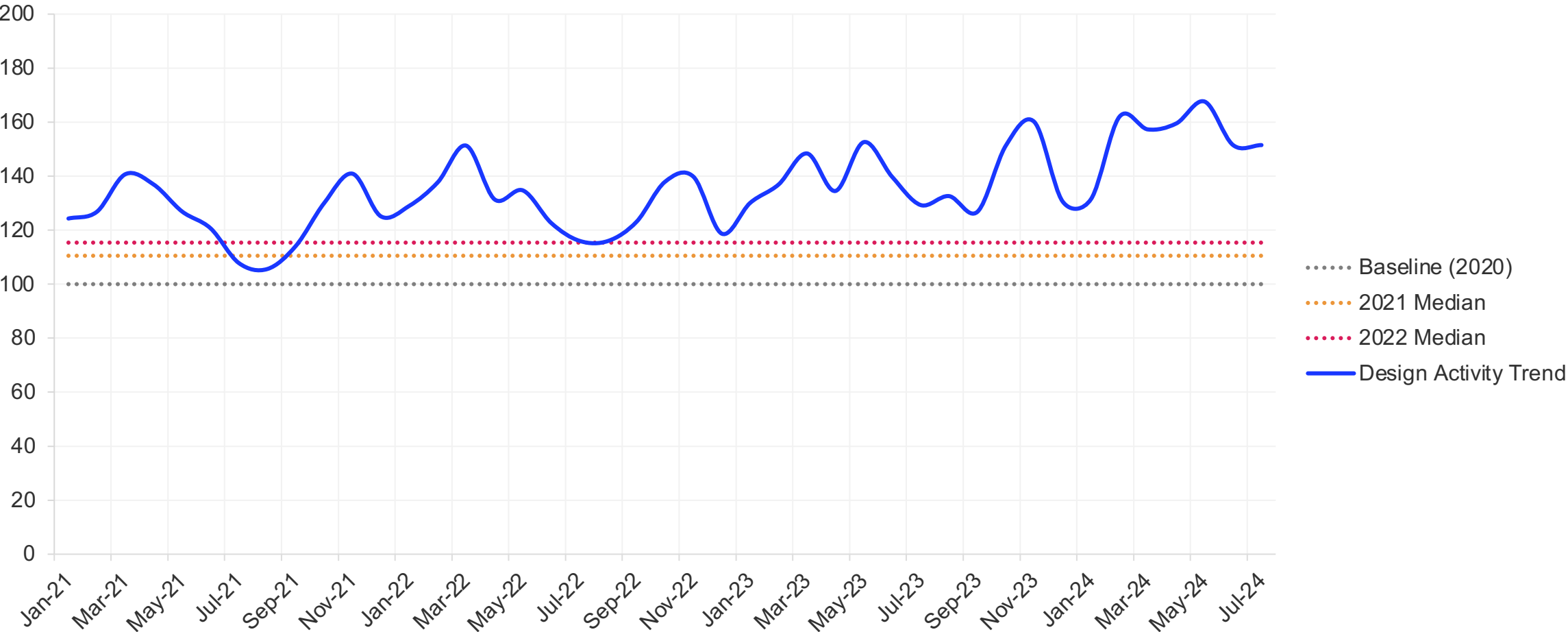


Table 3. Top 15 Product Categories in EMEA

Product Class	Design Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	9%	21%	1%
Power Circuits	61.3	3%	18%	1%
Capacitors	53.0	-1%	20%	1%
Resistors	51.1	-2%	26%	1%
Diodes	40.3	-5%	7%	0%
Transistors	27.1	-9%	0%	-2%
Microcontrollers and Processors	25.7	0%	16%	0%
Terminal Blocks	23.9	5%	12%	-2%
Inductors	23.3	-4%	25%	0%
Optoelectronics	21.2	-13%	6%	-3%
Drivers And Interfaces	18.3	-1%	4%	-1%
Amplifier Circuits	15.3	-7%	5%	0%
Logic	14.4	-7%	9%	-2%
Signal Circuits	14.0	-8%	6%	-1%
Switches	12.9	-3%	19%	-1%

# Design Activity: APAC Trends

JULY 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

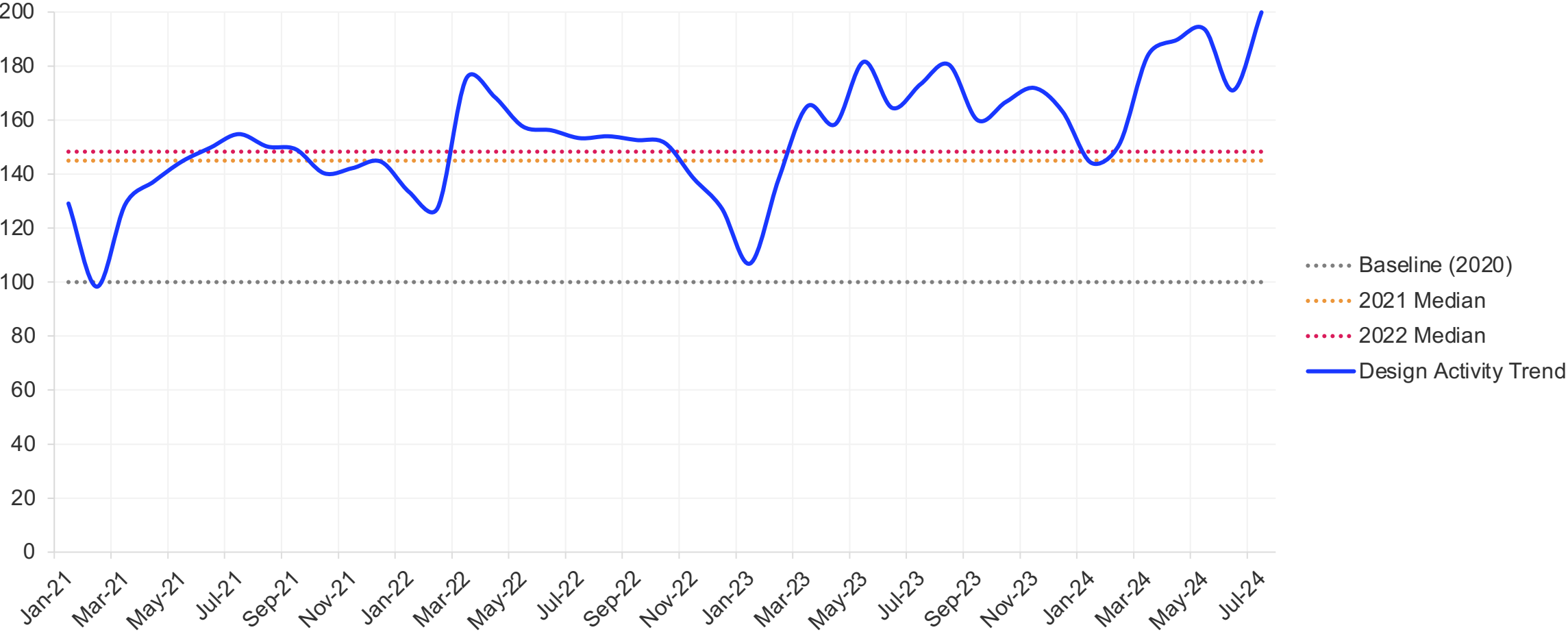


Table 4. Top 15 Product Categories in APAC

Product Class	Design Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	13%	19%	3%
Power Circuits	79.7	25%	18%	5%
Capacitors	66.5	29%	11%	3%
Resistors	53.3	23%	6%	2%
Diodes	51.2	8%	7%	1%
Transistors	35.9	14%	10%	2%
Microcontrollers and Processors	32.5	14%	3%	2%
Amplifier Circuits	25.1	30%	24%	4%
Drivers And Interfaces	23.9	10%	11%	2%
Optoelectronics	23.8	7%	10%	1%
Inductors	23.2	18%	16%	2%
Logic	19.5	15%	23%	3%
Signal Circuits	18.1	25%	14%	1%
Terminal Blocks	18.1	36%	35%	6%
Filters	14.6	18%	13%	3%

# Sourcing Activity Overview

JULY 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 increased +7% month-over-month but was -10% lower than prior year.

Following global design activity trends, global sourcing activities also increased month-over-month. Historically speaking, global sourcing activities have decreased on average -6% from June to July due to lower activity levels in the EMEA and Americas regions.

Increase in month-over-month sourcing activities were observed across all regions. The EMEA region observed the largest increase in sourcing activities (+12%), while the APAC and Americas regions observed more moderate increase in activities.

In the EMEA region, the following countries drove the growth and volume trends: Germany (+14%); France (+10%); Italy (+19%); Israel (+13%); and the United Kingdom (+19%). In these countries, the following product categories were most sought after by buyers: capacitors (+18%); connectors (+12%); resistors (+9%); power circuits (+16%); and diodes (+4%).

In the APAC region, the following countries drove the regional growth trends for July: India (+8%); South Korea (+18%); Taiwan (+15%); Malaysia (+33%); and Thailand (+17%). In China, sourcing activities remained flat month-over-month. In these countries, the following product categories were most sought after by buyers: connectors (+11%); capacitors (+5%); power circuits (+3%); resistors (+15%); and diodes (+11%).

Global sourcing activities for discrete semiconductors increased +7% moth-over-month, while for embedded processors it remained flat for the same period.

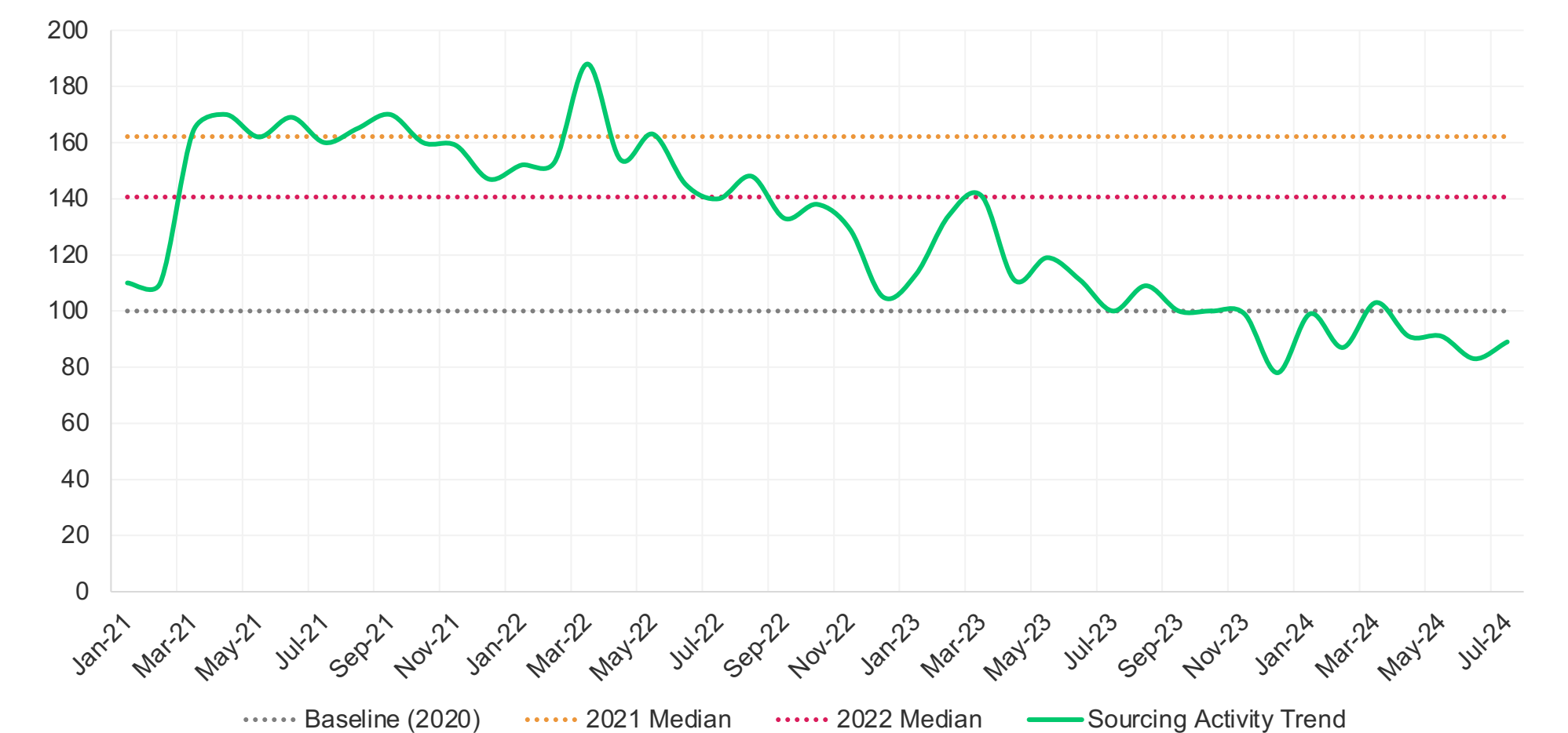
Table 5. Sourcing Activity Summary

		vs. Prior Month	vs. Prior Year	6mo. CMGR
<b>Global</b>		7.2%	-10.2%	-1.7%
Region	Sourcing Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
APAC	100.0	6.0%	-8.0%	-1.4%
AMER	54.1	7.0%	-8.8%	-1.5%
EMEA	32.6	11.5%	-18.3%	-3.1%

### Top 10 Countries / Territories

Country / Territory	Sourcing Activity Index	vs. Prior Month	vs. Prior Year	6mo. CMGR
China (incl. Hong Kong)	100.0	0%	-11%	-2%
United States	86.8	5%	-7%	-2%
India	31.5	8%	-7%	0%
Republic of Korea	25.2	18%	0%	-1%
Germany	15.3	14%	-19%	-3%
Taiwan	13.4	15%	-13%	-2%
Malaysia	10.4	33%	17%	3%
Canada	9.4	16%	-10%	-3%
Singapore	8.0	-12%	-18%	0%
France	7.1	10%	-10%	-3%

Chart 6. Global Sourcing Activity Trends





# Sourcing Activity: Americas Trends

JULY 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

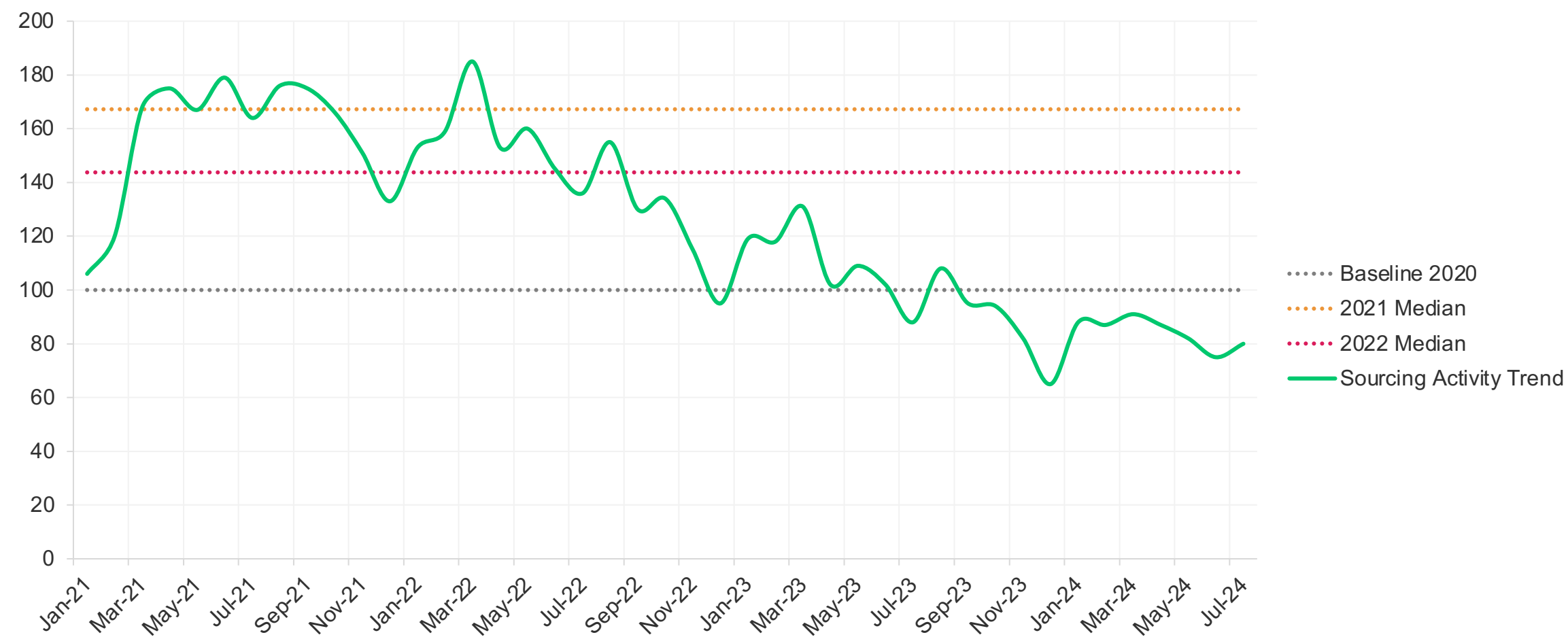


Table 6. Top 15 Product Categories in Americas

Product Class	Sourcing Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	6%	13%	0%
Capacitors	83.5	13%	2%	-1%
Resistors	73.2	4%	-2%	-1%
Power Circuits	42.8	9%	-23%	-2%
Diodes	37.6	10%	-14%	-2%
Connector Support	33.7	4%	12%	-1%
Transistors	28.9	11%	-26%	-3%
Microcontrollers and Processors	20.4	3%	-44%	-3%
Terminal Blocks	20.0	13%	-1%	-1%
Inductors	18.7	3%	23%	-4%
Optoelectronics	18.2	1%	-4%	-2%
Amplifier Circuits	17.0	4%	-30%	0%
Logic	14.0	12%	-14%	-2%
Drivers And Interfaces	13.4	10%	-28%	-3%
Memory	10.8	4%	-24%	-2%

# Sourcing Activity: EMEA Trends

JULY 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

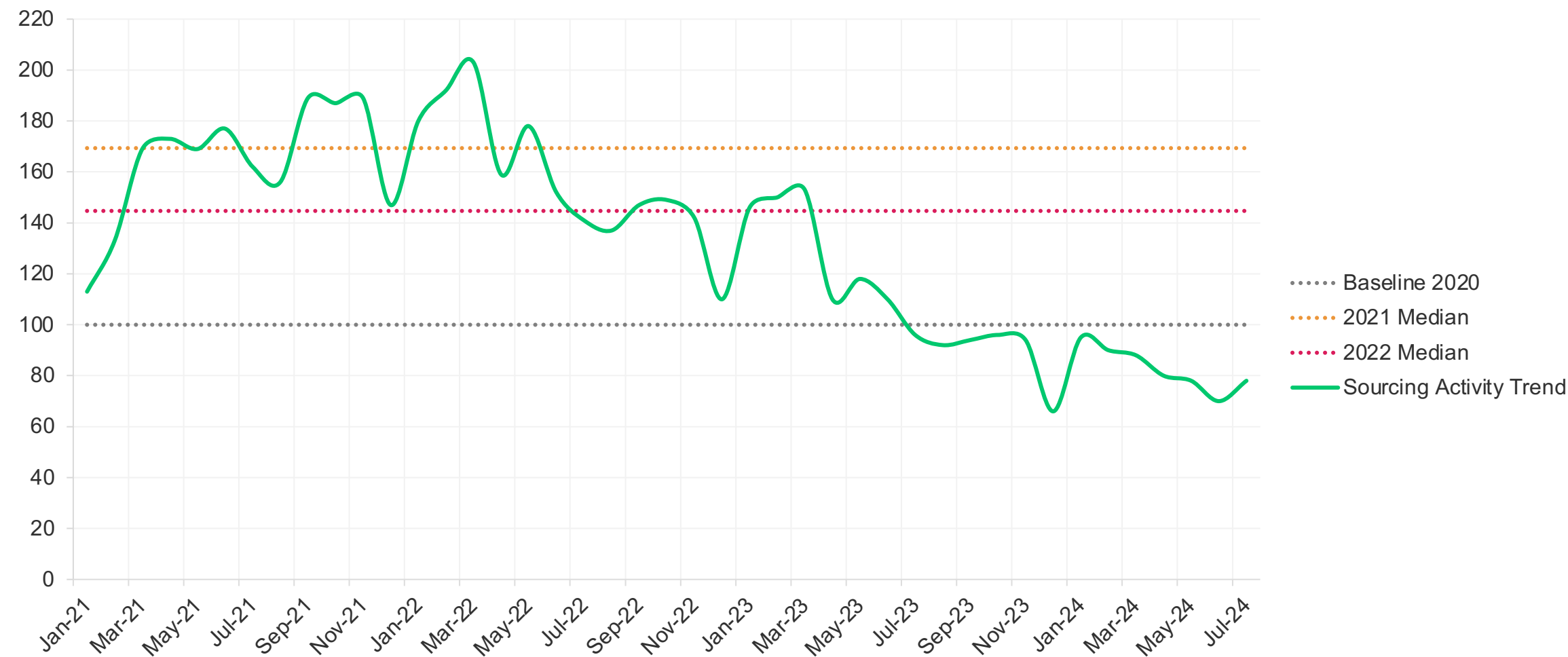


Table 7. Top 15 Product Categories in EMEA

Product Class	Sourcing Activity Index	M/M%	Y/Y %	6mo. CMGR
Capacitors	100.0	17%	0%	-1%
Connectors	89.0	4%	2%	-2%
Resistors	78.5	10%	0%	-1%
Power Circuits	63.5	12%	-32%	-4%
Diodes	49.0	5%	-28%	-5%
Transistors	42.1	10%	-38%	-6%
Microcontrollers and Processors	38.2	6%	-47%	-5%
Amplifier Circuits	37.7	60%	-8%	1%
Inductors	26.8	5%	7%	-5%
Optoelectronics	26.4	2%	-16%	-4%
Connector Support	26.2	11%	6%	-2%
Drivers And Interfaces	22.7	8%	-43%	-6%
Logic	17.2	23%	-27%	-5%
Memory	16.2	10%	-33%	-5%
Filters	16.2	10%	6%	-4%

# Sourcing Activity: APAC Trends

JULY 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

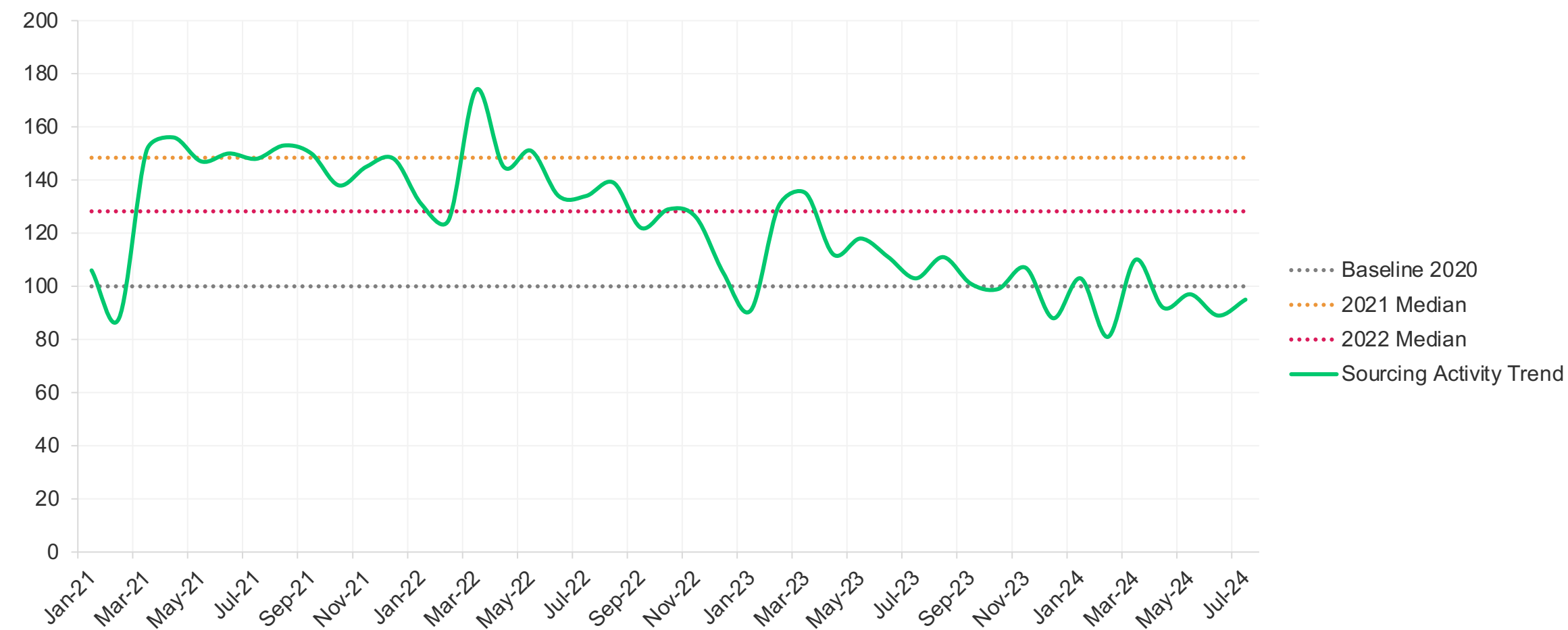


Table 8. Top 15 Product Categories in APAC

Product Class	Sourcing Activity Index	M/M%	Y/Y %	6mo. CMGR
Connectors	100.0	11%	22%	2%
Capacitors	81.3	4%	14%	1%
Power Circuits	64.0	3%	-19%	-2%
Resistors	61.8	14%	8%	1%
Diodes	46.3	7%	-17%	-3%
Microcontrollers and Processors	43.4	-3%	-38%	-3%
Transistors	41.5	4%	-31%	-5%
Connector Support	29.4	16%	20%	2%
Inductors	24.6	6%	33%	-6%
Optoelectronics	22.9	7%	0%	-1%
Drivers And Interfaces	22.2	6%	-25%	-3%
Amplifier Circuits	18.7	2%	-40%	-4%
Memory	18.3	5%	-25%	-5%
Logic	16.7	6%	-20%	-5%
Signal Circuits	15.6	6%	-15%	-2%

# Recap

JULY 2024

- Global design and sourcing activities improved in July. Global design activities increased +6% month-over-month and global sourcing activities increased +7% month-over-month. This was a departure from historical trends, when June to July we have previously observed both design and sourcing activities decrease due to slowing of activities in the EMEA and the Americas regions
- For design activities, the APAC region observed the largest month-over-month increase, while for sourcing activities, the EMEA region observed the largest month-over-month increase in activities
- Across design and sourcing, products in the passives and interconnects groups observed the largest increase in activities. Discrete semiconductors and embedded processor and controllers observed more modest growth in activities in July
- Global design and sourcing activities continued to show signs of stability, highlighting that the market may have stabilized and will soon show signs of recovery
- Although July was a strong month, calendar Q3 projections remain unchanged. Following seasonal trends, we expect to see global design and sourcing activities to decrease quarter-over-quarter

