HARWIN

CONNECT TECHNOLOGY
WITH CONFIDENCE

CONNECTING WITH NORTH AMERICA

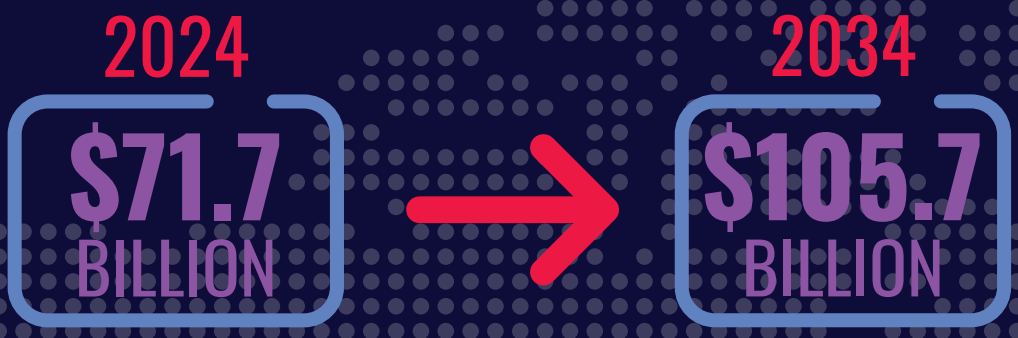
2025 CONNECTOR SPECIFIER AND BUYER SURVEY

WWW.HARWIN.COM

INTRODUCTION

Welcome to Harwin's **2025 North American Connector Market Survey**, where we explore the trends, technologies, and strategic decisions shaping this critical sector. As our world increasingly relies on electronic systems in everything from aerospace and telecommunications to industrial automation and cutting-edge consumer electronics, the importance of reliable connector solutions has never been greater.

In 2024, the global market for connectors was valued at **USD 71.7 billion**, with projections indicating a significant rise to **USD 105.7 billion** by 2034. The United States, representing approximately 13% of this market, is expected to surpass **USD 14 billion** within the same timeframe, reflecting the region's ongoing leadership in technology innovation and manufacturing.



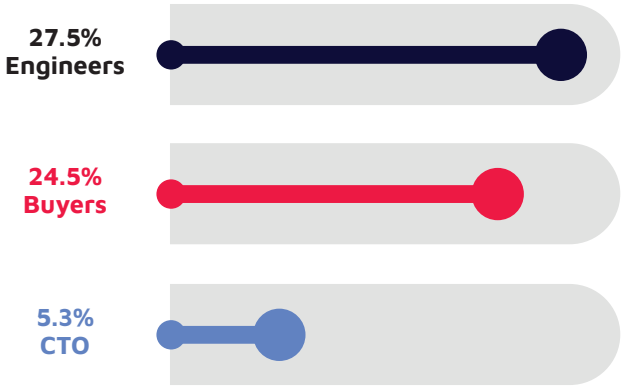
This survey, conducted in **April 2025**, gathered insights from a diverse cross-section of North American connector buyers and engineers, including professionals in procurement, design, and executive roles from key industries like **industrial**, **automotive**, **aerospace**, **and telecoms**. It examines critical application areas, the technologies influencing connector choices, and the criteria that guide purchasing decisions, including the growing impact of online tools in the design and selection process.

We invite you to explore the insights captured here, should you have any questions or wish to discuss the findings further, please do not hesitate to reach out.

Peter Schneid, Vice President of Marketing

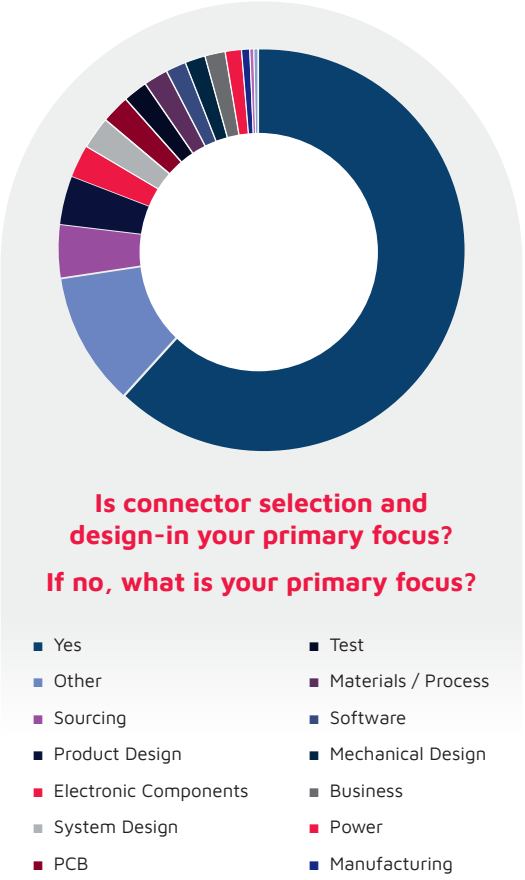
WHO RESPONDED?

The survey was conducted during April 2025 and received responses from more than 300 professionals working in a variety of roles including engineering, procurement and management.

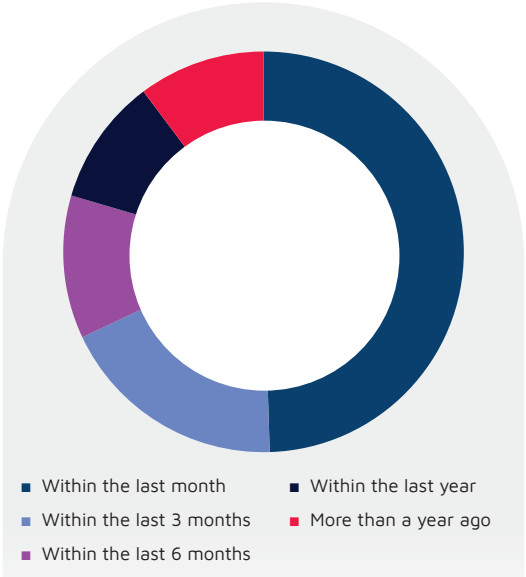


To ensure the validity of the results, the survey asked if selecting and designing-in of connectors was the respondent's primary focus. Over 60% of those who completed the survey confirmed that this was the case, while many of the remainder have roles that were closely allied.

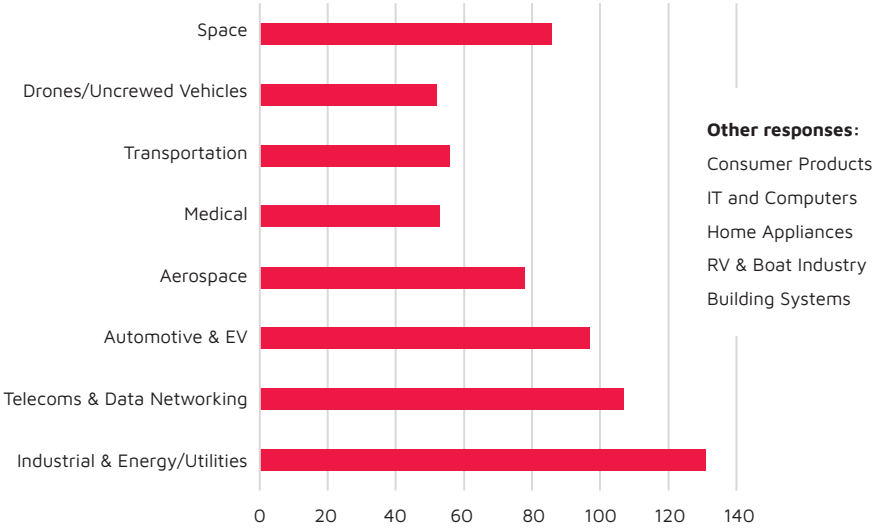
Additionally, the survey asked when respondents were last involved in connector purchases, so as to confirm the responses related to current experiences. 90% of respondents had purchased connectors within the past six months.



LAST BOUGHT CONNECTORS?



WHICH APPLICATIONS?



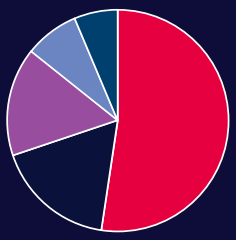
CHOOSING CONNECTORS AND SUPPLIERS

Connectors come in a wide variety of types and the survey responses covered the complete spectrum.

In terms of power, respondents were asked to categorize their power needs into low, medium or high, while data rates were quantified into low, mid and high.

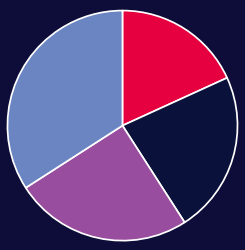
The survey illustrates the importance of high-reliability connectors **(selected by 61% of respondents)**. One third responded with five to ten years, with a further third needing reliability in excess of ten years.

POWER/CURRENT

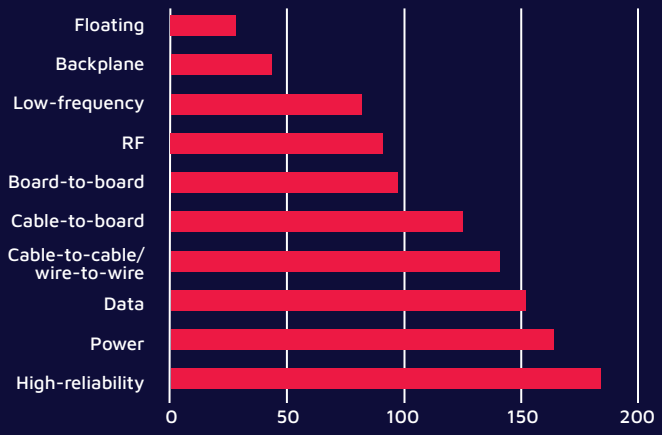


- Mixed / Ranges / Custom
- Low Power (0-30A / under 100W)
- Unclear / Not specified / N/A
- High Power (100A+ / 1kW+)
- Medium Power (30-100A / 100-1000W)

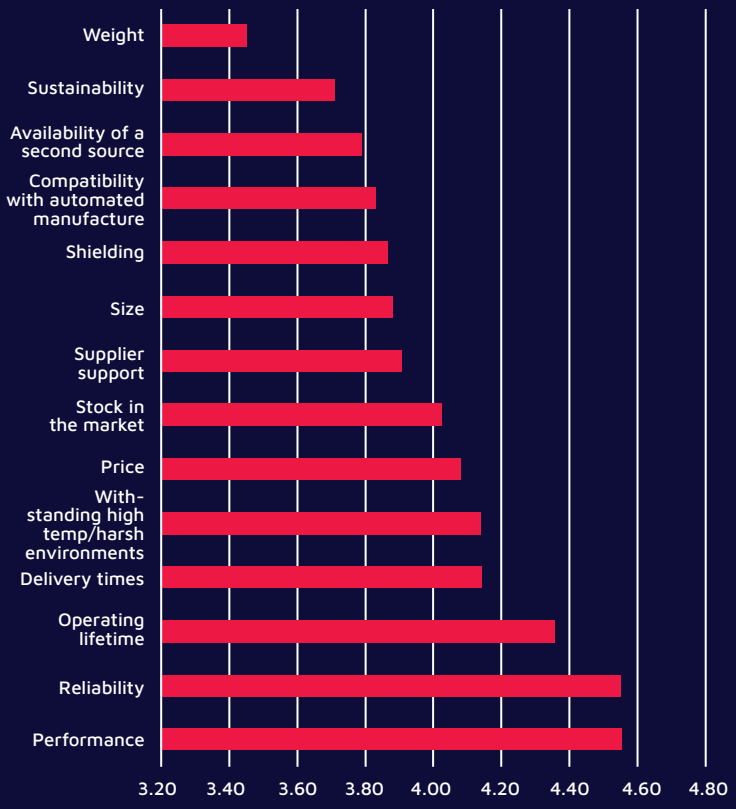
DATA



- High speed (Greater than 1 Gbps)
- Mid speed (Between 100 Mbps and 1 Gbps)
- Low speed (Below 100 Mbps, Kbps, Baud rates)
- Various/unknown



This focus on reliability was further confirmed when respondents were asked about their primary considerations for selecting and procuring connectors. Here, **performance, reliability and operating life** are the top three criteria.



MOST IMPORTANT CRITERIA?

Complementary Products	Rapid Sampling	Cable Assembling Design	Local Technical Support	Customization Services	Global Technical Support
3.84	3.81	3.77	3.74	3.67	3.61

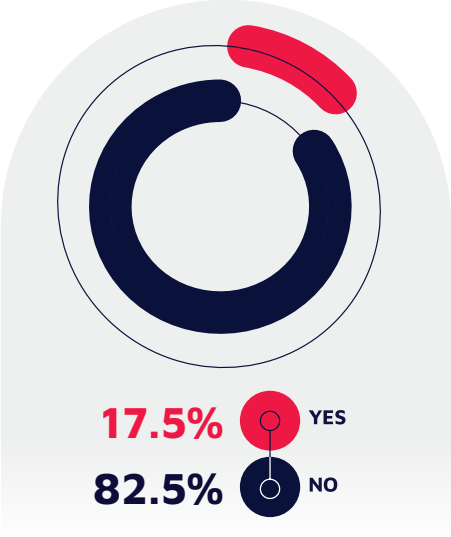
(Average scores out of five)

ONLINE TOOLS

Just over half of respondents said that they currently use or plan to use online design tools as part of the selection and design-in process.

Of those currently using such tools, the most important factors were deemed to be the ability to download design files and processes for online comparison of different products.

WHO USES AI AND SOLUTIONS SUCH AS 'DIGITAL TWINS' FOR DESIGN AND OPTIMIZATION?



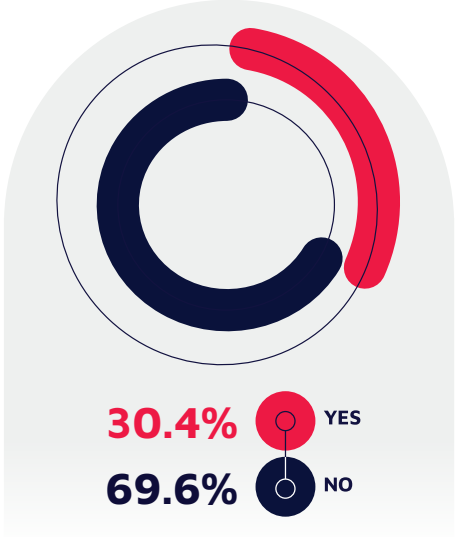
Early adopters are already using Artificial Intelligence (AI) in their design and optimization process with more than one-in-six (17.5%) currently using AI tools. This will grow over time as companies seek the efficiencies it can bring.

Those respondents using AI deploy it across a broad variety of areas within the design and production process including:

- Selecting connectors
- Assisting PCB design
- Accelerating qualification
- Automating testing and quality control

AI was also cited as a useful tool for both predictive maintenance during manufacture and overall supply chain optimization.

DO YOU USE OR PLAN TO USE 3D PRINTING FOR PROTOTYPING OR PRODUCTION?



Another modern innovation, 3D printing, is now in use by almost one third (30.4%) of respondents, who use this technology for:

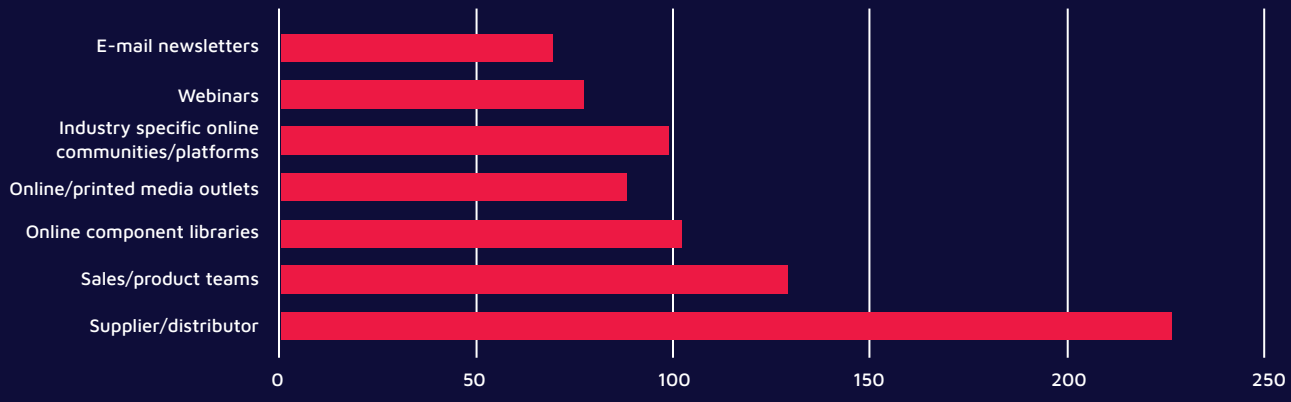
- Prototyping
- Ensuring mechanical 'fit'
- Rapid sampling
- Small batch manufacture
- Tooling design
- Material evaluation and selection

As demand grows for advanced design tools, AI integration, and rapid 3D prototyping, these capabilities are emerging as key differentiators in connector selection. Industry leaders are already aligning their strategies to meet this shift—ensuring engineers have the digital support they need to design faster and smarter.

SOURCING INFORMATION AND BUYING CONNECTORS

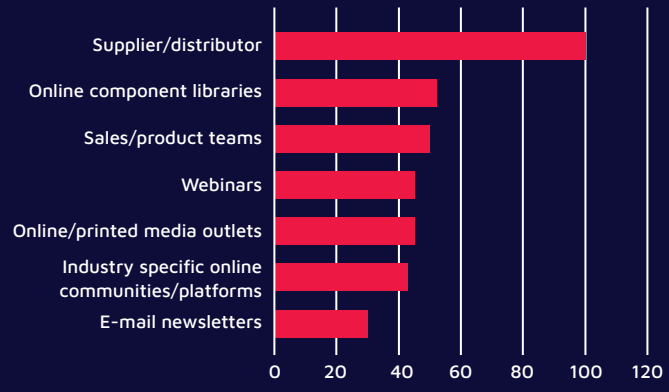
As you might expect, connector manufacturers and distributors are the main source of information when it comes to specifying and ordering connectors. And as much of this contact is now online, it is essential that supplier and distributor websites provide easy-to-find information and tools that simplify the selection and ordering process.

HOW DO YOU SOURCE INFORMATION?

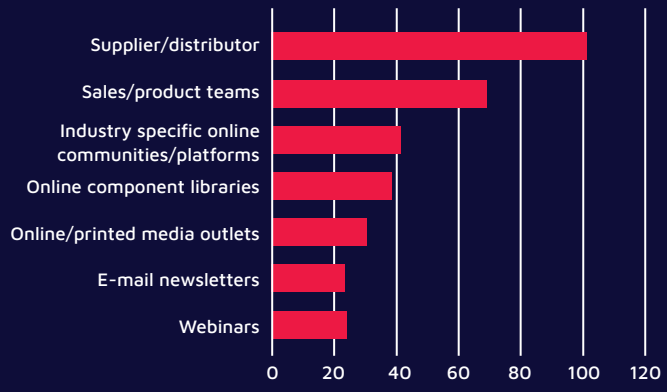


ENGINEERS VS BUYERS

ENGINEERS



BUYERS



The survey indicates that engineers and buyers value different resources. The supplier / distributor and sales / product teams feature highly for both, while online platforms are valuable to buyers but less so for engineers.

Conversely, engineers value webinars highly, but few buyers find them useful.

SURVEY RESULTS

When buying connectors from the distribution channel, the survey identified the top three companies for North American customers as **DigiKey, Mouser and Arrow.**

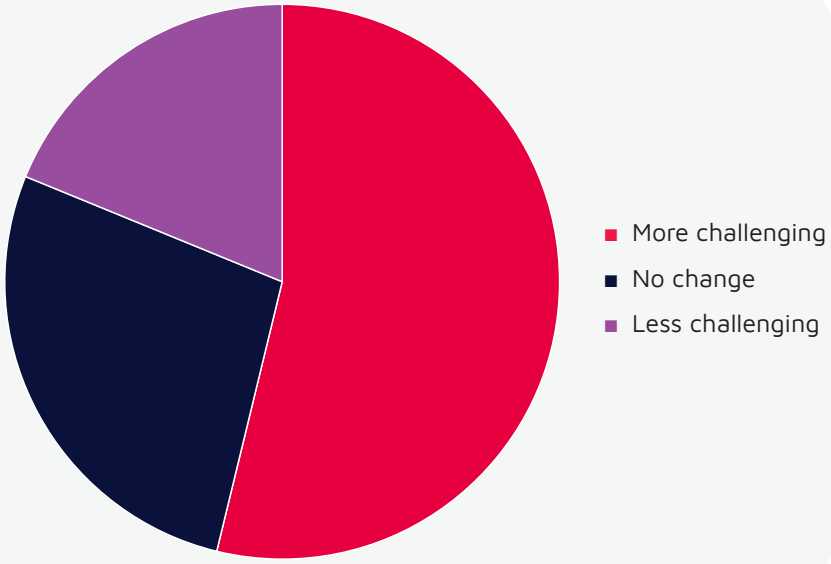
1. DigiKey
2. MOUSER ELECTRONICS
3. ARROW

SOME KEY CHALLENGES

As with their counterparts throughout the electronics industry, many of our connector specifier and purchaser respondents expected that their role would remain or become more challenging in the future.

Just 27% of responses suggested that their role would become easier.

HOW DO YOU SEE YOUR ROLE CHANGING IN THE FUTURE?



Engineers highlighted a range of challenges, including long lead times, MoQs, and supply chain disruptions, as well as issues with obsolete parts requiring requalification.

Balancing cost with performance and reliability under budget constraints was a common concern. Design hurdles included ensuring connector reliability in harsh environments, achieving miniaturization within tight PCB layouts, and maintaining signal integrity in demanding applications.

Compatibility, tooling for prototypes, and connector mating were also cited. Critically, respondents emphasized the need for better supplier support, comprehensive technical documentation, and robust online tools, including access to 3D models.

Key takeaways:

- Supply chain issues, obsolescence, and cost pressures are ongoing challenges.
- Engineers face growing complexity in miniaturization, reliability, and high-speed design.
- There's a clear demand for better technical support and digital design resources.

Today's engineers are navigating a perfect storm of design complexity, supply constraints, and rising expectations for digital support. Suppliers and manufacturers must rise to the challenge by being easy to work with, digitally optimized, and responsive to engineers' needs at every stage of the design journey.

HARWiN

CONNECT TECHNOLOGY
WITH CONFIDENCE

HRi RANGE

BBi RANGE

EZi RANGE

FOR FURTHER INFORMATION PLEASE CONTACT:

SUPPORT@HARWIN.COM

WWW.HARWIN.COM