

“Advanced Packaging Is Foundational For Next-Generation Systems, Particularly AI And High-Performance Computing”



SURESH BABU
FOUNDER AND CEO, CALIBER
INTERCONNECT SOLUTIONS

In an interaction with EFY’s Nitisha Dubey, Suresh Babu of Caliber Interconnect Solutions discusses how the company manages complex semiconductor supply chains, balances global sourcing with gradual localisation, and approaches delivery commitments.

As chip complexity increases and nodes shrink, what testing gaps do you see between silicon, package, and board?

As AI and high-performance workloads drive up silicon complexity, testing demands also increase, often representing nearly 50 per cent of total design cost. The largest gaps usually occur when testing is treated as a downstream activity. At Caliber, we engage early with design teams to optimise architectures, reduce test time, improve coverage, and prevent late-stage issues. Automation is central to both design and testing.

With so many companies offering design and testing services, how does Caliber differentiate itself?

Differentiation today is not about having a secret solution that no one else knows. **Differentiation is about speed, execution, and integration.** Because we work across IP development, design, packaging, and testing, we understand challenges from the very beginning of the design cycle. Our IP teams work closely with test engineers and packaging teams, allowing us to anticipate issues early and respond faster. This integrated model helps customers reach the market more quickly, which is critical in today’s competitive environment.

How do you ensure timely delivery and maintain customer trust?

We focus on our strengths and avoid overcommitting. We do not oversell or make promises we cannot keep. Whatever we commit to, we

deliver. Nearly 90 per cent of our revenue comes from customers outside India. Addressing customer pain points, understanding resource gaps, and aligning our teams are central to our operation.

What role do quality compliance and data security play in your operations?

Data security is the foremost requirement for a services company. Customer data and IP are highly sensitive; we maintain ISO 27001 certification, operate a private cloud infrastructure, and conduct regular audits. Customers can audit our facilities. Quality is next. While we follow ISO 9001 and AS 9100, many clients have their own quality standards. We align with them to ensure compliance on both sides.

How important are advanced packaging and HDI to your growth strategy?

Advanced packaging is foundational for next-generation systems, particularly AI and high-performance computing. Technologies like 2.5D, 3D packaging, co-packaged optics, wafer-level processes, and ultra-high-density interconnects are essential. Some PCBs we design reach 120-130 layers, requiring close collaboration with specialised manufacturers in Japan and Korea. These technologies directly support our revenue growth and long-term positioning.

Can you share some details about your R&D team?

We have 12-15 PhD-level

researchers in VLSI, microelectronics, embedded systems, and related fields. They study technology trends, market requirements, and emerging challenges, working closely with engineering teams to align with future needs.

How do you approach hiring and training talent?

Most hiring is at the college level. We recruit fresh graduates and provide extensive technical and cultural training. Engineers undergo three to six months of structured training before joining production teams. Senior engineers with over 10 years of experience mentor them in PCB, package, test engineering, and IP development.

What challenges do you see in the current semiconductor ecosystem?

The industry is evolving rapidly. One shift is from monolithic chips to chiplet-based architectures, integrating multiple dies from different nodes and IP vendors into a single package. This creates challenges in testing, integration, power delivery, and thermal management. Another emerging challenge is high-speed data transfer and co-packaged photonics, where electronic and photonic circuits coexist. Testing heterogeneous systems requires new methodologies, which we continuously adapt. **EFY**

This interview is an excerpt of a longer discussion. For the full transcript, please visit: <https://efy.co.in/EFYIntFeb4>





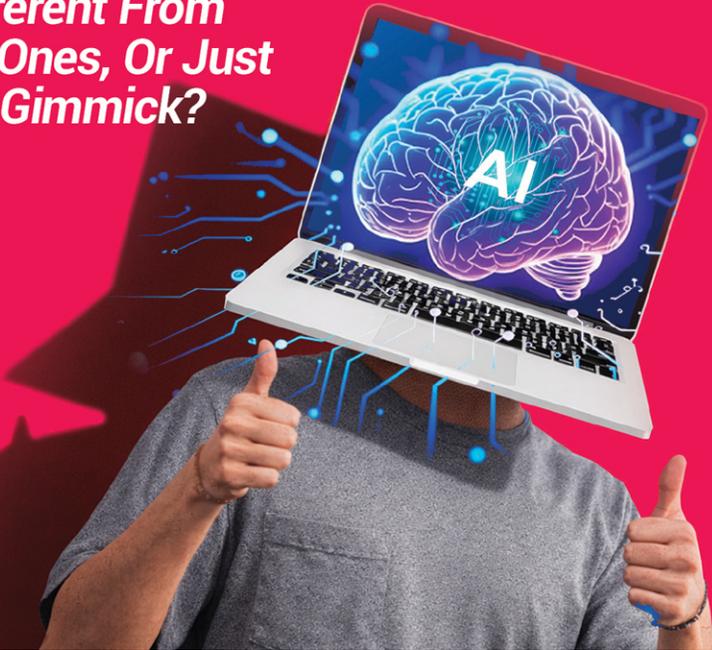
The New

electronics

FOR YOU

What On Earth Are AI PCs And Laptops?

Are They Different From The Regular Ones, Or Just A Marketing Gimmick?



MUST READ

"If You Have Ideas, Passion, Energy...Go Ahead And Do It."

— Prof. Ajay Kumar Sood, Principal Scientific Adviser (PSA) to the Government of India



Winners of EFY's Auto R&D Awards



Leading Suppliers Of SMT Reflow Oven



Why Automotive Displays Could Redefine India's Mobility Future



An **EFYGROUP** Publication
Vol. 58 No. 2 • ISSN 0013-516X
Pages: 120 • UK £5, US \$10

FUEL YOUR INNOVATION WITH THE RIGHT DEV BOARDS



element14
AN AVNET COMPANY

Contact us today!
in.element14.com
1800 108 3888 (toll free)

