

ACHIEVE ACCURATE TESTING RESULTS WITH ERNI

One of China's Leading Enterprise taps on ERNI for its Innovative Integrated Circuit Test Equipment

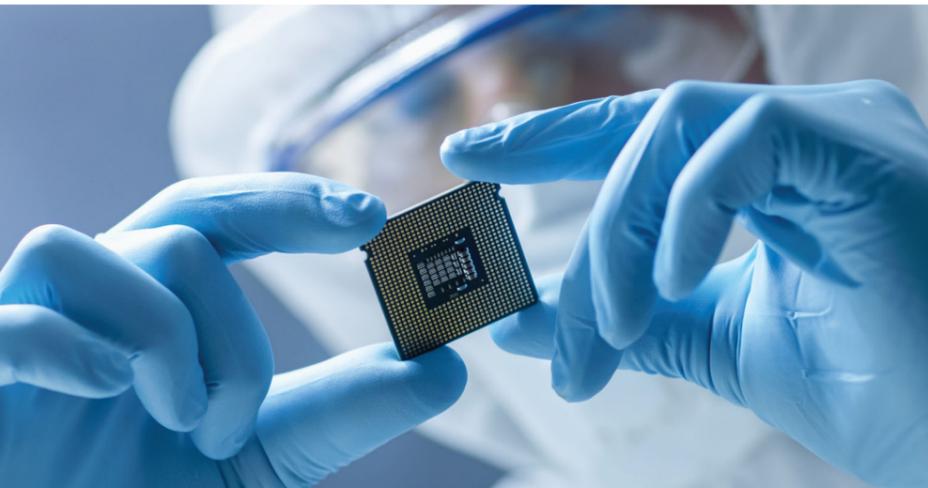
As a leading OEM for semiconductor test machines, our Client's core competence lies in the research, development, and innovation of integrated circuit (IC) test equipment. Their state-of-art patented technology has enabled manufacturers to accurately screen for defects and failures in semiconductor chips using an automated testing and inspection of packaged semiconductor chips to ensure a higher quality of products before it gets shipped out to the market.

Since its establishment in 2008, our Client has expanded over the years with offices in China, Japan, Hong Kong, Taiwan, Singapore and is a public-listed company on the Shenzhen Stock Exchange.

Semiconductor chips have greatly influenced the electronics industry and have revolutionised our lives. From many household applications to devices such as mobile, tablets, laptops and televisions, semiconductor chips have greatly enhanced how consumers work and play in countless ways!

Because a 100% yield is impossible in semiconductor manufacturing processes, testing of the chips is necessary and has a direct impact on the final chip cost, as even tiny defects could cause a product to fail.

For confidentiality reasons, we are unable to disclose our Client's name in this success story.



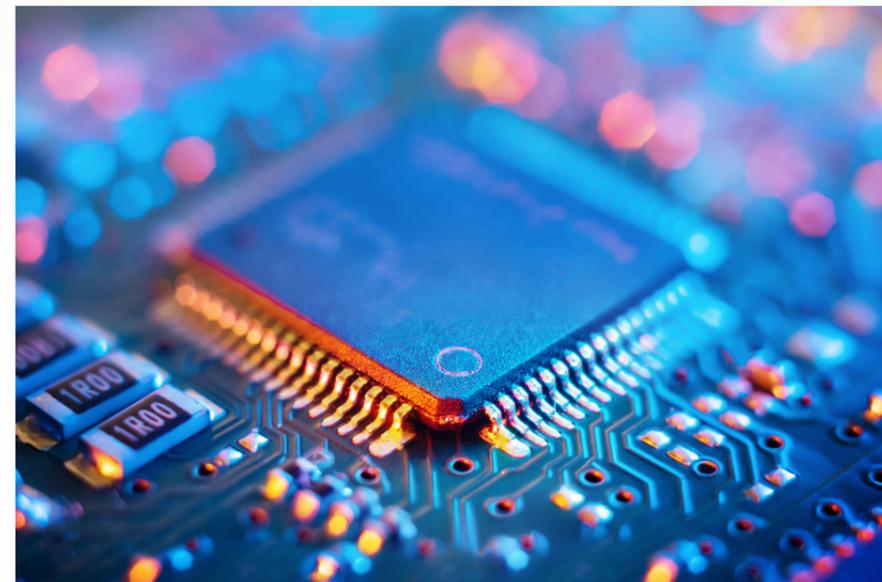
Our Client's Application: IC Testing Equipment

Semiconductor chips testing is carried out using a test system and a test handler in conjunction with an automated test equipment (ATE).

After the chips are individually sealed in a plastic packaging, each of these chips pass through the package test, also called the final test. The test handler will automatically move each chip to the ATE terminal to inspect if any chips were damaged during the packaging process before carrying out a test measurement to gauge its expected performance for use. This seemingly easy process with every step automated is much dependent on the electronic components in the application to influence the accuracy of test results.

Challenges:

Our Client struggled with data accuracy using low-end connectors caused by the poor contact connections between the printed circuit boards. The connector's terminal structure design, low vibration tolerance and other reasons led to a loss of signals in a complex application environment.



ERNI has been a key player in the instrumentation industry. Our class-leading experience and vast knowledge gives us a competitive edge over other manufacturers. It is no coincidence that our Clients hold ERNI in high regard as an innovative leader and supplier of high-quality electronic connectors worldwide

Our Solution

ERmet 2.0 mm Hard Metric and ERmet ZD connectors from ERNI meet the international industry connector standard IEC 61076-4-10 and are widely used in high-speed applications in the telecommunication and data communication industries. The connector system has also achieved widespread acceptance and popularity as the interconnect system chosen for CompactPCI® Express and PXI Express.

The ERmet 2.0 mm HM connectors can support various PCB arrangements including daughtercard, extender card, backplane, and board-to-board applications. The signal contacts of these female connectors have a dual beam leaf design which provides equalized signal path lengths for high-signalling performance. Browse our ERmet 2.0 mm Hard Metric connectors at www.erni.com/ERmetHardMetric



Other key features:

- Availability array of contacts including signal, high power, high frequency and coaxial for a circuit design versatility.
- Optional pin sizes and placement
- Coding key

ERmet ZD high speed connectors allow data rates from 20 or 25 Gbit/s with an excellent signal integrity. Its robust design ensures a long-time usage with high resistance against vibration and heat in a complex application. ERmet ZD connector meets the electrical performance requirements of high speed, low voltage differential signalling. The grid layout also enables these high speed connectors to be integrated with ERmet 2.0 mm HM. Browse our ERmet ZD High Speed connectors at www.erni.com/ERmetZD

At ERNI, we support our clients through their entire developmental journey - from the prototype design to their finished product. Contact us today at info.eah@erni.com if you wish to learn how ERNI can help you!