



Semiconductor Backend Tools Catalog



2022



AT A GLANCE



Oricus Semicon Solutions is an innovative Semiconductor Tools manufacturing company who, with almost 100 years of collective expertise, craft high tech bespoke tooling solutions for the global Semiconductor Assembly and Test industry.

From one-off customised products to large scale production, our R&D strength, precision manufacturing experience and problem-solving capabilities are impeccable. With a passion for engineering and customer oriented service, we deliver price competitive precision Semiconductor Tooling solutions to a global market with a local presence.

Oricus is made up of a global network of professionals with strong commitment and passion for our work. The company is managed and operated with a spirit of professionalism based on the foundation of integrity, equality and respect. We are determined, objective with a sense of ownership to deliver on our goals. We value our values, professionalism, passion, perseverance and our relentless pursuit to deliver value for our customers.



Authenticity



Expertise



Professionalism



Perseverance



Passion



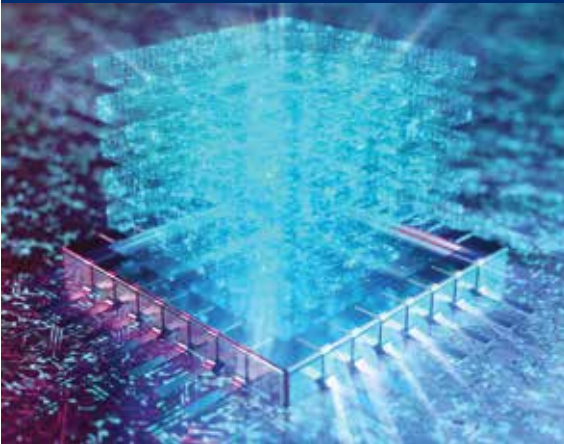
Community

Oriented to Customer's needs



We excel at creating specials – one of a kind pieces, with one of a kind craftsmanship combining with the latest in manufacturing technology to produce micro precision tooling. Oricus can Design and Manufacture either one-offs or high volume orders to your unique specifications, from High Temperature resistant tools for Power Devices to tools with complex geometries for 3D Advanced Packaging.

Industry Leading Solutions



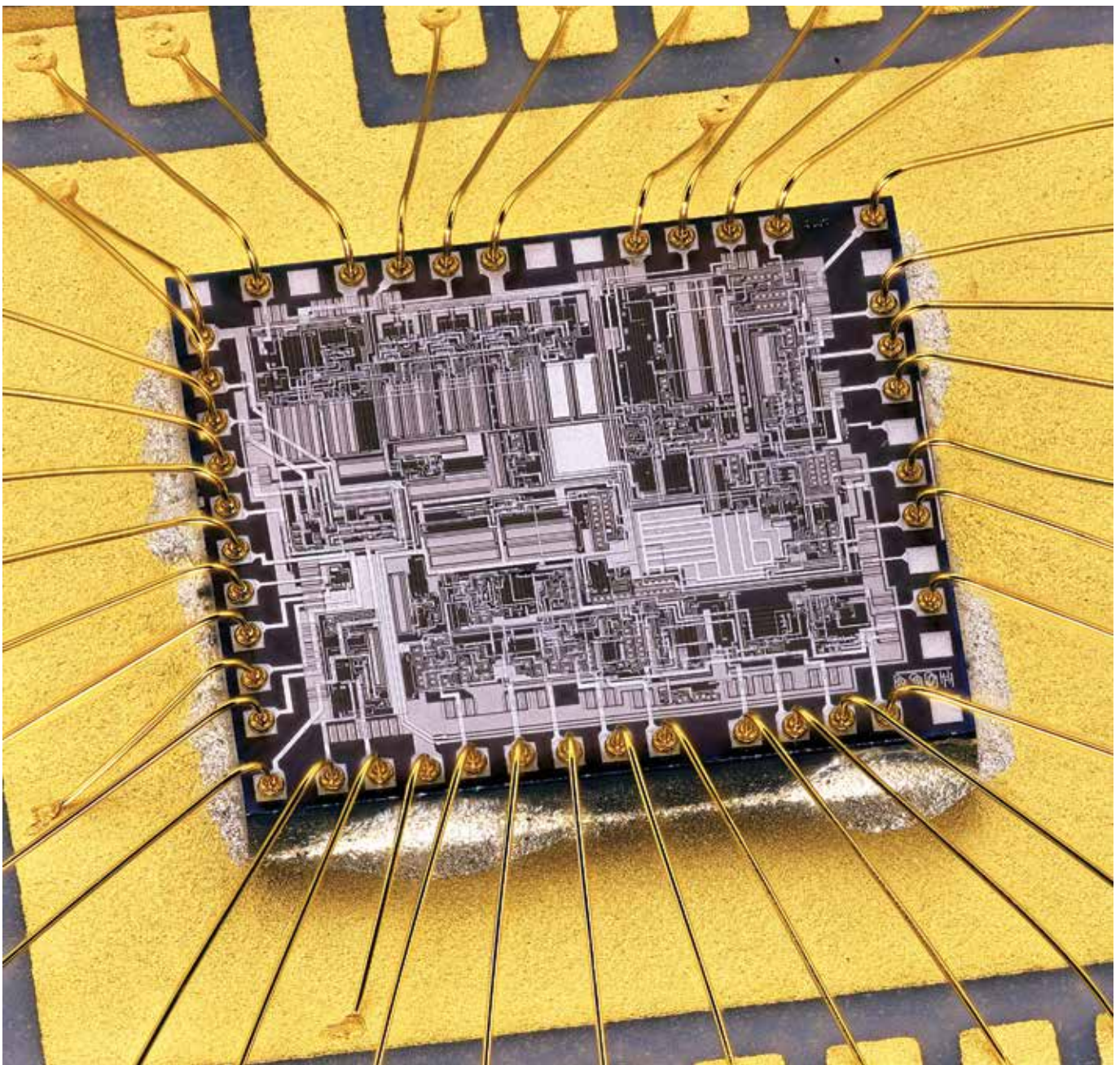
Our Technical Sales Consultants and R&D teams of seasoned Semiconductor Assembly and Test industry professionals will study your chip and package requirements and offer effective and competitive tooling solutions that will work right out of the box. Oricus has the solution to your tooling requirements. Leave it to us and you can focus on your key processes.

Research and Development



R&D is the cornerstone of our commitment to deliver market leading tooling solutions. Our Material Science know-how, coupled with our Manufacturing Expertise and knowledge on the latest demands of Integrated Circuits Packaging allow us to offer tools that maximizes productivity and minimizes downtime.

Bond Test



Bond Test. Product Families



Die Attach Test

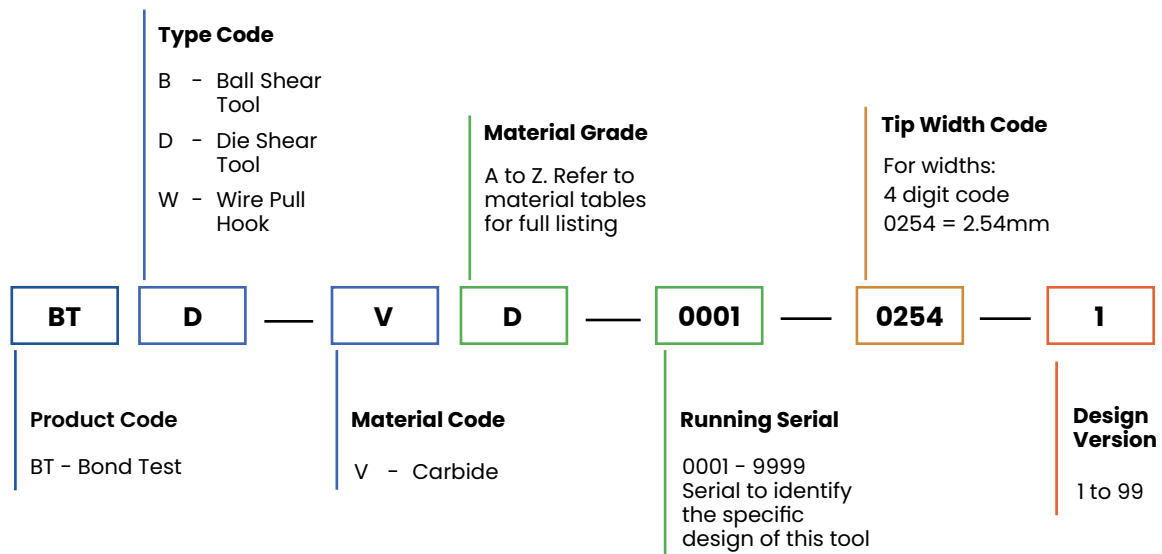
Die Shear Tools are attached to Die Shearing Test Equipment for testing the shear strength of the die and the substrate it is attached on.



Wire Bond Test

Shear strength of Wire Bonds and Solder Balls can be accurately tested using precision machined Ball Shear Tools.

Part Numbers And Ordering



Ball Shear Tool

Bond Test

Wire Bond Test



Ball Shear Test one of the most commonly performed Quality Control Tests performed on Semiconductor interconnects such as Wire Bonds and Solder Balls, which can be test sheared individually with a precisely manufactured tool that is accurately positioned above the surface of the Device Under Test (DUT).

The precision and position of the Shear Tool is critical to ensure accuracy, reliability and repeatability during Shear Testing. Mechanical properties such as shear force and displacement are measured throughout the test.

Applications

- Ductile
- Pad Lift
- Ball Lift
- Interfacial Break

Equipment Compatibility

- Royce
- Nordson DAGE
- XYZ
- Rhesca

Material

- Carbide

Part Number	W (mm)	T (mm)
BTB-VD-0001-0051-01	0.51	0.13
BTB-VD-0001-0051-02	0.51	0.25
BTB-VD-0001-0076-01	0.76	0.13
BTB-VD-0001-0076-01	0.76	0.25



Features

- Suitable for use in Die Shear Test Equipment from manufacturers such as Royce, Nordson DAGE, XYZ, Rhesca and more
- Available in a wide range of Carbide, HSS and Superalloy materials to suit your application
- Suitable for testing Ductile, Pad Lift, Ball Lift and Interfacial Break failure modes

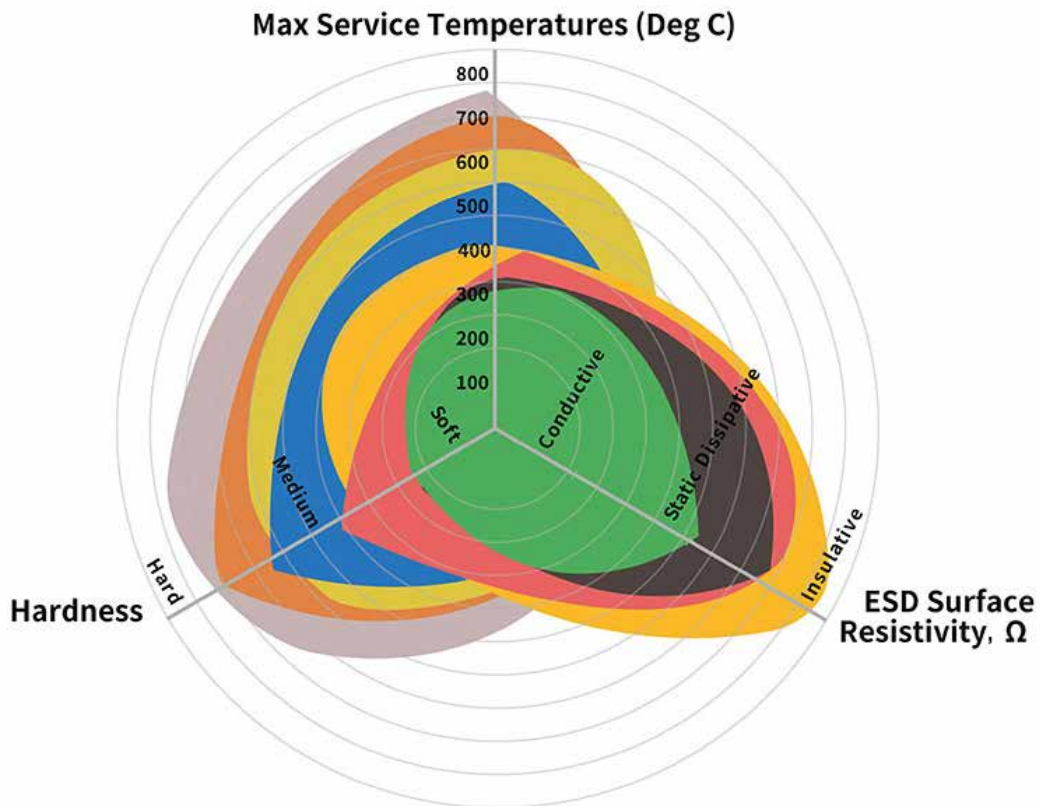
Benefits

- Application specific designs ensures test consistency by avoiding neighboring bumps
- Tool design thoroughly considers the test site's geography to ensure the integrity of channels are not affected during testing
- Extended Tool Face designs allows for better test conditions
- Our custom designs are especially beneficial for small and micro geometry testing

MATERIALS

Oricus's extensive line of engineered materials specially developed and selected to offer optimal tooling performance for your specific Semiconductor Backend process. Our in-house materials are closely developed in partnership with Original Equipment Manufacturers with input from our customers. For externally procured materials, each material goes through a rigorous Quality Assurance and Performance Assessment programme before making it into our material list.

Oricus' in depth understanding and experience of materials allows us to formulate tooling solutions that work for you. As part of our value proposition, we study the conditions of your application and suggest the most appropriate material that meets your needs.



Tungsten Carbide WC Line

Superalloy SA Line

Stainless Steel SS Line

Tool Steel TS Line

Non Ferrous Metals NF Line

Performance Engineering Plastics SP Line

Engineering Plastics EP Line

Rubber R Line

<p>WC LINE</p> <p>Tungsten Carbide</p> <p>High Wear & High Temp Resistance</p> <p>Carbide, K15 Carbide, K30 Carbide, M30 Carbide K40 Carbide, MG30</p>	<p>SA LINE</p> <p>Superalloy</p> <p>All-Round Superior Performance</p> <p>Haynes 25 (L605) Inconel Alloy 625 Inconel Alloy 718 Incoloy Alloy 925 Nitronic 50 Nitronic 60 Titanium Grade 2 Stellite 6 Stellite 31</p>	<p>SS LINE</p> <p>Stainless Steel</p> <p>Balanced Properties</p> <p>15-5 PH 17-4PH SUS 430F SUS 420 SUS 440C SUS 316 SUS 301 SUS 304 SUS 303</p>	<p>TS LINE</p> <p>Tool Steel</p> <p>High Strength</p> <p>CPM-10V SKD 11 SKH 51 Mirrax 40 ASP 23 Stavax XW 10 XW 42 Assab 718 - HH HSS DF2 DF3 Ramax HH Rochling 2315</p>
<p>NF LINE</p> <p>Non Ferrous Metals</p> <p>Special Applications</p> <p>Aluminium 7075 Aluminium 6061 Copper Brass Hovadur K350</p>	<p>SP LINE</p> <p>Performance Engineering Plastics</p> <p>Advantageous Performance & Value</p> <p>Torlon 4432 (PAI) Torlon 4301 (PAI) Torlon 5030 (PAI) Torion 7130 (PAI) Vespel SCP5050 (P) Vespel SP 21 (PD) Vespel SP1 (PI) ESD Semitron 520 ESD Semitron 420 ESD Semitron 410C ESD Semitron 225</p>	<p>EP LINE</p> <p>Engineering Plastics</p> <p>Economical And Versatile</p> <p>Acrylic/ Polycarbonate TECAFORM SD Delrin ESD Delrin White Delrin Black POM PEEK PEEK HT PEEK GF 30% PEEK CF 30%</p>	<p>R LINE</p> <p>Rubber</p> <p>Geometric Flexibility ESD Protection</p> <p>NBR NBR (Soft) NBR (Hard) NBR (Coated) HPR HPR (Soft) HPR (Hard) UPR CR (ESD) CR</p>

Contact Us

United States

📍 40 Trolley Square, Wilmington, Delaware

✉ us.sales@oricus-semicon.com

☎ +1 302 725 3188

United Kingdom

📍 15 Charleville Circus, Flat 3 London

✉ eu.sales@oricus-semicon.com

☎ +44 330 128 9181

Singapore

📍 2, 488 Sims Avenue, Singapore, 387560

✉ sg.sales@oricus-semicon.com

☎ +65 68649617

Malaysia

📍 8, Jalan Damanlela, Pusat Bandar Damansara Wilayah Persekutuan, Kuala Lumpur

✉ my.sales@oricus-semicon.com

☎ +60 154 600 0140

Philippines

📍 I Light Industry and Science Park of the Philippines Cabuyao, Laguna

✉ ph.sales@oricus-semicon.com

☎ +63 2 8271 2168

China

📍 Block D, Hangcheng Smart Security Science Park Shenzhen Guangdong

✉ cn.sales@oricus-semicon.com

☎ +86 400 842 7789

Hong Kong

📍 #28-34, 88 Commercial Building Wing Lok St Sheung Wang

✉ hk.sales@oricus-semicon.com

☎ +852 3008 8283

Taiwan

📍 7F, No.2-1, WhenHu Street Taipei, 11445

✉ tw.sales@oricus-semicon.com

☎ +886 2 7753 5371

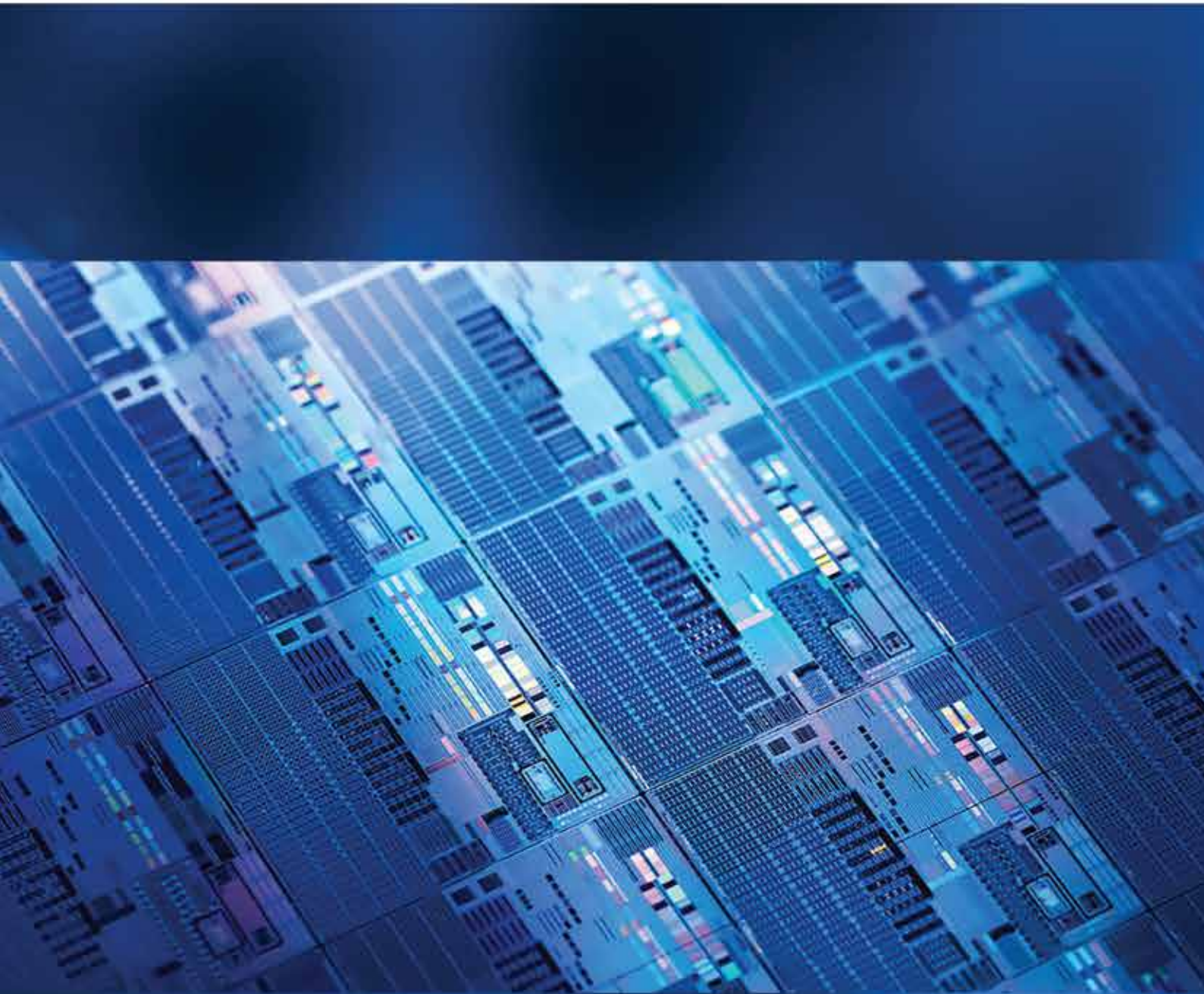
Korea

📍 27 Noksapyeong-daero 26ga-gil Seoul Seoul

✉ kr.sales@oricus-semicon.com

☎ +82 2 2023 6568





www.oricus-semicon.com
info@oricus-semicon.com