Semiconductor Industry in Kyushu

**SUMCO CORPORATION, Kyushu Factory (Ikegami) (2005)**
Silicon wafer

**OMRON Relay and Device Takeo Corporation (1972)**
Connecting and switching parts (Solid state relays, power relays)

**SUMCO CORPORATION, Kyushu Factory (Sagaya) (2005)**
Single crystal silicon wafer

**NAGASAKI**

- **Kumachi**
  - **Kumachi**
  - Sony Semiconductor Manufacturing Corporation, Nagasaki Technology Center (1987)
    - Wafer process of MOS IC, CMOS image sensor and SRAM
  - **OMRON RELAY & DEVICES Corporation (1972)**
    - Magnet relay
  - **Kikuchi**
    - JOEVICES CORPORATION, Shinsui District (1972)
    - System LSI
  - **OMRON Asa Corporation (1973)**
    - Electronic equipment, Measurement/monitoring control systems, Built-in protection components

- **Phenitec Semiconductor Corp.**
  - Sony Semiconductor Manufacturing Corporation, Oita Technology Center
  - Sony Semiconductor Manufacturing Corporation, Nagasaki Technology Center
  - Japan Semiconductor Corporation, Oita Operations
  - Sony Semiconductor Manufacturing Corporation, Kumamoto Technology Center (2001)
  - Sony Semiconductor Manufacturing Corporation, Kumamoto Technology Center
  - Sony Semiconductor Manufacturing Corporation, Nagasaki Technology Center
  - Sony Semiconductor Manufacturing Corporation, Oita Technology Center
  - Power devices
  - Ozu, Kikuchi-gun
  - Tera Probe, Inc., Kyushu Operation Center (2006)
  - Wafer testing (memories, Logic, SoC, Burn-in and other final tests)
  - Nishiki, Kuma-gun
  - Renesas Semiconductor Package & Test Solutions Co., Ltd. Nishiki Factory (2001)
  - Microcomputers, System LSI

**KUMAMOTO**

- **Kumaichi**
  - Sony Semiconductor Manufacturing Corporation, Oita Technology Center
  - Sony Semiconductor Manufacturing Corporation, Nagasaki Technology Center
  - Power devices
  - Ozu, Kikuchi-gun
  - Tera Probe, Inc., Kyushu Operation Center (2006)
  - Wafer testing (memories, Logic, SoC, Burn-in and other final tests)
  - Nishiki, Kuma-gun
  - Renesas Semiconductor Package & Test Solutions Co., Ltd. Nishiki Factory (2001)
  - Microcomputers, System LSI

**FUKUOKA**

- **Kiyosu, Kikuchi-gun**
  - Sony Semiconductor Corporation
  - Tera Probe, Inc., Kyushu Operation Center (2006)
  - Wafer testing (memories, Logic, SoC, Burn-in and other final tests)
  - Nishiki, Kuma-gun
  - Renesas Semiconductor Package & Test Solutions Co., Ltd. Nishiki Factory (2001)
  - Microcomputers, System LSI

**KAGOSHIMA**

- **Satsumasendai**
  - KYOCERA Corporation, Kagoshima Sendai Plant (1969)
  - Semiconductor parts, LCD color filter, Fine ceramics, Ceramics package
  - Kirishima ULVAC KAGOSHI Corporation (1962)
  - Sputtering equipment, Vacuum evaporation equipment, Vacuum furnaces, Exhausted and vacuum pumping systems
  - KYOCERA Corporation, Kagoshima Kokubu Plant (1972)
  - Multilayer ceramic condensers, Ceramic filters, Multi-layer PKG, Thin film PKG, Structural parts of equipment, Ceramic package

Capacity of Major Plants

**Front-end**

- **Asahi Kasei Microsystems Kyushu Co., Ltd.**
  - 5” φ: 12K, 8” φ: 12K
- **NJR FUKUOKA CO., LTD**
  - 5” φ: 12K, 8” φ: 12K
- **Japan Semiconductor Corporation, Oita Operations**
  - 5” φ: 12K, 8” φ: 12K
- **Sony Semiconductor Manufacturing Corporation, Kumamoto Technology Center**
  - 5” φ: 12K, 8” φ: 12K
- **Sony Semiconductor Manufacturing Corporation, Oita Technology Center**
  - 12” φ: 0.4K
- **Mitsubishi Electric Corporation, Power Device Works, Fukuoka Plant**
  - 12” φ: 0.4K
- **Renesas Semiconductor Mfg., Ltd.**
  - 5” φ: 60K, 6” φ: 0.4K

**Back-end**

- **Mitsubishi Electric Corporation, Power Device Works, Fukuoka Plant**
  - DIP/DFM about 1.2M
- **J-DEVICES SEMICONDUCTOR CORPORATION**
  - 25M
- **Renesas Semiconductor Package & Test Solutions Co., Ltd, Nishiki Factory**
  - 20M
- **Renesas Semiconductor Package & Test Solutions Co., Ltd, Nishiki Factory**
  - 4.5M

Source: Sangyo Times, Inc., Semiconductor Industry Project Catalog 2016 to 2017

One Point

**Trade (CY2015)**

<table>
<thead>
<tr>
<th>Semiconductor/FPD machinery</th>
<th>China</th>
<th>South Korea</th>
<th>Taiwan</th>
<th>ASEAN / India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export: 251.2 billion Yen</td>
<td>Export: 113.7 billion Yen</td>
<td>Export: 86.5 billion Yen</td>
<td>Export: 39.9 billion Yen</td>
<td>Export: 4.2 billion Yen</td>
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<tr>
<td>Import: 11.3 billion Yen</td>
<td>Import: 1.7 billion Yen</td>
<td>Import: 3.7 billion Yen</td>
<td>Import: 0.5 billion Yen</td>
<td>Import: 2.9 billion Yen</td>
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Source: Ministry of Finance Japan, Trade Statistics.
Structure of Semiconductor Related Industry in Kyushu

**Semiconductor**

- Design tool, Fabless business: 48
- Pattern formation, Deposition: 17
- Bumping: 10
- Wafer test: 38
- Recycling, Reusing: 13
- Assembly and Testing process: 55
- Final test and Analysis: 70
- Material for Wafer Process: 20
- Material for Wafer Process: 15

**Electronic substrate**

- Circuit design, Control unit design: 25
- Substrate/ Mounting: 29
- Controller unit: 43
- Analysis: 37
- Embedded software: 39

**Others**

- Equipment for Wafer process, Jigs: 25
- Equipment for Packaging and Testing process, and Jigs: 38
- Support, Maintenance, Clean Room, Human capital: 69
- Others: 5

**Designing, Machining, Mold, Assembly**

- Design: 44
- Device software: 28
- Machining: 95
- Machine assembly: 39
- Sheet metal, Welding: 53
- Mold: 63
- Heat treatment and Gilt: 35
- Machine element, Tools: 22
- Plastics processing: 16

**Number of Company/Office and Support Organization**

<table>
<thead>
<tr>
<th>Company/Office</th>
<th>Fukuoka</th>
<th>Saga</th>
<th>Nagasaki</th>
<th>Kumamoto</th>
<th>Oita</th>
<th>Miyazaki</th>
<th>Kagoshima</th>
<th>Total</th>
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<td>Design &amp; EDA tools</td>
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<th>Fukuoka</th>
<th>Saga</th>
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<th>Kumamoto</th>
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<th>Miyazaki</th>
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<td>8</td>
<td>3</td>
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</tr>
</tbody>
</table>

Note: Each firm and organization have one or more business domains.
**Semiconductor Industry in Kyushu**

### Design & EDA tools

- **Keirex Technology Inc.** Fukuoka Technology Center
  - EDA related consulting, Software development

- **KYEC Japan K.K.**
  - LSI test program, Test boards, and it’s support system, LSI test on consignment

- **CYBERCRAFT SOLUTION,COLTD. Fukuoka Office**
  - Manufacturing and designing and testing semiconductor and electronic devices

- **System JD Co., Ltd.**
  - Test design of system LSI, Development of CAD

- **Silicon Artist Technology, Inc.**
  - LSI chip

- **SPIR Limited**
  - FPGA, Printed wiring board, Jobs

- **Sony LSI Design Inc. Fukuoka Branch**
  - System LSI, Image sensor (CCD, CMOS), Mixed signal LSI, Analog IC

- **Tokyo Drawing Ltd. Fukuoka Office**
  - Design/design of semiconductor products

- **Tripleone Co., LTD. Fukuoka branch office**
  - Design/development of SoC/ASIC/FPGA

- **Nanodesign Corporation**
  - Development/design of consumer/industrial LSI

- **Minami-k, Fukuoka**
  - Laser sensor, Wiring save system, Image processing system

- **NSCORE, Inc.**
  - Design/design of non-volatile memory

- **Quailar Technology Solutions, Inc.**
  - LSI system

### Materials for Wafer Process

- **Denka Company Limited. Omuta Plant**
  - Fused silica, Silicon nitride, Aluminum nitride, Boron nitride, Ceramics boards, Phosphor materials for LED
  - Miyazaki, Kaminashi-gun

- **Sumco Technical Corporation, Head Office/Nagasaki Plant**
  - Cleaning solvents for electric parts and diluents

- **Kumamoto**
  - Specialty gas for semiconductor manufacturing

- **Hokkaido Co., Ltd Kaminuma technology center**
  - Design, production and sales for flue gas treatment equipment

### Type of Production Process [Semiconductor]

- **Design, production and sales for semi-conductor/FPD**

- **Design of Analog ICs, IP technology consulting**

- **AKM TECHNOLOGY CORPORATION**
  - Design/development of semiconductor for cell phone/digital home appliance

- **Japan Aqueous Chemicals Corporation**
  - High purity silicon wafer for semiconductor

- **Valqua TECH Co., Ltd.**
  - Recyclers, monitors, Monitor wafera (grinding of 8 ~ 12 inches)

- **Kawatana, Higashisongun**

- **Miyazaki**

- **CooTeK Nagasaki Corporation**
  - Photomask materials for LSI, Large-sized photomask for LCD

### Company Descriptions

- **Nagasaki Omuta**
  - **KYUSHU DENTSU CO., LTD.**
  - Crystal, crystal oscillator, Crystal filter, Reclaimed silicon wafer
  - **SUMCO TECHIV Co. Head Office/Nagasaki Plant**
  - High purity silicon wafer for semiconductor

- **Valqua AFT Co., Nagasaki Fab**
  - Recycling wafera, Monitor wafera (grinding of 8 ~ 12 inches)

- **Kawatana, Higashisongun**

- **Kumamoto**

- **Miyazaki**

- **CooTeK Nagasaki Corporation**
  - Photomask materials for LSI, Large-sized photomask for LCD

- **Hokkaido Co., Ltd Kaminuma technology center**
  - Design, production and sales for flue gas treatment equipment

- **Minamata**

- **KUMAMOTO OXYTON Co., Ltd Minamata Factory**
  - Specialty gas for semiconductor manufacturing

- **TOKYO OYKA KOGYO Co., Ltd. Aso Plant**
  - Photomasks for semiconductor/LCD

- **Kumamoto**

- **Miyazaki**

- **CooTeK Nagasaki Corporation**
  - Photomask materials for LSI, Large-sized photomask for LCD

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- **Kumamoto**

- **Miyazaki**

- **CooTeK Nagasaki Corporation**
  - Photomask materials for LSI, Large-sized photomask for LCD
Semiconductor Industry in Kyushu

**Fukuoka**
- Nishiku, Fukuoka: Bipolar IC, Analog IC
- Sue, Kasuya-gun: PMI CORPORATION - Semiconductor manufacturing equipment, Die/Episch, photography, minimal lithography

**Kumamoto**
- Minami-ku, Kumamoto: Renesas Semiconductor Manufacturing Co., Ltd., Kawai Factory - System LSIs, microcomputers (MPU), Koshi
- Mitsubishi Electric Corporation, Power Device Works, Kumamoto Plant - Power devices, modules, Kikuyo, Kikuchi-gun
- Sony Semiconductor Manufacturing Corporation, Kumamoto Technology Center - H-CCD, CDD/CMOS image sensor and SXRD

**Oita**
- Oita: Oita Device Technology Co., Ltd. - Pattern formation, Etching, Sony Semiconductor Manufacturing Corporation, Oita Technology Center - Logic LSIs, CMOS image sensor, Assembly/inspection of MOS LSIs, Development of assembling technology

**Kagoshima**
- Kirishima: Sony Semiconductor Manufacturing Corporation, Kagoshima Technology Center - Bipolar IC, MOS logic, CDD/CMOS image sensors, H-CCD, MMIC, SXRD
- Yusu, Aira-gun: Phenitec Semiconductor Corp., Kagoshima Factory - MOS Analog IC, Mixed Signal, MOSFET, IGBT

**Nagasaki**
- Isahaya: Sony Semiconductor Manufacturing Corporation, Nagasaki Technology Center - Wafer process of MOS IC, CMOS image sensor and SXRD

**Developers for Lithography, Thin Film Materials, Ultra-precision Micromachining**

**Yokohama**
- Fujikura: Yokohama, Kanto-ku, Yokohama: J-DEVICES CORPORATION, Usuki District - Wafer test, Assembly, Final test, Visual inspection of bear chip
- J-DEVICES CORPORATION, Oita District - Wafer test, Assembly, Final test, Visual inspection of bear chip

**Production**
- Syswave Techno Corp.: LSI development
- NTT Microelectronics Corp.: LSI design and packaging
- Mitsubishi Electric Corporation: Microcomputer distribution and packaging

**Advanced Materials Technology, INC.**
- TEQ (Test Element Group) wafer for process evaluation

**Sensors, RF Semiconductors**
- Yoshikawa RF Semiconductors Co., Ltd.: Asahi Kasei Microdevices Corp., Oita District - Sensor wafer process, Assembly, Inspection
- Asahi Kasei Microdevices Corp., Oita District - Sensor wafer process, Assembly, Inspection
- ELA Co., Ltd.: PCBs design, Development of LSI testing application, IC evaluation/analysis

**Miyazaki**
- Miyazaki: LAPIS SEMICONDUCTOR MIYAZAKI Co., LTD. - Logic (LCD driver, Microprocessors) - Foundry services (Power/HVC MOS, BCD, EEPROM WL-CSP)
- Nobeoka: Asahi Kasei Microdevices Corp. FAB 1 - Sensor wafer process, Assembly, Inspection
- Asahi Kasei Microdevices Corp. FAB 2 - LSI wafer process, Inspection

**Kagoshima**
- Kirishima: Sony Semiconductor Manufacturing Corporation, Kagoshima Technology Center - Bipolar IC, MOS logic, CDD/CMOS image sensors, H-CCD, MMIC, SXRD
- Yusu, Aira-gun: Phenitec Semiconductor Corp., Kagoshima Factory - MOS Analog IC, Mixed Signal, MOSFET, IGBT

**Pattern formation, Deposition**
- Fukuoka: Nishiku, Fukuoka: Bipolar IC, Analog IC
- Sue, Kasuya-gun: PMI CORPORATION - Semiconductor manufacturing equipment, Die/Episch, photography, minimal lithography

**Bumping**
- Fukuoka: Nakamatsu-ku, Kitakyushu: Shinyo Corporation, Wafer-Techno Business Division, Electrosis Department - Exterior planting of IC lead frames, Clearing of IC precision jigs
- Nishiku, Fukuoka: Nippon FUKUOKA CO., LTD. - Bipolar IC, Analog IC
- Fukuoka: Nakamatsu-ku, Kitakyushu: Shinyo Corporation, Wafer-Techno Business Division, Electrosis Department - Exterior planting of IC lead frames, Clearing of IC precision jigs

**Wafer test**
- Nagoa: TÜV Rheinland Japan Ltd., Kyushu EMC Laboratory - Testing service
- Koga: Advanced Materials Technology, INC. - TEQ (Test Element Group) wafer for process evaluation
- Saga: Technographics, Kanzaki-gun: Sage Electronics Co., Ltd. - Subcontract packaging/testing business

**Kumamoto**
- Minami-ku, Kumamoto: Renesas Semiconductor Manufacturing Co., Ltd., Kawai Factory - System LSIs, microcomputers (MPU)
- Kyushu Denki Co., Ltd.: Optical semiconductor devices, LSI design
- Mitsubishi Electric Corporation: Power Device Works, Kumamoto Plant - Power devices, modules
- Ashikita, Ashikita-gun: Tera Probe, Inc., Kyushu Operation Center - Wafer tests (memories, logic, SoC), Burn-in and other final tests
- Oita: Oita: STK Technology Co., Ltd.: Reliability evaluation/inspection, Burn-in equipment, Semiconductor manufacturing/evaluation equipment

**Miyazaki**
- Miyazaki: LAPIS SEMICONDUCTOR MIYAZAKI Co., LTD. - Logic (LCD driver, Microprocessors) - Foundry services (Power/HVC MOS, BCD, EEPROM WL-CSP)
- Nobeoka: Asahi Kasei Microdevices Corp. FAB 1 - Sensor wafer process, Assembly, Inspection
- Asahi Kasei Microdevices Corp. FAB 2 - LSI wafer process, Inspection

**Kagoshima**
- Kirishima: Sony Semiconductor Manufacturing Corporation, Kagoshima Technology Center - Bipolar IC, MOS logic, CDD/CMOS image sensors, H-CCD, MMIC, SXRD
- Yusu, Aira-gun: Phenitec Semiconductor Corp., Kagoshima Factory - MOS Analog IC, Mixed Signal, MOSFET, IGBT

**Nagasaki**
- Isahaya: ISHAYA ELECTRONICS CORPORATION, Isahaya Laboratory - Small signal transistors, Diodes, MOS-FET
- Sony Semiconductor Manufacturing Corporation, Nagasaki Technology Center - Wafer process of MOS IC, CMOS image sensor and SXRD
- Oita: Oita: STK Technology Co., Ltd.: Reliability evaluation/inspection, Burn-in equipment, Semiconductor manufacturing/evaluation equipment
- J-DEVICES CORPORATION, Oita District - Wafer test, Assembly, Final test, Visual inspection of bear chip
- HIJ, Hayami-gun: ELA Co., Ltd.: PCBs design, Development of LSI testing application, IC evaluation/analysis

**Miyazaki**
- Miyazaki: LAPIS SEMICONDUCTOR MIYAZAKI Co., LTD. - Logic (LCD driver, Microprocessors) - Foundry services (Power/HVC MOS, BCD, EEPROM WL-CSP)
- Nobeoka: Asahi Kasei Microdevices Corp. FAB 1 - Sensor wafer process, Assembly, Inspection
- Asahi Kasei Microdevices Corp. FAB 2 - LSI wafer process, Inspection

**Kagoshima**
- Kirishima: Sony Semiconductor Manufacturing Corporation, Kagoshima Technology Center - Bipolar IC, MOS logic, CDD/CMOS image sensors, H-CCD, MMIC, SXRD
- Nobeoka: Asahi Kasei Microdevices Corp. FAB 1 - Sensor wafer process, Assembly, Inspection
- Asahi Kasei Microdevices Corp. FAB 2 - Communication LSI, Audio and video LSI, Inspection
- Shintomi, Koyu-gun: Yawatahigashi-ku, Kitakyushu: J-DEVICES CORPORATION, Oita District - Assembly of ASIC/memory/logic LSI

**Miyazaki**
- Miyazaki: Micro Electronics Service Corp. - Test/assembly, Jigs for test, Semiconductor manufacturing equipment parts
- LAPIS SEMICONDUCTOR MIYAZAKI Co., LTD. - Logic (LCD driver, Microprocessors) - Foundry services (Power/HVC MOS, BCD, EEPROM WL-CSP)
- Nobeoka: Asahi Kasei Microdevices Corp. FAB 1 - Sensor wafer process, Assembly, Inspection
- Asahi Kasei Microdevices Corp. FAB 2 - Communication LSI, Audio and video LSI, Inspection

**Kagoshima**
- Kirishima: Sony Semiconductor Manufacturing Corporation, Kagoshima Technology Center - Bipolar IC, MOS logic, CDD/CMOS image sensors, H-CCD, MMIC, SXRD
- Yusu, Aira-gun: Phenitec Semiconductor Corp., Kagoshima Factory - MOS Analog IC, Mixed Signal, MOSFET, IGBT
Recycling, Reusing

Materials for Assembly and Testing process

Fukuoka
Mojiku, Kitakyushu
Shinko Leadmikk Co., Ltd.
Lead frames
Tokataku, Kitakyushu
Kissei Chemicals Co., Ltd.
Lead frames/motor core and dies of them, Dies for pressing, IC lead frames, IC assembly, Motor core
Hamada Heavy Industries Ltd., Nippon Steel Corporation
Lead frames, Motor frames, Bonding wire, Die,
Nippon Steel & Sumikin Chemical Co., Ltd.
Lead frames, Motor frames, Bonding wire, Die,
Air Water Materials info., Fukuoka Head Office
Sale of chemical and electronic materials
Chuo-ku, Fukuoka
Fujimori Kogyo Co., Ltd.
Sales of optomechanical parts
Oita
Denka Co., Ltd.
Prepreg, conductive resin, Thermosetting resin, Thermosetting resin, Curing agent, Molding compound

Semiconductor Industry in Kyushu

Assembly and Testing process

Kiiuchi
J-DEVICES CORPORATION, Shisui District
System LSI

Kyuushu Denso Co., Ltd.
Optical semiconductor devices, LSI design
Chuo Denshii Kogyo Co., Ltd., Kumamoto Plant
Si/compound semiconductor high frequency devices

Koishi
Kykuyo Semiconductors Co., Ltd.
IC assembling, High pressure gas for semiconductor

Ozu, Kikuchi-gun
Ozu Electronics Co., Ltd.
IC assembling, Microcomputer, System LSI

Oita
J-DEVICES CORPORATION, Shisui District
System LSI, Memory products

Shinaya Electronics Co., Ltd., Isahaya Laboratory
Packaging of Ics, semiconductors

Yokohama Kogyo Kogyo Co., Ltd.
Passive components, Electrostatic discharge protection, Electrostatic discharge protection, Hardening agent

Kyushu Denshi Co., Ltd.
System LSI, Memory products

Kumamoto
Minamata
JNC Corporation, Minamata Factory
Integrated ICs, Integrated ICs, Integrated ICs, Integrated ICs, Integrated ICs,
Nishinomiya, Aso-gun
Nakayama Seimitsu Co., Ltd., Kumamoto Factory
Parts of wire bonding and die bonding

Koishi
H-1 Systec Inc.
Optical semiconductor inspection equipment

Oita
Sekishu Technology Co., Ltd., Ebisu Plant
Assembly of burn-in equipment

Hagata
Hitachi Chemical Electronic Materials (Kyushu) Co., Ltd.
System LSI, Memory products
Semiconductor Industry in Kyushu

FUKUoka

- Watanakatani, Kitakyushu
- Shinkino High-Tech Co., Ltd., Kitakyushu Branch
- Burn-in equipment, Large PB, Camera module, LSI design, FGPA, Development of semiconductor test equipment

HIROTA Chemical Industry Co., Ltd., Kitakyushu Factory
- Inorganic chemicals for semiconductor processing, Contracted analysis
- Yahatahaseki-ku, Kitakyushu

Yoshikawa Kogyo Co., Ltd.
- Precision press of electronic parts, Picture processing for semiconductor devices
- Yahatanishiku-ku, Kitakyushu

GEN Inc.
- Design/verification/evaluation of system LSI, Circuit design, Design of semiconductor manufacturing equipment
- Mitsu-High-Tech Inc.
- Dies for testing, IC lead frames, IC assembly, Motor core

Chuo-ku, Fukuoka

Sumika Chemical Analysis Service Ltd.
- Fukuoka Sales Division
- Various analysis for electronics

Minami-ku, Fukuoka

Mobatec Co., Ltd.
- BGA rework/repair, BGA mounting for high-mix-low volume IC, Non-destructive inspection, Assembly of prototypes

Niku, Fukuoka

Mitsubishi Electric Corporation, Power Device Works, Fukuoka Plant
- Power device modules

Melco Power Device Corporation, Fukuoka Office
- Power module

Sawara-ku, Fukuoka

KYEC Japan K.K.
- LSI test program, Test boards, and its support, LSI test on consignment

Omura

INTERTEC CORP., Omura Test Center
- Reliability evaluation/inspection, Calibration of testing instrument

Mitsui Chemicals Electronic Components Service, Inc., Omura Works
- Analysis support of electronic materials

Nagoya

TUV Japan Ltd.
- Quality inspection of semiconductor devices

Minami-ku, Nagoya

Bizen

Buizen Toshiba Electronics Co., Ltd., Nagoya Division
- Assembly and inspection of various capacitive diode

Buizen

Buizen Toshiba Electronics Corporation
- Optical semiconductor assembly and inspection

Miyazaki

J-DEVICES CORPORATION, Fukuoka District
- System LSI, Memory products

Itosima

Melco Power Device Corporation, Nippon Factory
- Assembling/inspection of IPMs (for electric power, hybrid car)

Hirokawa, Yame-ku

ROHM Apollo Co., Ltd., HQ/Hirokawa Plant
- Transistors, Diodes, Tantalum condensers, Precision ICs

Kanda, Miyakono-ku

KYUSHU FUJIMI SANGYO CO., LTD.
- Quality inspection of LEDs

Saga

Yoshinonari, Kanzaki-ku

Saga Electronics Co., Ltd.
- Subcontract packaging/testing business

Nagasaki

Nagasaki

PAL Co., Ltd.
- Structural strength analysis and evaluation (deformation, vibration, thermal stress) of equipment and parts

ICG CORPORATION
- Packaging of ICs, semiconductor devices

ISAAYA ELECTRONICS CORPORATION, Isaya Laboratory
- Small signal transistors, Diodes, MOS-FET

Kumamoto

Chuo-ku, Kumamoto

Nodaichi-Denshi Co., Ltd.
- PCBs design, Development of LSI testing equipment

Kikuchi, Cho-ku

Oita Electronics Co., Ltd.
- Precision plastic components/dies for optical devices

Okuno Electronics Co., Ltd.
- Lead frames, Bonding wires, Sapphire substrate
**Type of Production Process (Electronic substrate)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Company/Institution</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fukuoka</strong></td>
<td>Yokohama realizado Co., Ltd.</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Kasuya, Kasuya-gun</strong></td>
<td>FNK Manufacturing Co., Ltd.</td>
<td>LPCB, Parts assembly, Technical support of electronics devices</td>
</tr>
<tr>
<td><strong>Hakata-ku, Fukuoka</strong></td>
<td>Kyushu Semiconductor C Kr., Ltd.</td>
<td>Circuit board, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Isahaya</strong></td>
<td>ISAHAYA ELECTRONICS CORPORATION, Head Office/Tsukuba Laboratory</td>
<td>PCBs, Parts assembly, Technical support of electronics devices</td>
</tr>
<tr>
<td><strong>Kumamoto</strong></td>
<td>Miyazaki Control Systems Co., Ltd.</td>
<td>Design and assembly of PDP modules</td>
</tr>
<tr>
<td><strong>Kumamoto</strong></td>
<td>Mikuni Electric Co., Ltd.</td>
<td>Circuit boards, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Nagasaki</strong></td>
<td>Nippon Steel &amp; Sumikin Chemical Co., Ltd.</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Nagasaki</strong></td>
<td>NTT Electronics Co., Ltd.</td>
<td>Laser welding, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Nagasaki</strong></td>
<td>Nikon Corporation</td>
<td>Design and assembly of PDP modules</td>
</tr>
<tr>
<td><strong>Oita</strong></td>
<td>Oita City Industrial Research Institute</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Saga</strong></td>
<td>Saga Industrial Research Institute</td>
<td>Design and assembly of PDP modules</td>
</tr>
<tr>
<td><strong>Shimonoseki</strong></td>
<td>Shimonoseki Industrial Research Institute</td>
<td>Design and assembly of PDP modules</td>
</tr>
<tr>
<td><strong>Sekiyama</strong></td>
<td>Sekiyama Industrial Research Institute</td>
<td>Design and assembly of PDP modules</td>
</tr>
<tr>
<td><strong>Takamatsu</strong></td>
<td>Takamatsu Industrial Research Institute</td>
<td>Design and assembly of PDP modules</td>
</tr>
</tbody>
</table>

**Controller unit**

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<tbody>
<tr>
<td><strong>Fukuoka</strong></td>
<td>Yaskawa Electric Mfg. Co., Ltd.</td>
<td>PCBs assembly, Design and assembly of PDP modules</td>
</tr>
<tr>
<td><strong>Higashi-ku, Fukuoka</strong></td>
<td>Staubach Electronic Co., Ltd.</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
</tbody>
</table>

**Substrate/ Mounting**

<table>
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<tbody>
<tr>
<td><strong>Fukuoka</strong></td>
<td>Toshiba Corporation</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Hakata-ku, Fukuoka</strong></td>
<td>Seiko Electric Co., Ltd.</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Shimane</strong></td>
<td>Shimane Industrial Research Institute</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
</tbody>
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**Semiconductor Industry in Kyushu**

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<tr>
<td><strong>Fukuoka</strong></td>
<td>SEIKEI ELEX CO., LTD.</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Hakata-ku, Fukuoka</strong></td>
<td>Seiko Electric Co., Ltd.</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Sagamihara</strong></td>
<td>Sagamihara Industrial Research Institute</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
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**OEM Engineering**

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<tbody>
<tr>
<td><strong>Fukuoka</strong></td>
<td>NEC Corporation</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Hakata-ku, Fukuoka</strong></td>
<td>Seiko Electric Co., Ltd.</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
</tr>
<tr>
<td><strong>Shimane</strong></td>
<td>Shimane Industrial Research Institute</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
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**Software**

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<td>Seiko Electric Co., Ltd.</td>
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<tr>
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<td>Shimane Industrial Research Institute</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
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**Experimental Research**

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<td><strong>Shimane</strong></td>
<td>Shimane Industrial Research Institute</td>
<td>PCBs fabrication, Assembling/inspection of semiconductor</td>
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</table>
Analysis

Fukuoka

Wakamatsukku, Kitakyushu

STEG Company

Development for technology of LED high heat dissipation

Vitec System Engineering Inc.

Development of integrated software, Technical support, Evaluation boards related to CCD cameras; Liquid Design Systems Inc., Kitakyushu Design Center

Three-dimensional packaging technology

Kokusaku-ku, Kitakyushu

HOKKOKJSA Co., Ltd.

High density/high precision multilayer PCBs, Design/ manufacturing of CAD, Components assembling

Hoju-ku, Fukuoka

HANO MANUFACTURING CO., LTD.

PCB's, Parts assembly, Technical support of electronic devices

Hakata-ku, Fukuoka

Wabo Electronics Co., Ltd., Hakata Satellite Office

PCB assembling, High-density packaging

Chuo-ku, Fukuoka

Sunika Chemical Analysis Service, Ltd., Fukuoka Sales Division

Valves, valves for electronic devices

Sawara-ku, Fukuoka

WALT'S CO., LTD.

TIG wafer (chip) board for evaluation of next generation's assembling and packaging

Momata

INTERTEC CORP., Omuta Analysis Center

Analysis

Osaka Denshi Kougyou Co., Ltd.

Fabrication of PCBs, Circuit/pattern design, Components assembly

Mitsu Chemical Analysis & Consulting Service, Inc., Omata Works

Analysis support of electronic materials

Nagata

Origin Co., Ltd.

Assembly of PCBs

Onojo

Meidenshi Corporation

Design/fabrication of assembly of PCBs/FPGA, Development of system LSI

Nagasaki

PAC Co., Ltd

Structural strength analysis and evaluation (deformation, vibration, thermal stress) of equipment and parts

Miyazaki

Soshin Poutry Co., Ltd.

Parts of mobile communication/ communication/ broadcast/general industry devices

Saito

ULVAC KIKO Inc.

Small vacuum pumps, Small vacuum exhaust sets, Vacuum evacuation equipment, Small R sputtering equipment

Kii, Hayami-gun

Okawa Mould Designs & Engineering Co., Ltd.

Dies design, Plastic molding, 3D image visual inspection systems/equipment

Miyazaki

Miyakonjo

Soshin Poutry Co., Ltd.

Parts of mobile communication/ communication/ broadcast/general industry devices

Saito

ULVAC KIKO Inc.

Small vacuum pumps, Small vacuum exhaust sets, Vacuum evacuation equipment, Small R sputtering equipment

Kii, Hayami-gun

Miyazaki Daishin Canon Inc.

Mounting/assembly of digital cameras

Kagoshima

KYOBERA Corporation, Kagoshima Sendai Plant

Semiconductor parts, LCD color filter, Fine ceramics

Kumamoto

Kokubu Electric Corp.

Power distribution equipment

Kirishima

MT Co., Ltd.

Monitoring devices, Battery monitor, Portable power supply (by LiB), Applications of LiB

Kokubu Denki Co., Ltd.

LED lightening equipment

TOFLO CORPORATION Kagoshima Division

Fluid control device

Satsunan, Satsuna-gun

ARON DENKI CO., LTD.

Semiconductor manufacturing equipment parts (chamber, plasma CVD equipment, sputtering equipment)

Sasebo

Shinsei Electronics Co., Ltd., Sasebo Factory

Board mounting

Isahaya

SHINBUNKI ELECTRONICS CORPORATION, Head Office/Takaki Laboratory

IGBT gate drivers, DC-DC converters, Custom power units

Nagayo, Nishino-ku-

Com hearts Japan, Co., Ltd.

Electronic products, PCBs, Cylindrical design, Machine design, Assembly/test

Kumamoto

Uto

Kumamoto Marantz Corp.

Chip mounting, Assembly of semiconductor manufacturing (grinding) equipment/probe card testing board

Techno Design Ltd.

electronic packaging, mechatronics

Oita

Oita

SHELL ELECTRONICS CO., LTD.

Semiconductor manufacturing equipment (assembling and testing process), Design and assembling of PCB

Kitasenju

Denken Co., Ltd., Kikusui Plant

Fabrication/trial production of semiconductor, Visual inspection, Evaluation analysis, Reliability evaluation

Hi, Hayami-gun

ELJA Co., Ltd.

PCBs design, Development of LSI testing application, IC evaluation/analysis

Hiji

HIGH-TECH CO., LTD.

Circuit design (analog, digital, mixed signal), Layout design

HOKKOS Co., Ltd.

Substrate assembly

Miyazaki

Miyazaki

Soshin Device Co., Ltd.

Circuit units, Design/assembly of hybrid IC, Assembly of modules

Kumamoto

LAPIS SEMICONDUCTOR MIYAZAKI CO., LTD.

Logic (IC driver, Microcomputer), Foundry services (Powe/HVC MOS, BCD, EEPROM WLFLASH)

Kagoshima

Shinsei Electronics Co., Ltd., Miyakonjo Factory

Assembling/packaging of boards (automotive parts/cell phone)

Kumamoto

Okano Electronics Co., Ltd

Peltier device, Opt fiber assembly, Board mounting, Board assembly

Kiri

CAD/Design Japan Co., Ltd.

PCBs manufacturing

Minamikyushu

Takataki Electric Industry Co., Ltd., Chiran Plant

LED packaging

NIPPON KEIKI KAGOSIMA CO., LTD.

Electronic component mounting, lead frame processing

Fukuoka

Wakamatsukku, Kitakyushu

ECS Company

Automotive Embedded System

KITHIT Co., Ltd.

Speech dialog system

Vitec System Engineering Inc.

Development of integrated software, Evaluation boards related to CCD cameras

MIK Technologies, Inc.

Kokurakita-ku, Kitakyushu

HIKARI ALPHAX INC., Kitakyushu Office

High-value-added semiconductor, Electronic parts/devices, Embedded software

Yahatanishiku, Kitakyushu

GEN, Inc

Design/verification/evaluation of system LSI, Circuit design, Design of semiconductor manufacturing equipment

Kakata-ku, Fukuoka

SRA Nishi-Nihon Inc.

Software development

Embedded software

MUC Co., Ltd., Fukuoka Branch

Communications protocol system for mobile phone

Kashima Electronics Inc., Kyushu Office

Semiconductor related solutions, Taping services/ materials, Maintenance of electronic devices

Kyushu Kelkokki Co., Ltd.

Function IC tester, interface boards, FPGA/ ASIC design, Embedded software

CyberBeIng, Inc.

LSI controlling firmware, Communication middleware

Selko Service & Engineering Co., Ltd.

Security solutions

Soft-Service Co., Ltd.

Embedded software development, Control system for industrial robot

Nishimu Electronics Industries Co.,Ltd.

Control / Communication / Power systems

Network Application Engineering Laboratories Ltd., Network management system, Human Interface, Embedded software/tools

Chuo-ku, Fukuoka

CORE Corporation, Kyushu Company

Microcomputer system, Embedded system

Minami-ku, Fukuoka

Yashimassaygo Co., Ltd.

Laser sensor, Wiring save system, Image processing system

Sawara-ku, Fukuoka

Kairex Technology Inc. Fukuoka Technology Center

EDA related consulting, Software development

CYBERCRAFT SOLUTION,CO.,LTD Fukuoka Office

Manufacturing and testing semiconductor and electronic devices

SPIR Limited

FPGA, Printed wiring board, Jigs

Nanodesign Corporation

Development of IC, Related software

Hibiki System Lab Inc.

LSI full turn-key service, Development of FPGA and applied system thereof

Fujitsu Kyushu Network Technologies Limited

Development/design of hardware/firmware/software for communication devices

YOKOHAMA ARNTICS CO.,LTD.

Circuit design, Design, Development of FPGA/PLD program devices, PCB artwork

Izuka

JM Technology Inc.

Design of IT hardware/software, Design/ building of IT infrastructure

Fukuoka Software Solution Co., Ltd.

System development, Network business

Yanagawa

Kyushu Electron Co., Ltd.

Prober, Automatic pin inserter system, Wiring

continuity checker

Munakata

Hybrid Recognition Technologies Ltd.

Software for pattern recognition

Nagasaki

Nagasaki

ADL LTD, Kyushu R&D Center

Wide band receiver, Digital signal processing, applied products, ASIC

Ishashita

AVI NAGASAKI CORPORATION

Control boards for semiconductor manufacturing equipment, standard CPU, Bus board

SYTEC INOUE CORPORATION

Total system integration

Kumamoto

Kagoshima

Hybrid Recognition Technologies Ltd.

Software for pattern recognition

Kumamoto

Nagase Techno-Engineering Co., Ltd., Kyushu Service Station

Software for designing semiconductor

Kikyo, Kagoshima

SHINDENGEN KUMAMOTO TECHN RESEARCH CO.,LTD

Development of embedded software, System design

Oita

Oita

InfoWave, Inc.

Picture inspection and processing machines

Kansetsu Co., Ltd., Oita Branch Office

Electronics industry equipment, CAD applications software

Kikyo

KTS Co., Ltd.

Hotel Pay system

Kagoshima

Kirishima

MT Co., Ltd.

Monitoring devices, Battery monitor, Portable power supply (by LiB), Applications of LiB

Miyazaki

Nakatsu

Nakatsu Cosmos Electric Co., Ltd.

Variable resistors, Electronic components in cars, Plastic molding parts

Uita

KOTOKUBI SEIKAKUHO CO., LTD Kyushu Plant

Assembling of camera/digital camera/digital video

Hiji, Hayami-gun

Okawa Mould Designs & Engineering Co., Ltd.

Dies design, Plastic molding, 3D image visual inspection systems/equipment

Miyazaki

Miyakonjo

Soshin Poutry Co., Ltd.

Parts of mobile communication/ communication/ broadcast/general industry devices

Saito

ULVAC KIKO Inc.

Small vacuum pumps, Small vacuum exhaust sets, Vacuum evacuation equipment, Small R sputtering equipment

Kii, Hayami-gun

Miyazaki Daishin Canon Inc.

Mounting/assembly of digital cameras

Kagoshima

Kagoshima

KYOBERA Corporation, Kagoshima Sendai Plant

Semiconductor parts, LCD color filter, Fine ceramics

Kirishima

MT Co., Ltd.

Monitoring devices, Battery monitor, Portable power supply (by LiB), Applications of LiB

Kokubu Denki Co., Ltd.

LED lightening equipment

TOFLO CORPORATION Kagoshima Division

Fluid control device

Satsunan, Satsuna-gun

ARON DENKI CO., LTD.

Semiconductor manufacturing equipment parts (chamber, plasma CVD equipment, sputtering equipment)
Sheet metal, Welding

Fukuoka

Wakamatsu-ku, Kitakyushu
KASYU.CO.LTD
Laser processor; Water jet precision cutting, Sheet metal processing, Mechanical processing, Frame painting
Tobata-ku, Kitakyushu
Tobata Turret Company
Cold and hot forging, Die-cast processing, Machining
Kokura-ku, Kitakyushu
ITAICHIKURO CO., LTD.
Precision processing of ceramics
Higashi-ku, Fukuoka
Kyushu Meiko Co., Ltd.
Processing of industrial plastic products, Semiconductor equipment and related accessories
Hakata-ku, Fukuoka
KYUSHU NITTO SEIKO CO., LTD.
Probe pins, Ultra precision processing (cutting/grinding, Sinking/cutting, Press/pressing, etc.), Die casting
Kumamoto City

Nagasaki

Sakitama

Fuji Syoko Co., Ltd.
Frame assembling/welding and thin sheet metal processing (SUS, SS) for semiconductor/manufacturing equipment
Yukawa Crown Co., Ltd.
Semiconductor manufacturing equipment parts Omura
Iwayoshi Ism Co., Ltd.
Parts of rotary machine/cold machine/land turbine

Kumamoto

Kumamoto Techno Co., Ltd.
PCBs, Relay, Special cable processing, Assembly of semiconductor/manufacturing equipment/control panels
Shoyo Co., Ltd.
Liquid crystal equipment parts, Semiconductor parts, Jigs, Car
Shin-nippon Stainless Industry Co., Ltd.
Manufacture of sheet metal parts for IC manufacturing and assembly equipment

Arao

Hirai Seimitsu Kogyo Corporation
Semiconductor components (L/F, BGA heat sinks, mask)
FUJIMIYA CO., LTD.
Metal processing

Oita

Kagoshima Case Inc.
Parts/modules for vacuum pumps/semiconductor manufacturing equipment parts

Yarm

MARUYAMA-SK Co., Ltd.
Processing stainless steel sheet metal

Fukuoka

Kagoshima Seiki Co., Ltd.
Precision frames for semiconductor equipment and precision plating

Asaka

Fuji Syoko Co., Ltd.
Processing and precision plating

Oita

Sanai Kiko Co., Ltd.
Casting core manufacturing

Kumamoto

Kumamoto Techno Co., Ltd.
Semiconductor manufacturing equipment/control panels

Nagasaki

FUJIMIYA CO., LTD.
Parts of clean robots

Kyushu

Futaba Metal Corporation
Parts for modules for vacuum pumps/semiconductor manufacturing equipment

Kagoshima

Shin-nippon Stainless Industry Co., Ltd.
Laser and Talent pump for processing equipment parts

Onojo

Niho Iron Works Corporation
Processing stainless steel sheet metal

Kumamoto

IWAYOSHI Ism Co., Ltd.
Precision processing

Kumamoto

Kagoshima Seiki Co., Ltd.
Polishing of the sapphire substrate

Nakama

Kurimoto Co., Ltd. Fukuoka Plant
Semiconductor manufacturing equipment parts

Onojo

Kogai Seikosho Co., Ltd.
Metal processing (press, sheet metal processing)

Yamada

Kagoshima Case Inc.
Semiconductor equipment and related accessories

Nakama

Saiki

Kunisaki

Shin-nippon Stainless Industry Co., Ltd.
Precision processing of ceramics

Omura

Nagasaki

Kumamoto

Kagoshima Seiki Co., Ltd.
Semiconductor manufacturing equipment parts

Higashi-ku, Fukuoka

Kagoshima Seiki Co., Ltd.
Precision processing

Sunrise-seiko Company
Parts processing for semiconductor/optical communication related equipment

Kagoshima

Izumi

Try-mec Inc.
Processing with milling cutter

Kumamoto

YAMAHA MFG. CO., LTD.
Parts for modules for vacuum pumps/semiconductor manufacturing equipment

Takasago

Fujita Works Company Limited
High precision sheet metal processing (thin sheet TIG welding)

Sasebo

Iwayoshi Ism Co., Ltd.
Parts of rotary machine/cold machine/land turbine

Kumamoto

Kumamoto Techno Co., Ltd.
PCBs, Relay, Special cable processing, Assembly of semiconductor/manufacturing equipment/control panels

Oita

Nihon Iron Works Corporation
Processing stainless steel sheet metal

Kumamoto

Kagoshima Seiki Co., Ltd.
Precision processing

Kumamoto

Kumamoto Techno Co., Ltd.
PCBs, Relay, Special cable processing, Assembly of semiconductor/manufacturing equipment/control panels

Fukuoka

Nakama

Saiki

Shin-nippon Stainless Industry Co., Ltd.
Laser and Talent pump for processing equipment parts

Nakama

Saiki

Kunisaki

Shin-nippon Stainless Industry Co., Ltd.
Laser and Talent pump for processing equipment parts

Kumamoto

Kumamoto Techno Co., Ltd.
PCBs, Relay, Special cable processing, Assembly of semiconductor/manufacturing equipment/control panels

Fukuoka

Yashio

Kichirou

Yamaha

SYOWA CO., LTD.
High precision sheet metal processing, Communication devices/modules, Machining

Asakura

Nismo

NTK FINE POLISH Corporation, Kyushu Plant
Polishing of the sapphire substrate

Kumamoto

Kumamoto Techno Co., Ltd.
Metal processing

Hakata-ku, Fukuoka

Nippon Tungsten Co., Ltd.
Processing stainless steel sheet metal

Kumamoto

Kumamoto Techno Co., Ltd.
PCBs, Relay, Special cable processing, Assembly of semiconductor/manufacturing equipment/control panels

Shoyo Co., Ltd.
Liquid crystal equipment parts, Semiconductor parts, Jigs, Car

Shin-nippon Stainless Industry Co., Ltd.
Manufacture of sheet metal parts for IC manufacturing and assembly equipment

Arao

Hirai Seimitsu Kogyo Corporation
Semiconductor components (L/F, BGA heat sinks, mask)

FUJIMIYA CO., LTD.
Metal processing

Oita

Kagoshima Case Inc.
Precision liquifying, Laser processing, Machnetronic equipment

Saiki

Nagoya Seiaeku Co., Ltd.
Metal processing (press, sheet metal processing)

Yarm

MARUYAMA-SK Co., Ltd.
Processing stainless steel sheet metal

Kumamoto

Kagoshima Case Inc.
Precision liquifying, Laser processing, Machnetronic equipment

Kagoshima

Izumi

Try-mec Inc.
Processing with milling cutter

Kumamoto

YAMAHA MFG. CO., LTD.
Parts for modules for vacuum pumps/semiconductor manufacturing equipment

Takasago

Fujita Works Company Limited
High precision sheet metal processing (thin sheet TIG welding)

Sasebo

Iwayoshi Ism Co., Ltd.
Parts of rotary machine/cold machine/land turbine

Kumamoto

Kumamoto Techno Co., Ltd.
PCBs, Relay, Special cable processing, Assembly of semiconductor/manufacturing equipment/control panels

Fukuoka

Yashio

Kichirou

Yamaha

SYOWA CO., LTD.
High precision sheet metal processing, Communication devices/modules, Machining

Asakura

Nismo

NTK FINE POLISH Corporation, Kyushu Plant
Polishing of the sapphire substrate
Heat treatment and Gilt  

Fukuoka

Wakamatsukizu, Kitakyushu
Shinyo Corporation, Multitech Business Division, Electrotechnology Department
Exterior planting of IC lead frames, Cleaning of IC processing parts
Hitachi Metals Wakamatsu, Ltd.
Precision ball screws, Ultra precision processing (cutting, grinding/fabricated plate/sheet metal)
Kuruma
Mutsumi kasei Co., Ltd.
Fluorine resin coating, plastic coating
Asaka
Ako Co., Ltd.
Surface processing (plating) for leadframes and wafers

Edision Heat treatment Co., Ltd.
Heat treatment of dies, jigs and mechanical parts

Sasaguri, Kasuya-gun
FUKUNETSU Company
Metal heat treatment, Grinding process

Nagasaki

Tio Systems Co., Ltd.
Photocatalytic coating
Kyiyama, Miyakonojo-ku
Taguchi Plating Industry Co., Ltd.
Surface treatment (electronic plating)
Kamimine, Miyakonojo-ku
Nagase Chemical Corporation
Sasage Factory
Plating of lead frames

Aki, Fukuoka City
Aiko Co., Ltd.
Rapident processing (thin film rustproofing) of semiconductor/IC manufacturing equipment parts

Nagano

Kokushiku, Kamiyama
Knowledge Management Technology Co., Ltd.
Maintenance/management of semiconductor manufacturing facilities, Water treatment, accessories and other expendable supplies and diesel trucks
Omura
Labo Co., Ltd. Omura Process-research Center
Development of function coating technology

Kumamoto

Hitachi-kyu, Kamiyama
KUMADO METAL CO., LTD.
Electronic plating for semiconductor/(LCD/solar cell etc)

Kumamoto Bosui Kogyo Co., Ltd.
Lead frame and semiconductor plating, Jig washing

Nishinhon Electronics Industrial Corporation
Surface treatment of electronic/electrical parts

Ogic Technologies Co., Ltd.
Non-electronic Ni plating, Fluorine resin coating, Anti-electrostatic processing

Kumakura

NCC Electric Industries Co., Ltd., KUHYU DIVISION
Planting of semiconductor device

Oita

Hira Seimitsu Kogyo Corporation, Kumamoto Plant
Semiconductor components (L/F, BGA heat sinks, mask)

Tanioka

Machine Island Co., Tamana Factory
Plants (leading die etc)

Sekiyu Corporation, Kumamoto plant
Surface treatment/assembly of IC manufacturing equipment, Cleaning/maintenance of jigs

Iwaki COATING ING., LTD.
Fluorine resin coating for semiconductor and LCD manufacturing equipment

Oita

Agawa Meiki Inc.
Electrochemical/plating

Miyaizaki

Miyaizaki
Shinryo Corporation, Miyaizaki plant
Surface treatment/assembly of IC manufacturing equipment, Cleaning/maintenance of jigs

Nagose

YOSHIYAMA SURFACE FINISHING CO., LTD.
Planting (electroplate, electroless, honing) Engine parts

METEK CO., LTD. Miyaizaki Plant
Silver plating, copper plating, and lead-free tin plating

Kagoshima

Hoki

METEK CO., LTD. Kagoshima Plant
Silver plating, copper plating, and lead-free tin plating

Sasakura, Satsumasaka-gun
Teco Co., Ltd.
Electropolishing

YOSHIYAMA SURFACE FINISHING CO., LTD. Miyanojo Division
Planting (hard chrome, electroless nickel)

Plastics processing

Fukuoka

Kokuramachi-ku, Kitakyushu
YOHU CO., LTD.
Semiconductor manufacturing equipment parts
Yamano

Takron Polymer Co., Ltd.
Resin processing
Kasuya, Kasuya-gun
Denki juuhi Co., Ltd.
Cutting work for plastic precision mechanical parts

Nagasaki

Sasebo

Fuji Plastics Co., Ltd. Kyushu Plant
Cleaning equipment (water ultrasonic washing cleaning), Hooded boxes for chemical resistant, Resin processing

Matsura

CHUKOH CHEMICAL INDUSTRIES, LTD. Matsuura Plant
Fluoroplastic copper-clad laminate, Liquid crystal polymer copper-clad laminates

Kumamoto

Minamata

JNC Kihatsu Co., Ltd.
Plastics processing, IC cartridges, Buffers and fillers, Film and sheet printing

Dazaifu

Phoenix Seiko Co., Ltd.
Parts for semiconductor manufacturing equipment

Kumamoto Nichias Corporation
Plating of synthetic resin for semiconductor manufacturing equipment parts

Miyakonojo

Miyamura Co., Ltd.
Resin tank and Roll processing of vinyl chloride for semiconductor/FPD cleaning equipment

Nagasaki

Taguchi Plating Industry Co., Ltd.
Surface treatment/assembly of IC manufacturing equipment, Cleaning/maintenance of jigs

Nishinhon Electronics Industrial Corporation
Surface treatment of electronic/electrical parts

Ogic Technologies Co., Ltd.
Non-electronic Ni plating, Fluorine resin coating, Anti-electrostatic processing

Kumakura

Miyaizaki Electric INDUSTRIES CO., LTD. KYUSHU DIVISION
Planting of semiconductor device

Oita

Hitachi Seikou, Fukuoka Plant
Plating, Precision processing (cutting, grinding/fabricated plate/sheet metal/press/surface treatment)

Tsubakimoto Nishinohon Co., Ltd.
Transmission system

Kurume

Noritake Co., Limited, Kurume Factory
Optical glass prism

Yasuda Precision Co., Ltd.
Machining and processing Ceramics

Nakazono Industry Co., Ltd.
Precision mold parts

Metalpress, Fukuoka Plant
Lead frame/motor core and dies of them, Dies (Purity tungsten/molybdenum products)
Ariga, Nishinamisakura-ku
YSK Co., Ltd. Kyushu Plant
Dye shaft, Precision processing machine parts

Kumamoto

Amaiku

AMAKUSA OPTICAL COLTD
Optical glass prism

Nakano, Tamana-gun
Fuji Die Co., Ltd. Kumamoto Works
Ultra hard tools

Kumamoto

Nakazono Industry Co., Ltd.
Precision machining parts, Vacuum equipment, Liquid crystal and semiconductor manufacturing equipment

Kagoshima

Satsumasaka-ku
Zikyu Seiko Company
Metal press, NC index
Semiconductor Industry in Kyushu

Itosima
Kumamoto Seiken Kogyo Co., Ltd.
- Precision die parts, tooling, ceramics, Parts
- Foreman Co., Ltd.
- Precision dies and IC dies
Shinsai, Kusyu-gun

Daiya-Saka Seiko Co., Ltd.
- Precision jigs for magnetic resistance heads, Precision dies
- Manufacture of precision of ceramics
Ashiya, Onita-gun

Futervtech Co., Ltd.
- Design and manufacture dies and dies parts
- Mournaki, Onga-gun

Unoi Seiko Co., Ltd.
- Tool handler, Taping equipment, Singulation equipment
- Ball mounter, Trim/form dies
Ogaki, Onga-gun

Tomra Co., Ltd.
- Dies for cutting/molding, Jigs for bonding
Oniga, Onga-gun

WORKS Co., Ltd.
- Dies for semiconductor, lenses
Kurata, Kurate-gun

Fujiseko Co., Ltd.
- Precision dies of lead frame, Forming dies
Kurata, Kurate-gun

Saga

Shotoku Zerotech Co., Ltd.
- IC press dies, Ultra-hard parts, Metal press tools
TOWA Corporation, Kyushu Work
- Ultra precision dies for semiconductor resin enclos-
ure equipment, Packaging/singulation equipment
Kunazaki

Yagumo Factory Co., Ltd.
- Automated/bake/automatic machine labor-saving
- components, Semiconductor related equipment
Kumamoto

Higashi-ku, Kumamoto

Japanrich Co., Ltd.
- Precision mold, jigs and tools
Yatsushiro

KFK Co., Ltd.
- Jigs/tools, Dies
Yamaga

Meisou Inc.
- Dies for molding
Nankan, Tamana-gun

NEXUS Co., Ltd.
- Dies of lead frame, Ultra precision parts
Oto, Kitkuchi-gun

Otsu Tech Co., Ltd.
- Metal cutting, Precision dies
Takamori, Aso-gun

Alpha-Tech Inc.
- Semiconductor manufacturing equipment parts, mold for injection molding
Nishikata, Aso-gun

Nexus Precision Inc.
- Dies of lead frame, Parts of semiconductor
- Manufacturing equipment
Matsumi, Kastami-gun

Nissei Denshi Co., Ltd.
- Lead frames, LCD parts
Fukuoka

Miyakonojo

Izumi

Yahatahagishu-ku, Kitakyushu

Yoshikawa Kogyo Co., Ltd.
- Precision press of electronic parts, Picture processing equipment for semiconductors
Higashi-ku, Fukuoka

HANO MANUFACTURING CO., Ltd.
- PCBs, Parts assembling, Technical support of electronic devices
Nishiku, Fukuoka

Showa Electric Laboratory Co., Ltd.
- IC testing handler, LCD inspection equipment
Kurume

Cashika Co., Ltd.
- Components of precision and labor-saving devices
Takei Electric Industries Co., Ltd.
- Kurume Works

- Optical disc manufacturing equipment, Laser processing machines (thin film processing for solar cell)
Izuka

Yoshizuka Seiki Corporation
- Futere processing parts/assembling for microelectronics assembling/packaging machines
Yukahashi

Yasukawa Siemens Automation & Drive Corp.
- Yukahashi Division
- Design, manufacture, sales, and maintenance of electric machines and systems

Sasebo

JDC, Inc.
- Metal coil processing, Industrial machinery
Nakaya, Nishigun

Com hearts Japan, Co., Ltd.
- Electronic products, PCBs, Cylindrical design, Machine design, Assembly/test

Kumamoto

Kumamoto

Hirata Corporation, Kumamoto Plant
- Automatic power trains/parts, FPD manufacturing equipment, Battery engineering
Yatsushiro

Sakura Seiki Co., Ltd.
- TAB handler, IC handler, semiconductor inspection equipment, Industrial robots
Kikujima

KOY Electric Co., Ltd.
- Kumamoto Division
- Semiconductor manufacturing/inspection equipment, Design of digital/analog circuit
SANHA HI-TECH Co., Ltd.
- Headquarters/Fabrication Facility
- Semiconductor manufacturing equipment parts, Jigs/tools, Equipment for clean room
Synergy System Co., Ltd.
- Device design, Machining, Assembly
Kumamoto

Kumamoto Marantz Corp.
- Chip mounting, Assembly of semiconductor machining
- (grinding) equipment/probe card testing board
Kumamoto

Kumamoto IDM Corporation
- Semiconductor manufacturing equipment, IC testing handler
Rising Advanced Technology Co., Ltd.
- Device design, Machining, Assembly
Nankan, Tamana-gun

Yoshino Denki Kougyou KK
- Assembly of a semiconductor/IC manufacturing equipment
Nakagawa, Chikushi-gun

Techno Design Ltd.
- electronic packaging, mechatronics
Kasjima, Kaminashiki-gun

Preceed Co., Ltd.
- Semiconductor/FPD manufacturing equipment (coating, separation, cleaning, conveyance, resist coating)
Miyawaka, Kaminashiki-gun

Human Co., Ltd.
- Employment agency, Semiconductor manufacturing equipment, Measurement/evaluation service

Dita

Oita

Briteco Co., Ltd.
- Probe cards, PCBs, LCDs, solar cell related equipment
Bungo-takada

Sasai Seiko Co., Ltd.
- Part shape of equipment
Yufuin

AK System Co., Ltd.
- Semiconductor manufacturing equipment, Control, Cleanroom system
Denken Co., Ltd.
- Laser, Test service
Kurashiki

Musashiyashi Industry Co., Ltd.
- Processing of semiconductor manufacturing equipment parts

Sasebo

Myakonojo

System Engineering Co., Ltd.
- IC test handler, IC inspection equipment, Die parts
Nobeoka

Nakazono Industry Co., Ltd.
- Precision mechanics parts, Vacuum equipment, Liquid crystal and semiconductor manufacturing equipment

Kagoshima

Izumi

Try-mec Inc.
- Processing with milling cutter
Hidoki

SYEURYOKUKA GIKEN Co., Ltd.
- Semiconductor manufacturing/inspection equipment (laser marking, multi functional taping machines), Robots
Surikuma, Satsuma-gun

ARON DENKI Kogyo Co., Ltd.
- Semiconductor manufacturing equipment parts (chamber, plasma CVD equipment, sputtering equipment)
Kotobuki Precision Co., Ltd.
- Precision mold parts

Fukuoka

Miwa Precision Industry Ltd.
- Dies parts, Precision machining
Kagoshima

Kusama

Togo Co., Ltd.
- Design and manufacture of IC press dies, Dies maintenance,
- Fabrication of dies components and precision parts
Satsumasendai

Hiwai Seiko Co., Ltd.
- Precision dies, Various components, Jigs
Kirishima

MICRO-CUT CO., LTD.
- Mold component for photonic technology
Satsuka, Satsuma-gun

Kotobuki Precision
- Precision mold parts

Miyazaki

Kumamoto

KOKUKU Co., Ltd.
- IC dies, Design/fabrication of die related equipment
Hirasewa Precision Co., Ltd.
- Manufacture of semiconductor leadframe preci-
- sion dies and parts Precision parts processing
Myakonojo

System Engineering Co., Ltd.
- IC test handler, IC inspection equipment, Die parts
Nichinan

Miyagoe Precision Industry Ltd.
- Die parts, Precision machining equipment

Kagoshima

Kusama

Togo Co., Ltd.
- Design and manufacture of IC press dies, Dies, fabrication of dies components and precision parts
Satsumasendai

Hiwai Seiko Co., Ltd.
- Precision dies, Various components, Jigs
Kirishima

MICRO-CUT CO., LTD.
- Mold component for photonic technology
Satsuka, Satsuma-gun

Kotobuki Precision
- Precision mold parts

Fukuoka

Yahatahagishu-ku, Kitakyushu

Yoshikawa Kogyo Co., Ltd.
- Precision press of electronic parts, Picture processing equipment for semiconductors
Higashi-ku, Fukuoka

HANO MANUFACTURING CO., Ltd.
- PCBs, Parts assembling, Technical support of electronic devices
Nishiku, Fukuoka

Showa Electric Laboratory Co., Ltd.
- IC testing handler, LCD inspection equipment
Kurume

Cashika Co., Ltd.
- Components of precision and labor-saving devices
Takei Electric Industries Co., Ltd.
- Kurume Works

- Optical disc manufacturing equipment, Laser processing machines (thin film processing for solar cell)
Izuka

Yoshizuka Seiki Corporation
- Futere processing parts/assembling for microelectronics assembling/packaging machines
Yukahashi

Yasukawa Siemens Automation & Drive Corp.
- Yukahashi Division
- Design, manufacture, sale, and maintenance of electric machines and systems
## Semiconductor Industry in Kyushu

**Device software**

<table>
<thead>
<tr>
<th>Location</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyushu</td>
<td>Kakita-ku, Fukuoka</td>
</tr>
<tr>
<td></td>
<td>Kyushu Keisakki Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Function IC tester, Interface boards, FPGA/ASIC design, Embroided software</td>
</tr>
<tr>
<td></td>
<td>Sueda-ku, Kyuki Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>System/heavy electric/information/machinery equipment, Mechatronics products</td>
</tr>
<tr>
<td></td>
<td>Seiko Electric Company Ltd.</td>
</tr>
<tr>
<td></td>
<td>Hello protocol, receiving/distribution panels, Control systems for electric power/water supply</td>
</tr>
<tr>
<td></td>
<td>Sawara-ku, Fukuoka</td>
</tr>
<tr>
<td></td>
<td>NEC Software Kyushu Ltd.</td>
</tr>
<tr>
<td></td>
<td>SI software design, development and employment of a computer system, Software development</td>
</tr>
<tr>
<td></td>
<td>KYEC Japan K.K.</td>
</tr>
<tr>
<td></td>
<td>LSi test program, Test boards, It's support system, LSI test on constipation</td>
</tr>
<tr>
<td></td>
<td>Fujitsu Kyushu Network Technologies Limited</td>
</tr>
<tr>
<td></td>
<td>Development/design of hardware/firmware/ software for communication devices</td>
</tr>
<tr>
<td></td>
<td>Saga</td>
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<td></td>
<td>Imari</td>
</tr>
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<td></td>
<td>NT Corporation</td>
</tr>
<tr>
<td></td>
<td>Industrial washing enterprise, Software design, Maintenance of semiconductor manufacturing facilities</td>
</tr>
<tr>
<td></td>
<td>Kikuchi-gun, Kikuchi-kita-ku, Kumamoto</td>
</tr>
<tr>
<td></td>
<td>Isahaya</td>
</tr>
<tr>
<td></td>
<td>Sago Plans Industry Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Development of automatic controlling hardware/software, Handling equipment in clean room</td>
</tr>
<tr>
<td></td>
<td>Nagasaki</td>
</tr>
<tr>
<td></td>
<td>AQR LTD, Kyushu R&amp;D Center</td>
</tr>
<tr>
<td></td>
<td>Wide band receiver, Digital signal processing applied products, ASIC</td>
</tr>
<tr>
<td></td>
<td>Koyowaden Industry Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment modules (material handling, mechatronics, conveyance), Software</td>
</tr>
<tr>
<td></td>
<td>Mitsubishi Electric Corporation, Nagasaki Office</td>
</tr>
<tr>
<td></td>
<td>System integration</td>
</tr>
<tr>
<td></td>
<td>Higashi-ku, Kumamoto</td>
</tr>
<tr>
<td></td>
<td>ANAGASAKI CORPORATION</td>
</tr>
<tr>
<td></td>
<td>Control boards for semiconductor manufacturing equipment, standard CPU, Bus board</td>
</tr>
<tr>
<td></td>
<td>SYSTEIC INOU CORPORATION</td>
</tr>
<tr>
<td></td>
<td>Total system integration</td>
</tr>
<tr>
<td></td>
<td>Omura</td>
</tr>
<tr>
<td></td>
<td>Shinwa Controls Co., Ltd.</td>
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<tr>
<td></td>
<td>Kyushu Plant</td>
</tr>
<tr>
<td></td>
<td>Precision temperature control system, Automatic control devices, Air purifier for local area in clean room</td>
</tr>
</tbody>
</table>

**Equipment for Wafer process**

<table>
<thead>
<tr>
<th>Location</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fukuoka</td>
<td>Kitaura-kita-ku, Kitayasu</td>
</tr>
<tr>
<td></td>
<td>Kaminokawa Technology Co.</td>
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<tr>
<td></td>
<td>ESPEC KYUSHU CORP.</td>
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<tr>
<td></td>
<td>Cure ovens, Clean ovens, Burn-in equipment, Evaluation devices, Solder reflow equipment</td>
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<tr>
<td></td>
<td>TOTO LTD.</td>
</tr>
<tr>
<td></td>
<td>Various precision ceramics, Ceramic components for optical communication</td>
</tr>
<tr>
<td></td>
<td>YASKAWA Electric Corporation</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment, Wafer transfer systems, LCD glass substrate handling robots</td>
</tr>
<tr>
<td></td>
<td>Adavantest Corporation, Kitakyushu R&amp;D Center</td>
</tr>
<tr>
<td></td>
<td>R&amp;D of new generation semiconductor testing system</td>
</tr>
<tr>
<td></td>
<td>Yatsuyakita-kita-ku, Kitakyushu</td>
</tr>
<tr>
<td></td>
<td>TAKADA CORPORATION</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment, Water cleaning, Dry cleaning, Pool cleaning, Automated equipment, PV screen printing equipment, PV manufacturing equipment</td>
</tr>
<tr>
<td></td>
<td>Size: Kusano</td>
</tr>
<tr>
<td></td>
<td>PMT CORPORATION</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment, Parts, Devices, Proportion photography, Minimal lithography</td>
</tr>
<tr>
<td></td>
<td>Shingu, Kusaya-gun</td>
</tr>
<tr>
<td></td>
<td>DAIICHI INSTITUTION INDUSTRY CO., LTD.</td>
</tr>
<tr>
<td></td>
<td>Contactless LCD handling equipment, High-speed vertical handling equipment, Contactless cleaning devices</td>
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<tr>
<td></td>
<td>Nagasaki</td>
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<td></td>
<td>Sasebo</td>
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<tr>
<td></td>
<td>Fuji Plastics Co., Ltd.</td>
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<td></td>
<td>Kyushu Plant</td>
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<tr>
<td></td>
<td>Cleaning equipment (wafer ultrasonic cleaning), Hooded bulbs for chemical resistant, Resist processing</td>
</tr>
<tr>
<td></td>
<td>Omura</td>
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<tr>
<td></td>
<td>Epicrew Corporation</td>
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<tr>
<td></td>
<td>Electric wave with devices</td>
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<tr>
<td></td>
<td>Kumamoto</td>
</tr>
<tr>
<td></td>
<td>Haseki-kita, Kumamoto</td>
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<tr>
<td></td>
<td>OOKUMA ELECTRONIC CO., LTD.</td>
</tr>
<tr>
<td></td>
<td>LCD inspection equipment, Power supply for Organic EL, Image processing equipment for LCD inspection</td>
</tr>
<tr>
<td></td>
<td>TOHO Electric Inc. Kumamoto Sales Office</td>
</tr>
<tr>
<td></td>
<td>Probe cards, Contacts, Kumamoto</td>
</tr>
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<td></td>
<td>Hirata Corporation, Kumamoto Plant</td>
</tr>
<tr>
<td></td>
<td>Automotive power trains/parts, FPD manufacturing equipment, Battery engineering</td>
</tr>
<tr>
<td></td>
<td>THREEDYNE CORPORATION</td>
</tr>
<tr>
<td></td>
<td>Overhaul, Cleaning equipment, Chemical dispense equipment</td>
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<tr>
<td></td>
<td>Kaichi</td>
</tr>
<tr>
<td></td>
<td>Japan Electronic Materials Corp. Kumamoto Factory</td>
</tr>
<tr>
<td></td>
<td>Probe card, Electronic components (heaters for CRTs, etc.)</td>
</tr>
<tr>
<td></td>
<td>Mirail Co., Ltd. Kumamoto Division</td>
</tr>
<tr>
<td></td>
<td>Baskets and shipping vessels of silicon wafer</td>
</tr>
<tr>
<td></td>
<td>Tokyo Electron Kyushu Ltd. Koshi Plant</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment (coater/developer, surface preparation system)</td>
</tr>
<tr>
<td></td>
<td>RORZE CORPORATION, Kyushu Factory</td>
</tr>
<tr>
<td></td>
<td>Handling equipment for wafer and LCD glass substrates</td>
</tr>
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<td></td>
<td>Ozu, Kusuki-gun</td>
</tr>
<tr>
<td></td>
<td>Tokyo Electric Kyushu Ltd. Ozu Plant</td>
</tr>
<tr>
<td></td>
<td>Coater/coating, FPD</td>
</tr>
<tr>
<td></td>
<td>Hagiwara Engineering Corporation</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment</td>
</tr>
<tr>
<td></td>
<td>Nishinomiya, Ako-ku</td>
</tr>
<tr>
<td></td>
<td>HORIBA STEC, Co., Ltd. Aso Plant</td>
</tr>
<tr>
<td></td>
<td>Material analysis devices, Contamination inspection devices for lithographic process</td>
</tr>
<tr>
<td></td>
<td>Kamisato, Kusuki-ku</td>
</tr>
<tr>
<td></td>
<td>Micro Engineering, Inc. Kumusu Branch</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment (wafer washing and cleaning), FPD manufacturing equipment (wet process)</td>
</tr>
<tr>
<td></td>
<td>Oita</td>
</tr>
<tr>
<td></td>
<td>ULVAC KYUSHU CORPORATION, Oita CS center</td>
</tr>
<tr>
<td></td>
<td>Maintenance of vacuum system for semiconductor and FPD</td>
</tr>
<tr>
<td></td>
<td>Miyazaki</td>
</tr>
<tr>
<td></td>
<td>Miyazaki System Engineering Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>IC test handler, IC inspection equipment, Die parts</td>
</tr>
<tr>
<td></td>
<td>Kagoshima</td>
</tr>
<tr>
<td></td>
<td>Kirishima</td>
</tr>
<tr>
<td></td>
<td>ULVAC KYUSHU CORPORATION</td>
</tr>
<tr>
<td></td>
<td>Sputtering equipment, Vacuum evacuation equipment, Vacuum furnaces, Exhausted and vacuum pumping systems</td>
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</table>

**Equipment for Packaging and Testing process**

<table>
<thead>
<tr>
<th>Location</th>
<th>Company</th>
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<tbody>
<tr>
<td>Fukuoka</td>
<td>Wakamatsu-ku, Kitakyushu</td>
</tr>
<tr>
<td></td>
<td>KYUSHU NISSHO Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Die bonds, Heater blocks for mounting heating, Ceramic heaters, Reflow equipment</td>
</tr>
<tr>
<td></td>
<td>Tobata-ku, Kitakyushu</td>
</tr>
<tr>
<td></td>
<td>Japan System Engineering Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Development and fabrication of electronic control devices, Wafer sorters</td>
</tr>
<tr>
<td></td>
<td>Kakita-kita, Kitakyushu</td>
</tr>
<tr>
<td></td>
<td>ESPEC KYUSHU CORP.</td>
</tr>
<tr>
<td></td>
<td>Cure ovens, Clean ovens, Burn-in equipment, Evaluation devices, Solder reflow equipment</td>
</tr>
<tr>
<td></td>
<td>TOTO LTD.</td>
</tr>
<tr>
<td></td>
<td>Various precision ceramics, Ceramic components for optical communication</td>
</tr>
<tr>
<td></td>
<td>Yatahata-guchi-ku, Kitakyushu</td>
</tr>
<tr>
<td></td>
<td>Adavantest Corporation, Kitakyushu R&amp;D Center</td>
</tr>
<tr>
<td></td>
<td>R&amp;D of new generation semiconductor testing system</td>
</tr>
<tr>
<td></td>
<td>GEL Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Characteristics tester of semiconductor, Wire bonders, Laser marking machine</td>
</tr>
<tr>
<td></td>
<td>TAKADA CORPORATION</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment (wafer cleaning, Dry cleaning), Pool cleaning, Equipment, High purity gases</td>
</tr>
<tr>
<td></td>
<td>Fukuoka</td>
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<tr>
<td></td>
<td>Shока Electric Technology Co., Ltd.</td>
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<td></td>
<td>IC testing handler, LCD inspection equipment</td>
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<td></td>
<td>Kuma</td>
</tr>
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<td></td>
<td>Asahi Engineering Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Semiconductor packaging equipment (auto molding), Precision dies</td>
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<tr>
<td></td>
<td>Oita</td>
</tr>
<tr>
<td></td>
<td>Meiho Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Encapsulation dies for semiconductors, Encapsulation system for semiconductors</td>
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<tr>
<td></td>
<td>Oita</td>
</tr>
<tr>
<td></td>
<td>DAIICHI SEIKO CO., LTD. Fukuoka Ogi Plant</td>
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<tr>
<td></td>
<td>Semiconductor molding equipment</td>
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<tr>
<td></td>
<td>Dazaiko</td>
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<tr>
<td></td>
<td>NFT Company</td>
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<td></td>
<td>Mold design</td>
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<td>Miyawaka</td>
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<tr>
<td></td>
<td>JAPAN FINETECH CO., LTD.</td>
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<tr>
<td></td>
<td>Resin enclosure/wafer cleaning equipment, POP screen printing equipment, PV manufacturing equipment</td>
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<tr>
<td></td>
<td>Nagakawa, Chikushin-gun</td>
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<td></td>
<td>Adweldes Co. Ltd.</td>
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<tr>
<td></td>
<td>Li-ion battery, Semiconductor, FPD, solar cell and OLED display manufacturing equipment</td>
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<td>Sasebo-gun</td>
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<td></td>
<td>RIX CORPORATION</td>
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<tr>
<td></td>
<td>Fukuoka Factory</td>
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<td></td>
<td>Flux cleaning, Defensive equipment for IC, Resin mold, Rotary joints for CMPs</td>
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<tr>
<td></td>
<td>Mizumaki, Onga-gun</td>
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<td></td>
<td>Jeno Seiki Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Test handler, Taping equipment, Singulation equipment, Blinding, Counter, Trim/form dies</td>
</tr>
<tr>
<td></td>
<td>Onga, Onga-ku</td>
</tr>
<tr>
<td></td>
<td>AQUATECH CO., LTD.</td>
</tr>
<tr>
<td></td>
<td>Vacuum washing and drying equipment</td>
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<tr>
<td></td>
<td>Saga</td>
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<tr>
<td></td>
<td>Towa Corporation, Kyushu Work</td>
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<tr>
<td></td>
<td>Ultra precision dies for semiconductor, Resin enclosure equipment, Packaging/singulation equipment</td>
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<tr>
<td></td>
<td>Mannai-ku</td>
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<tr>
<td></td>
<td>Takai Electric Industries Co., Ltd.</td>
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<tr>
<td></td>
<td>Optical disc manufacturing equipment, Laser processing machines (thin film processing for solar cell)</td>
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<tr>
<td></td>
<td>Kumamoto</td>
</tr>
<tr>
<td></td>
<td>Yatsushiro</td>
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<tr>
<td></td>
<td>SAKURAI SEIKI Co., Ltd.</td>
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<tr>
<td></td>
<td>FST handler, IC handler, semiconductor inspection equipment, Industrial robots</td>
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<tr>
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<td>Oita</td>
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<tr>
<td></td>
<td>OYO Electric Co., Ltd.</td>
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<tr>
<td></td>
<td>Kumamoto Division</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing/inspection equipment, Design of digital/analog circuit design</td>
</tr>
<tr>
<td></td>
<td>Inc.</td>
</tr>
<tr>
<td></td>
<td>Inoue Corporation, Kumamoto site</td>
</tr>
<tr>
<td></td>
<td>Electrical inspection equipment, Carrier, Device carrier, (mother board frame, magazine, stick magazine)</td>
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<tr>
<td></td>
<td>Oita</td>
</tr>
<tr>
<td></td>
<td>Fuji Light Metal Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Semiconductor/FPD manufacturing equipment (parts and carrier, frame carrier), Vacuum system, Color measurement, Wafer carrier, Reflow equipment, Packaging equipment)</td>
</tr>
<tr>
<td></td>
<td>Ozu, Kusuki-gun</td>
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<tr>
<td></td>
<td>TERRASYSTEM Co., Ltd.</td>
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<tr>
<td></td>
<td>IC visual inspection equipment, Carrier device</td>
</tr>
<tr>
<td></td>
<td>Nehara-ku</td>
</tr>
<tr>
<td></td>
<td>Nippon Precision Inc.</td>
</tr>
<tr>
<td></td>
<td>Dies of lead frame, Parts of semiconductor manufacturing equipment</td>
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<td></td>
<td>Oita</td>
</tr>
<tr>
<td></td>
<td>STK Technology Co., Ltd.</td>
</tr>
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<td>Reliance evaluation/inspection, Burn-in equipment, Semiconductor manufacturer/evaluation equipment</td>
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<tr>
<td></td>
<td>SHELL ELECTRONICS Co., LTD.</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment (assembly and testing process), Design and Simulation of semiconductor</td>
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<tr>
<td></td>
<td>Takai Tools &amp; Materials Co., Ltd.</td>
</tr>
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<td></td>
<td>Taping machines, Visual inspection equipment</td>
</tr>
<tr>
<td></td>
<td>Takeda Corporation</td>
</tr>
<tr>
<td></td>
<td>Semiconductor manufacturing equipment (carrier, Die bonding, Indexing, Laser marking)</td>
</tr>
<tr>
<td></td>
<td>PLESON LLC</td>
</tr>
<tr>
<td></td>
<td>Development of semiconductor testing processes, Design equipment, Various equipment (auto testing, Tatsuyama-ku, Kitakyushu</td>
</tr>
</tbody>
</table>
**Support, Maintenance, Clean Room, Human capital**

**Fukuoka**
- Mok-ku, Kitakyushu
  - Asahi Koka Technical Co., Ltd. Vacuum Equipment Factory
- Kudakita-ku, Kitakyushu
  - Semiconductor related vacuum equipment
- Kinko-ku, Kitakyushu
  - Ceramic coating equipment, Sample preparation equipment
- Tama-ku, Kitakyushu
  - Cleanroom for vacuum equipment manufacturing

**Rigaku Corporation. Kyushu Branch**
Semiconductor Industry in Kyushu

Direct Flight
China (Shanghai) - Fukuoka, Nagasaki, Kagoshima
China (Dalian) - Fukuoka
Bangkok - Fukuoka
Ho Chi Minh - Fukuoka

Access Map / Major Economic Indicator

Expressway

Fukuoka IC - 101 min.
Sapgyato IC - 62 min.
Nagasaki IC - 6 min.

Railway

Hakata - Kitakyushu 20 min.
Hakata - Saga 40 min.
Hakata - Kumamoto 35 min.
Hakata - Nagasaki 120 min.
Hakata - Oita 120 min.
Hakata - Kagoshima 80 min.
Hakata - Miyazaki 180 min.

Economic Indicator

<table>
<thead>
<tr>
<th>Category</th>
<th>Unit / Year</th>
<th>Figure</th>
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</thead>
<tbody>
<tr>
<td>Land area</td>
<td>km² / 2015</td>
<td>42,191</td>
</tr>
<tr>
<td>Population</td>
<td>people / 2015</td>
<td>13,353</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>Persons / 2014</td>
<td>1.59</td>
</tr>
<tr>
<td>Labor force</td>
<td>people / 2015</td>
<td>2,604</td>
</tr>
<tr>
<td>Regional GDP</td>
<td>¥ million / 2013</td>
<td>443,051</td>
</tr>
<tr>
<td>Income per capita</td>
<td>¥ / 2013</td>
<td>2,546</td>
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<tr>
<td>Unemployment rate</td>
<td>% / 2015</td>
<td>3.8</td>
</tr>
<tr>
<td>Total cash savings per month</td>
<td>¥ / 2015</td>
<td>315,795</td>
</tr>
<tr>
<td>Consumption of petroleum</td>
<td>1,000 m³ / 2015</td>
<td>15,236</td>
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<tr>
<td>Automobile production</td>
<td>1,000 units / 2015</td>
<td>1,187</td>
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<tr>
<td>Grade steel production</td>
<td>1,000 t / 2015</td>
<td>15,701</td>
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<tr>
<td>IC production</td>
<td>¥ / 1 million / 2015</td>
<td>6,283</td>
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Source of Expressway: Website of NEXCO West (as of January 2017)
<table>
<thead>
<tr>
<th>Category</th>
<th>Family</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semiconductor Fabrication</strong></td>
<td>Design &amp; EDA tools</td>
<td>EDA tool, Simulation Software, etc</td>
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<tr>
<td></td>
<td>Materials for Wafer Process</td>
<td>Material gases, Photoresists, Target materials</td>
</tr>
<tr>
<td></td>
<td>Pattern formation, Deposition</td>
<td>Oxide film, Photoresists, Etching, Ion Infusion, Electrode</td>
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<tr>
<td></td>
<td>Wafer test</td>
<td>Wafer test, Evaluative analysis</td>
</tr>
<tr>
<td></td>
<td>Bumping</td>
<td>Bumping</td>
</tr>
<tr>
<td></td>
<td>Recycling, Reusing</td>
<td>Wafer reclamation, Film removal</td>
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<td></td>
<td>Assembly and Testing process</td>
<td>Dicing, Mounting, Molding, Trim&amp;Forming, Wire Bonding, Burn-in etc.</td>
</tr>
<tr>
<td></td>
<td>Materials for Assembly and Testing process</td>
<td>Leadframes, Bonding Materials, Encapsulation</td>
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<tr>
<td></td>
<td>Final test and Analysis</td>
<td>Final test, Marking</td>
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<td><strong>Electronic packaging</strong></td>
<td>Circuit design, Control unit design</td>
<td>Electronic substrate, Control unit design</td>
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<td>Substrate/ Mounting</td>
<td>Substrate/ Mounting</td>
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<td>Controller unit</td>
<td>Electricity distribution system, Image processing equipment,</td>
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<td>Evaluation and Analysys</td>
<td>Measuring system</td>
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<td>Embedded software</td>
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<td><strong>Production Engineering</strong></td>
<td>Design</td>
<td>Machine design</td>
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<td>Sheet metal, Welding</td>
<td>Sheet metal, Welding, Etching</td>
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<td>Machining</td>
<td>Cutting, Grinding, Ceramics processing</td>
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<td>Heat treatment and Gilt</td>
<td>Heat treatment and Gilt</td>
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<td>Plastics processing</td>
<td>Plastics processing, Injection molding</td>
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<td>Machine element, Tools</td>
<td>Wire Harness, Spring, Cam</td>
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<td>Mold</td>
<td>Precision dies, Sealed mold</td>
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<td>Machine assembly</td>
<td>Unit assembly</td>
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<tr>
<td><strong>Equipment and Machinery engineering</strong></td>
<td>Device Embedded software</td>
<td>Software for Production equipment management, Package, System integrator</td>
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<td></td>
<td>Equipment for Wafer process</td>
<td>Washing equipment, Drying equipment, Thermal oxidizer, Spin coater, etc</td>
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<tr>
<td></td>
<td>Equipment for Packaging and Testing process</td>
<td>Dicer, Die bonder, Molding equipment, Plating equipment, Burn-in system etc</td>
</tr>
<tr>
<td></td>
<td>Support, Maintenance, Clean Room, Human capital</td>
<td>Equipment maintenance, Pre-sale, Clean room, Temporary staffing</td>
</tr>
<tr>
<td></td>
<td>Others Electronic components</td>
<td>Capacitor, Memory, Sensor, LED etc</td>
</tr>
</tbody>
</table>

*Kyushu Industrial Advancement Center (Kyushu Semiconductor Industries & Electronics Technology Innovation Association) produced this leaflet, commissioned by METI Kyushu.

*Information providers do not cover all companies in Kyushu in this leaflet.

*As for the companies in this leaflet, METI Kyushu do not guarantee the quality of their technologies.