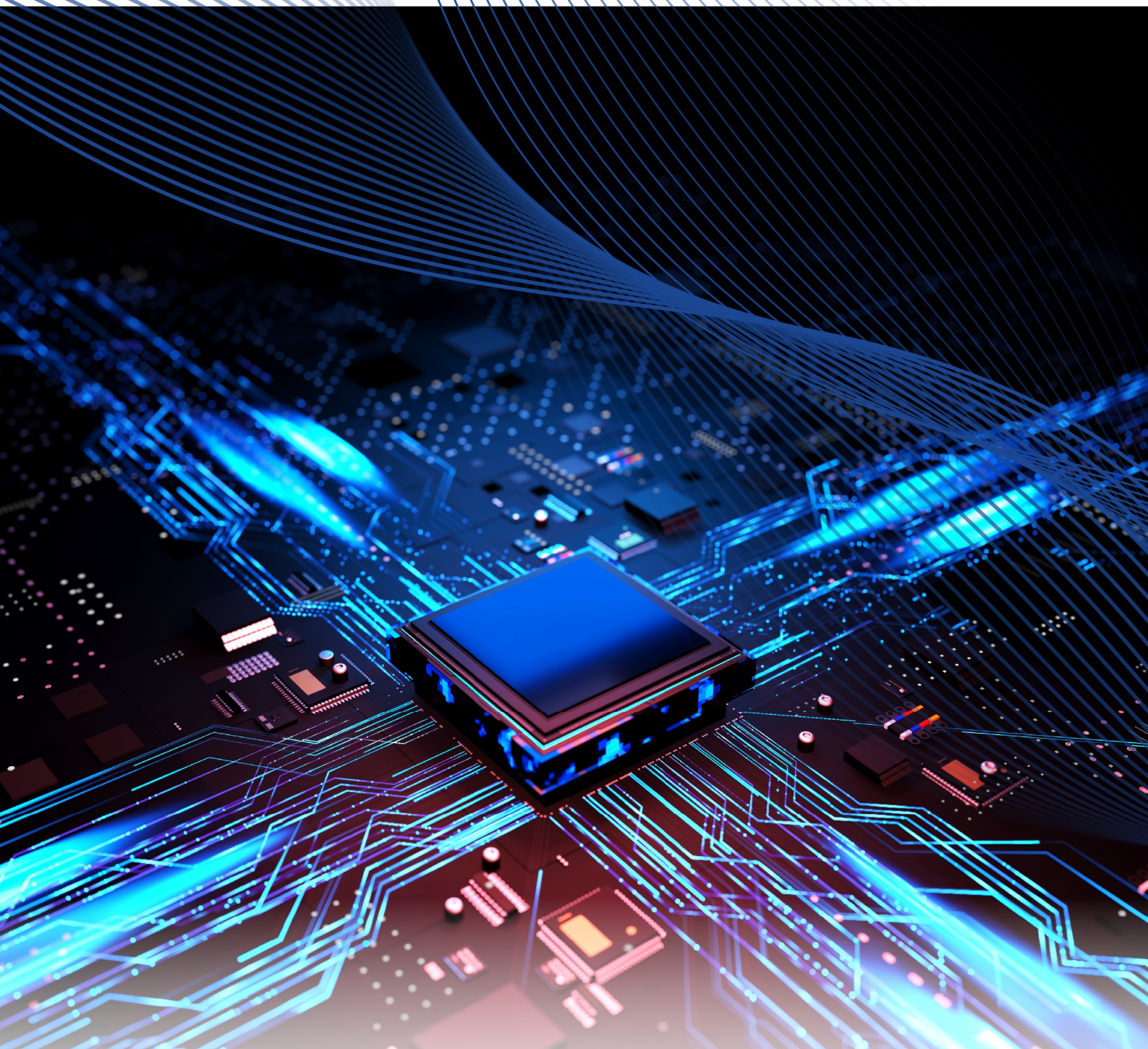

Keeping you ahead in Testing

ARATAS

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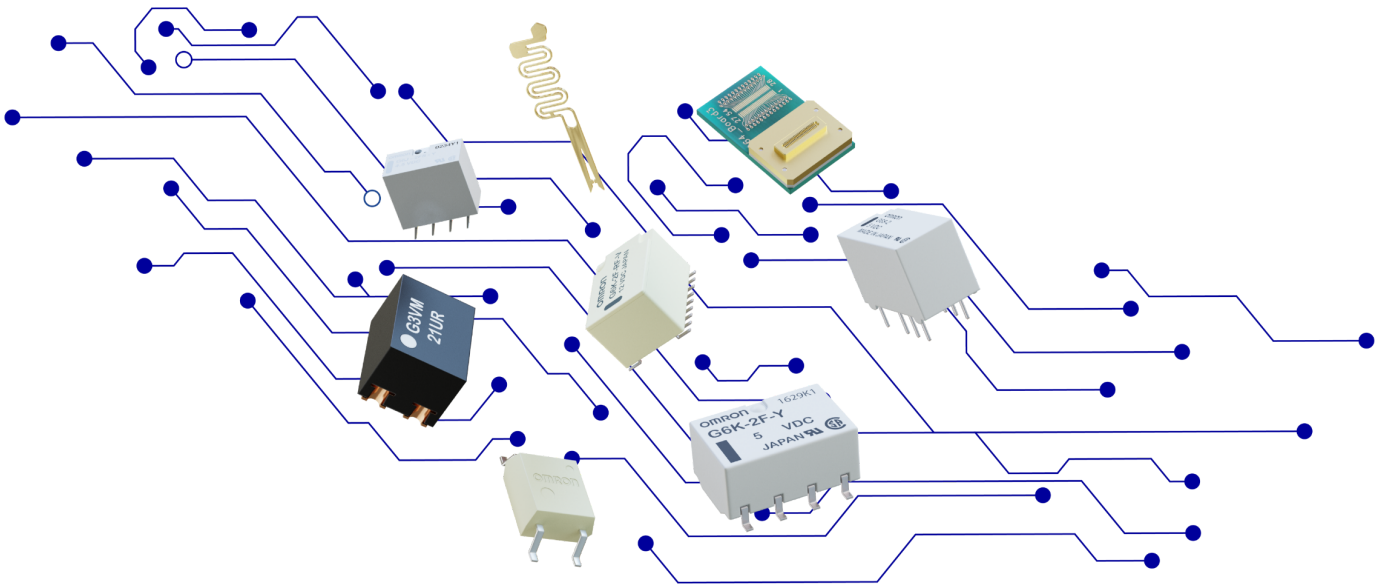
About Aratas

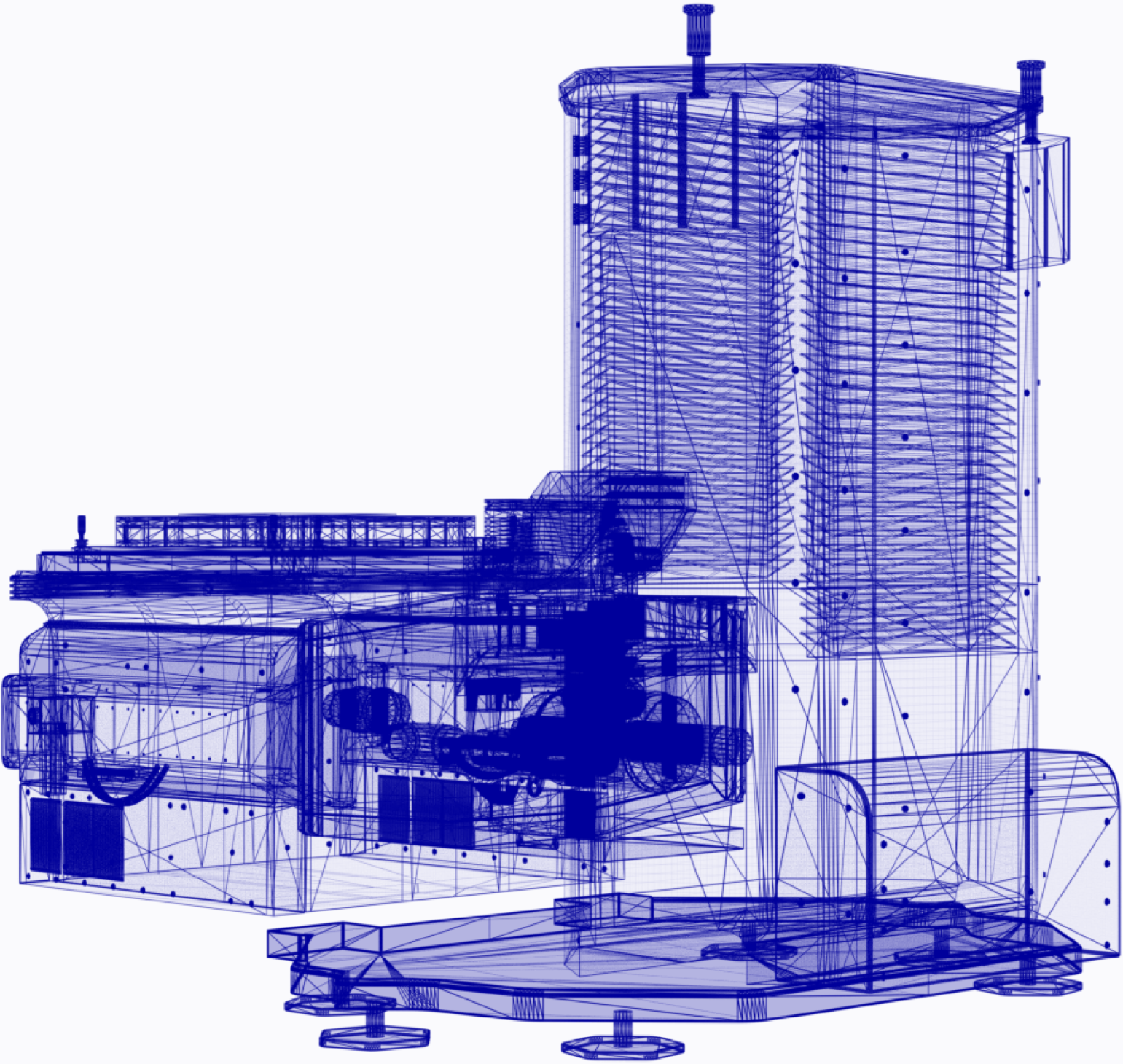
High frequency electronics are on the rise

From smartphones to satellites, today's devices demand ever higher speeds, capacities and frequencies. As high-speed data transmission expands, testing and inspection equipment must evolve just as fast. Aratas supports this progress with switches, relays, connectors, sensors and test pins that meet challenges like space limits, high capacity and fast signals. Found in semiconductor testing and manufacturing, our components enable advances in 5G/6G, AI, machine learning and compact device design. Trusted for performance and quality, Aratas technologies power the innovations that improve life worldwide.



Automated test equipment (ATE)

As semiconductor devices advance, test equipment requires greater stability, accuracy, and reliability. Manufacturers also need flexible, scalable, long-life components that support high throughput and compact test board designs. Aratas delivers versatile solutions, including G3VM MOSFET relays, signal and high-frequency relays, plus new EFC blade pins for IC testing. These components address challenges in high-frequency, high-power, and high-temperature conditions.



Next-level components for your ATE

Our portfolio includes products that improve reliability and accuracy across every part of your automated testing equipment — from testers and handlers to probers — with components designed for use in all types of resource cards, interface cards, and probe cards.

Automated Test Equipment



1 INSTRUMENT: TEST SIGNAL SWITCHING

MOSFET relay
G3VM series
– Low CxR type
– High speed response type
– High temperature compatible type
– Ultra-compact type
– High load voltage type (including SiC types – coming soon)
Signal relay
G6K
P6K (socket) for G6Krelay (coming soon)
G6J-Y
High frequency relay (up to 8GHz)
G6K-RF (up to 3GHz)
G6K-RF-V (up to 8GHz)

2 DEVICE POWER SUPPLY CONNECTION

MIL connectors
XG2/4/5
I/O connector
XW4MN
Power relays
G2RL
G6B
G7EB-E2
G9KA-E

3 TEST HEAD

Connection from Testing instrument to DUT by executing measurement

4 INTERFACE BOARD/PROBE CARD: TEST SIGNAL SWITCHING

MOSFET relay
G3VM series
– Low CxR type
– High speed response type
– High temperature compatible type
– Ultra-compact type
– High load voltage type (including SiC types – coming soon)
Signal relay
G6K
P6K (socket) for G6Krelay (coming soon)
G6J-Y
High frequency relay (up to 8GHz)
G6K-RF (up to 3GHz)
G6K-RF-V (up to 8GHz)

5 CONTROL PANEL

Settings
Tactile switches
B3SL/B3W/B3FS/B3FS key top

6 HANDLING MECHANISM

Mechanism positioning
Miniature basic switches
D3V/SS/D2
Photomicrosensor
EE-SX / EE-SY
Light convergent reflective sensor
B5W-LB

7 TEST SOCKET / DUT

Connecting board to DUT
EFC test pins/socket
XP2A/XP2B/ XP2S series
IC Connector to interface
XR2

MOSFET relays



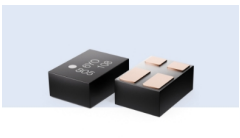
G3VM-UR (VSON)



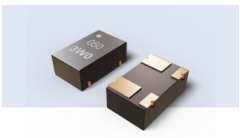
G3VM-QR (S-VSON)



G3VM-QV, -UV (with internal resistor)



G3VM-YR (WSON)



G3VM-WR (PSON)

More ways to search

Discover here our full range of recommended MOSFET relays for semiconductor testing equipment

You want to search for MOSFET relays by parameter? Visit this page to discover our full range for semiconductor testing equipment.

High frequency relays



G6K-RF-S, -T



G6K-RF-V

Signal relays



G6K

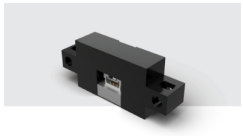


G6J



G6S

Reflective sensor



B5W-LB

MIL connectors



XG2/4/5

I/O connectors



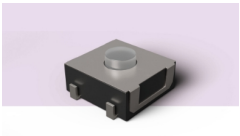
XW4M/N

Basic switches



SS

Tactile switches



B3SL

DIP switches



A6SN

Pushbutton switches

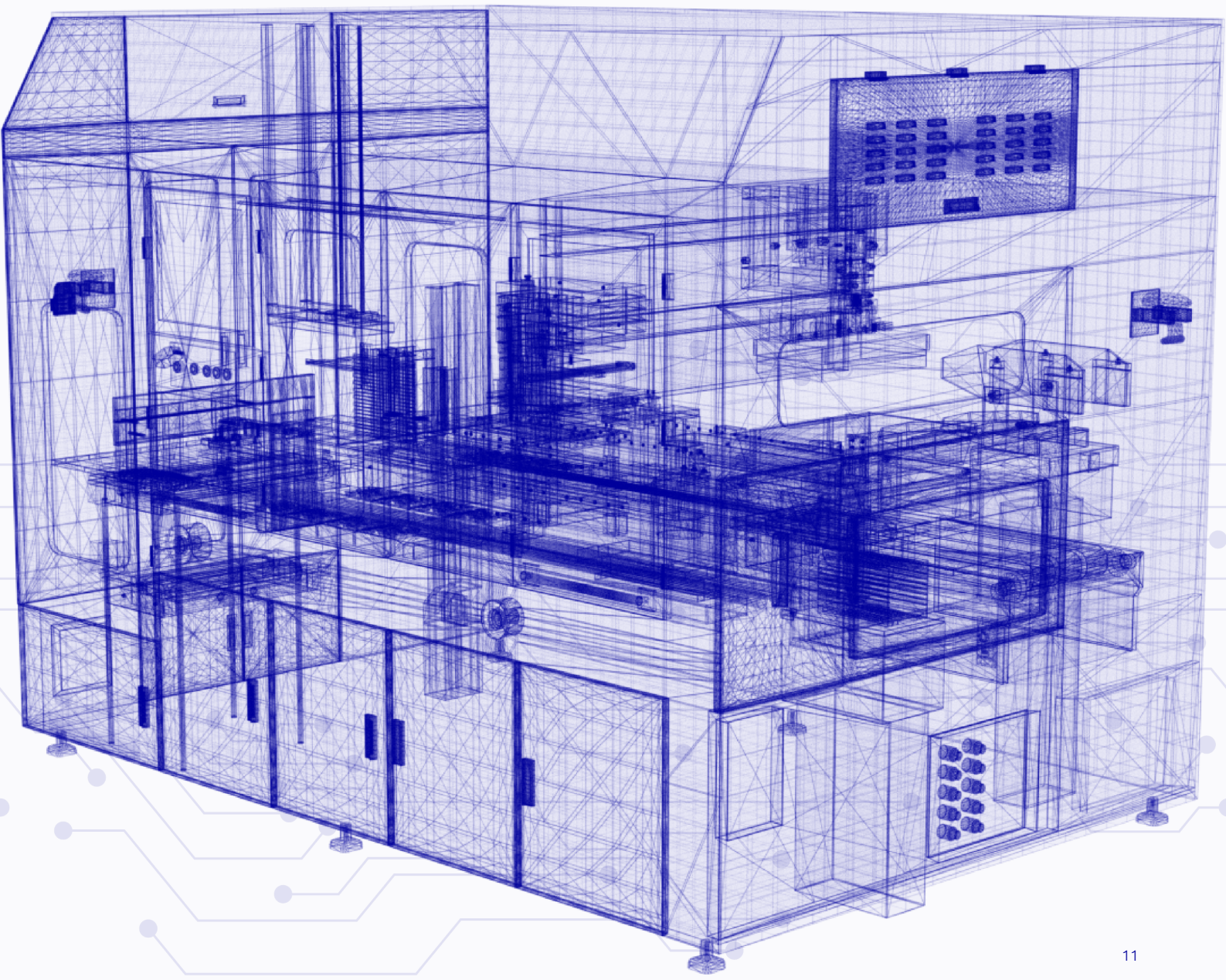


A16

Semiconductor manufacturing equipment (SME)

Semiconductor manufacturing demands specialized tools and constant adaptation. Aratas supports this with relays, switches, connectors, and sensors for advanced equipment.

Our HVC-P2 image sensing module combines ten functions in a compact design, including personnel detection in cleanroom attire. The E8Y-L pressure sensor with digital display ensures precise pressure control, vacuum maintenance, and leak detection. For circuit boards, G6K, G6J, and G6S signal relays save space while delivering reliability.



A tailored product range for advanced manufacturing equipment

Our products boost productivity and reliability across semiconductor manufacturing—from power supplies and interfaces to PCBs, control panels, and devices. We offer human presence detection, flow sensors for vacuum and gas monitoring, and both contact and contactless technologies for object detection. The product range incldes both mechanical contact technology (microswitches) and optical technology (photomicrosensors) for object detection within equipment.

Semiconductor Manufacturing Equipment



1 POWER SUPPLY, MEASUREMENT, MOTORS & SOLENOIDS

● Device power on-off
● Controlling measurement circuits and drives
Power relays
G2RL
G6B
G7EB-E2
G9KA-E

2 CONTROL PCBs

● Switch test signals, switch power circuit
Signal relays
G6K
G6J
G6S
MOSFET relays
G3VM
High-frequency relay
G6K-RF

● Settings, I/O signal switching
DIP switches
A6TN/A6SN

3 INSIDE OF THE BOARD

● Signal and power supply connection
Input/Output PCB connectors:
XW4M
XW4N
MIL connectors
XG2/4/5
FPC/FFC connectors
XF2M/XF3M

4 COVER

● Open-close status detection
Basic switches
D3V/SS/D2F
Sealed ultra Subminiature basic switches
D2HW/D2EW/D2EW-R

● Open-close status detection embedded in device
● Object position/direction detection
Photomicrosensors
EE-SX
Light convergent/diffuse reflective sensor
B5W-LB/DB

5 CONTROL PANEL

● Interface for device control
Tactile switches
B3SL/B3W/B3FS/B3FS key tops
Push-button switches
A16/A22/A30

6 HUMAN PRESENCE DETECTION

Human Vision Components:
B5T HVC Top View for Human Body Detection, including OKAO software
B5T HVC Human Body Detection wearing clean suit, including OKAO software

7 INTERNAL DEVICES

Micro Pressure Sensor
E8Y-L **(NEW!)**

● Nitrogen gas flow control
MEMS flow sensors
D6F-A
D6F-P

● Filter vicinity
● Clogged filter detection
MEMS flow sensors
D6F-V
D6F-W
D6F-P
D6F-PL

● Vacuum maintenance in process chamber
● Abnormalities in exhaust gas detection

Power relays



G2RL



G6B



G7EB -E2



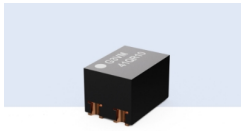
G9KA-E

MOSFET relays

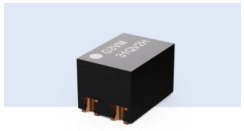


G3VM-UR (VSON)

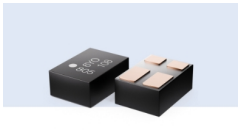
High frequency relays



G3VM-QR (S-VSON)



G3VM-QV, -UV (with internal resistor)



G3VM-YR (WSON)



G3VM-WR (PSON)



G6K-RF-S, -T

Signal relays



G6K-RF-V



G6K



G6J



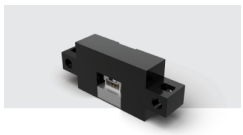
G6S

Photomicro sensors



EE-SX

Reflective sensor



B5W-LB

Flow sensors



D6F

Pressure sensor



E8Y-L **(NEW!)**

MIL connectors



XG2/4/5

I/O connectors



XW4M/N

FPC connectors



XF2M/XF3M

Basic switches



SS

Tactile switches



B3SL

DIP switches



A6SN

Pushbutton switches



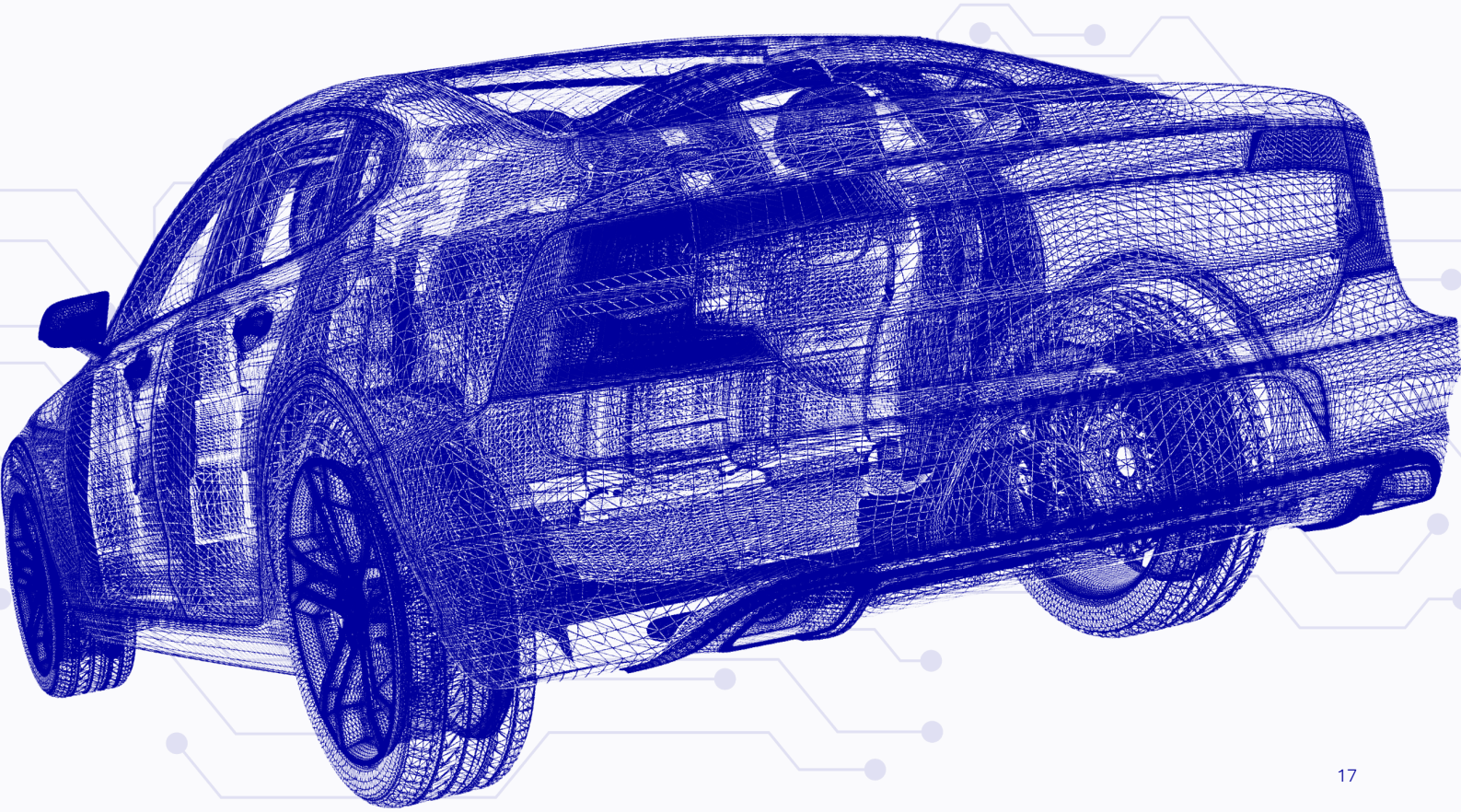
A16

More ways to search

You want to search for MOSFET relays by parameter? Visit this page to discover our full range for semiconductor testing equipment.

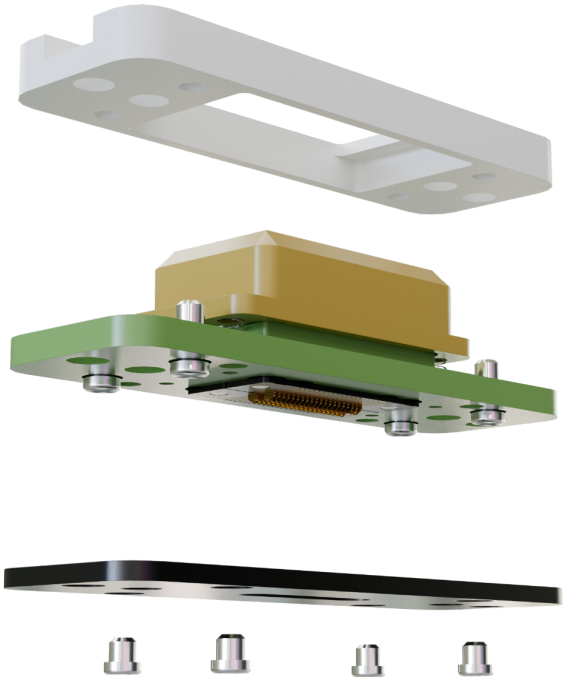
Device testing

Many devices using high-frequency signals have rapid release cycles, demanding inspection equipment that adapts quickly to new, complex designs. Applications, like for instance vehicle ECUs, require technical complexity and meantime durable inspection. This determines a need for multiple terminals, narrow pitches and high-frequency features.
Aratas supports this with advanced electroformed (EFC) blade pins for reliable testing.



Customised sockets for efficiency and peace of mind

Aratas' customised socket designs enhance testing efficiency and reliability to support innovation in various applications like vehicle ECUs, advanced driver assistance systems (ADAS), camera/display modules and other high-end electronic components. Offering a long operating life and high precision, our testing sockets significantly reduce operational downtime and maintenance.



With a fully customised pin tip, connection to the tested object is much more reliable



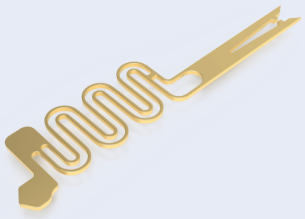


Blade pin
Achieves mechanically and electrically stable contact with virtually no failures, thanks to custom design, proprietary materials, and optimized pin structure.

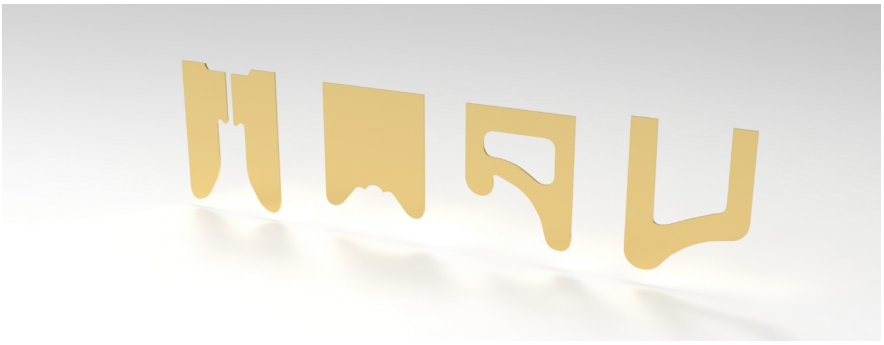
Pogo pin
Difficult to conduct mechanically and electrically stable inspections due to single point contact between the pogo pin and the connector conductive part. Prone to contact failure.

Cutting-edge electroforming technology

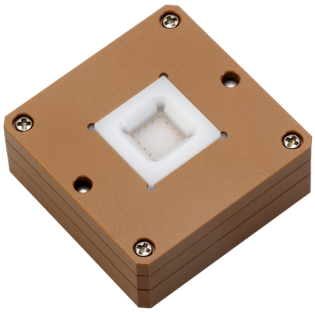
The probe pins packed into advanced testing sockets are manufactured using our proprietary electroformed components (EFC) process technology. This produces highly durable pins with complex shapes and excellent spring properties, while can be manufactured with precision on the order of microns.

	Blade pin	Pogo pin
		
High durability	500,000 cycles	< 100,000 cycles
High precision measurement	30mΩ High inspection accuracy even for devices under test that require low contact resistance	70mΩ Difficult to use for devices under test that require low contact resistance
High inspection pass rate	99.8% at module inspection	80%
Narrow pitch	≤ 0.175mm	≥ 0.35mm

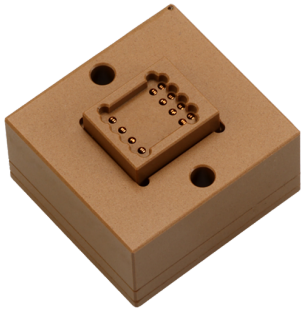
The shape of the blade pin can be customized to meet customer needs



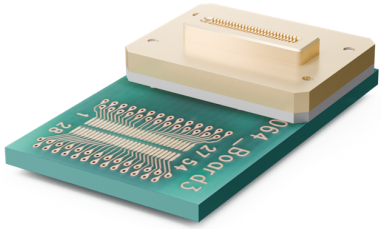
EFC pins/sockets are suitable for inspection in the automotive, consumer, and industrial sectors.



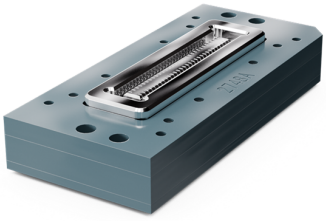
High Frequency test
Up to 50GHz
Wi-fi/LAN, GPS, etc.



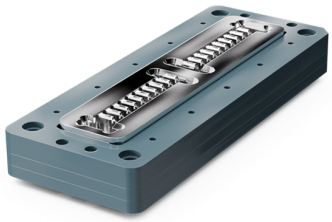
High Power test
Up to 10A
Power IC, etc.



Narrow Pitch test
min 0.175mm
Camera/Display module, etc.



Automotive ECU
B2B Connector test



Automotive BMS
FPC Connector test



XP2U
USB-C type test

Other high frequency applications

As high frequency technologies evolve, improving infrastructure and living standards around the world, new applications for our high frequency components are emerging all the time. They are already widely used in testing & measurement, in numerous electronic devices with communication functions, or in infrastructure equipment like telecommunications base stations.



Testing & measurement equipment



Communication devices



Base stations

About Aratas Corporation

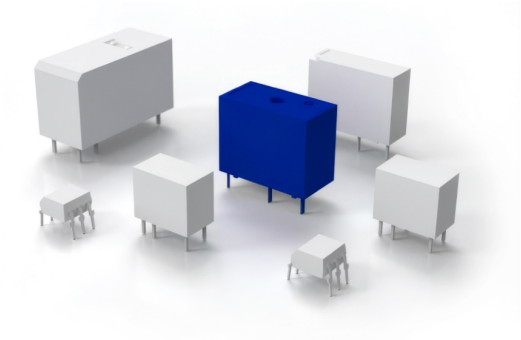
Aratas Corporation was established on 1 July 2026 through the spin-off of OMRON's electronic components business and became independent from the OMRON Group on 1 October 2026. The company manufactures and sells relays, switches, connectors, sensors and other electronic components. Its mission is to "harness innovative connections between people and technology to create a new tomorrow". Drawing on over 90 years of expertise and trust developed through OMRON's founding electronic components business, Aratas combines this heritage with the agility of an independent, specialised company.

About Aratas Europe B.V.

Aratas Europe B.V. is based in Hoofddorp, the Netherlands. Across Europe, Aratas has a sales presence in nine countries. Its regional model combines local-language Area Sales Managers, European product specialists and regional sales offices with a Bratislava-based support hub and a European warehouse. An established network of global and local distributors extends its reach across the region. For more information, visit Aratas.com.

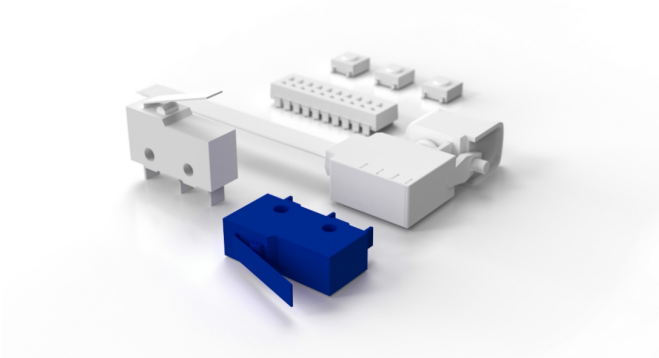
Our full line-up

Relays



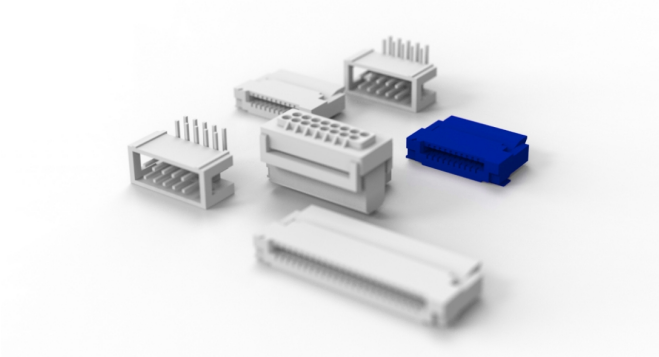
Scan for more information

Switches



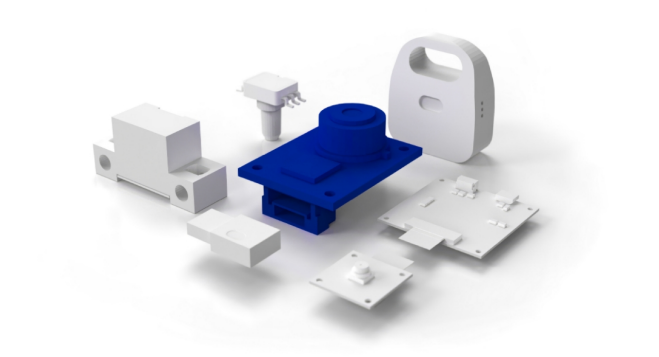
Scan for more information

Connectors



Scan for more information

Sensors



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