



IBIDEN Co., Ltd. https://www.ibiden.com/



2-1, Kanda-cho, Ogaki, Gifu 503-8604, Japan Tel: 0584-81-3111

■Issued : Corporate Planning Group, Corporate Planning Division







This report uses Forest Stewardship Council®(FSC)-certified paper. This certification means that the paper is made using wood from forests managed appropriately. This report uses highly biodegrable and de-inkable vegetable ink. Waterless printing with no release of toxic effluents has been used. In addition, the graphics including graphs and charts can be easily identified by people with all types of color vision.



Our aim is to be a company that grows stably by developing human resources, creating a place where more diverse people can play lively and active roles.

IBIDEN Group started business in 1912 as Ibigawa Electric Power Co., Ltd. with the mission of being the engine that would drive the local economy. In its over-100-year history the environment around our group has drastically changed. However, our company has a history of taking up challenges in product development that meets the needs of the time by working together toward the same goals under any circumstances, and by tirelessly mastering our original technologies.

In fiscal 2018, we launched our five-year mid-term management plan, "To the Next Stage 110 Plan" in order to realize sustainable growth toward the next 100 years by overcoming environmental changes. Under our basic policy, "What supports corporate activities is human resources," we will actively invest our management resources in the growing market on the basis of human resources, realize our stable growth by strengthening the competitiveness of our existing businesses and by expanding new businesses, and drive our ESG-central operation in order to become a company trusted by all stakeholders.

We look forward to your continued support for the IBIDEN Group for many years to come.

President & CEO

Mid-Term Management Plan

To The **Next Stage** 110 Plan

FY2018 to FY2022

To realize our sustainable growth toward in the next 100 years, IBIDEN Group launched our five-year mid-term management plan from fiscal 2018 to fiscal 2022, "To the Next Stage 110 Plan". We will promote our ESG business management in order to become a company trusted by all stakeholders.

Pillar of the strategy

- •Strengthening competitiveness of existing businesses
- •Expanding new businesses
- •Development of human resources
- •Driving ESG-central operation

contents

Top Message ····	1	Business & Product Electronics	
Mid-Term Management Plan · · · · · · · · · · · · · · · · · · ·	2	Business & Product Ceramics	1
Management Philosophy · · · · · · · · · · · · · · · · · · ·	3	Business & Product Other	1
Changes in Technology and Business ·····	5	Global Network ·····	1
Value Creation Story	7	Corporate Information	1

01 IBIDEN CORPORATE PROFILE 02

The IBIDEN WAY

—our corporate philosophy passed down through generations and across borders We strive to achieve sustainable growth by implementing ESG management.

IBIDEN Brand Logo Mark



This cycle reflects the attitudes of people brought together from around the world to become recognized professionals in their fields as they work continuously to meet new challenges.

IBIDEN Group Charter of Behavior

We have established the IBIDEN Group Charter of Behavior by reflecting our roles as a global corporation as well as requests from our stakeholders in order to share the goals for the entire Group. Article 1: Compliance with laws, regulations, and ethics

Article 2: Development together with stakeholders

Article 3: Providing customer delight

 $Article \ 4 \hbox{:} \ Management \ based \ on \ global \ standards$

Article 5: Harmony with nature

Article 6: Attractive and vibrant company

IBIDEN WAY MISSION We contribute to the progression of society through innovative technology, with respect for both individuals and the global environment. SPIRIT Trust through Integrity "Wa" Teamwork and Synergy Challenge with Passion IBI-TECHNO Innovation

Trust through Integrity

Gaining customer and societal trust through "Genchi Genbutsu*"

*Genchi Genbutsu: Go and See for yourself to thoroughly understand the situation

"Wa" Teamwork and Synergy

Integrating knowledge and wisdom from the employee involvement for greater power.

Challenge with Passion

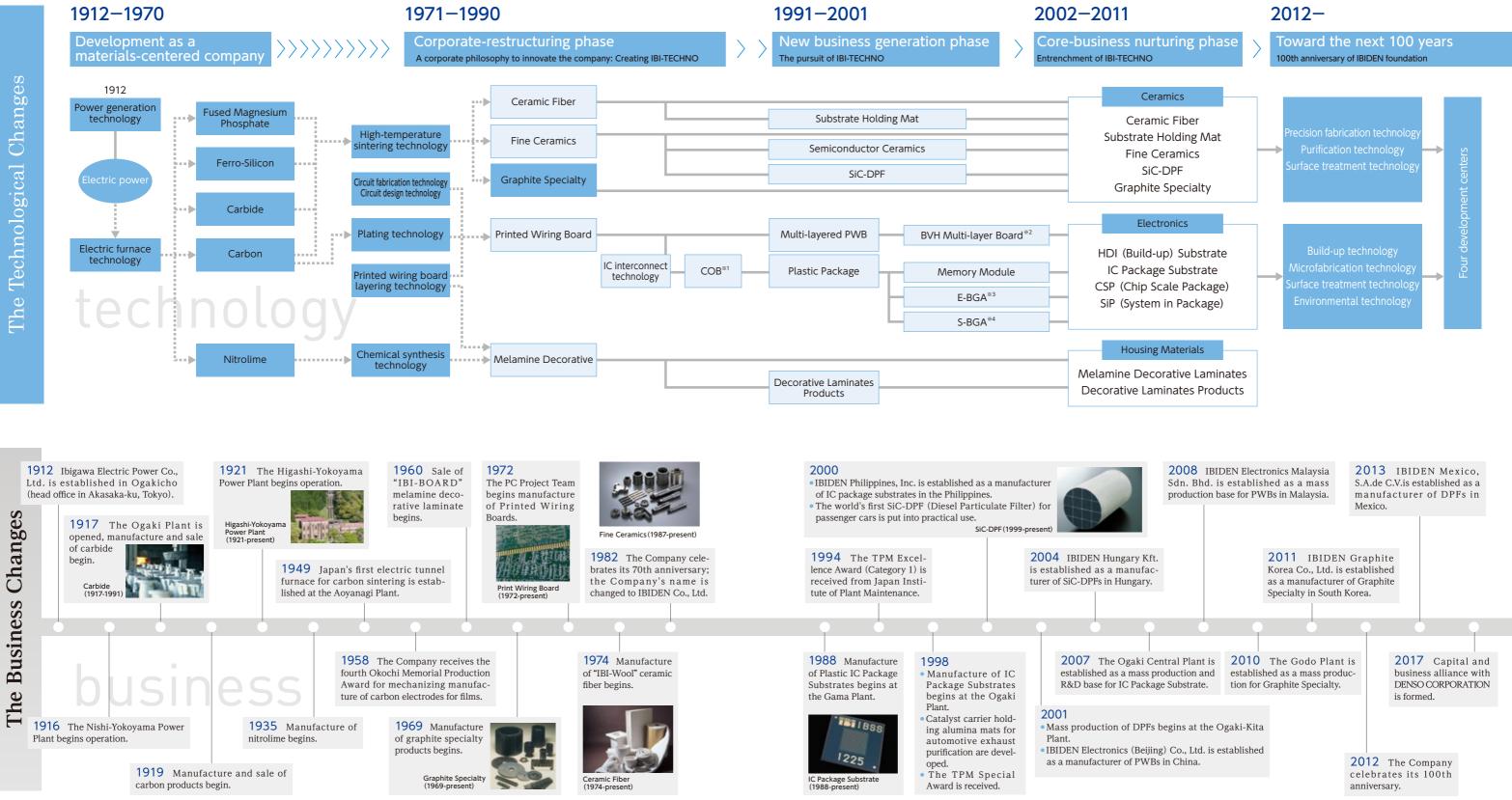
Anticipating change, and acting boldly to create new value.

IBI-TECHNO Innovation

Evolving by overcoming hurdles through creativity and ingenuity.

"IBI-TECHNO"

The common sprit of all company people, expressing our determination to create new technologies through fusions and coposites of our proprietary technologies. We have expanded our business through creating new products by evolving and combining our own existing technologies.



05 IBIDEN CORPORATE PROFILE 06

We will realize sustainable value creation through innovating "IBI-TECHNO", with respect for both "individuals" and "environment".

Our company, which was founded as a hydroelectric power generation company intended to promote the regional economy, has long valued people and the global environment, and as a technology development company has contributed to society's development with its state-of-the art technologies. From now, we will also continue to take up challenges in new value creation by continuously innovating "IBI-TECHNO," which is to develop new technologies by evolving and uniting our original technologies.

IBIDEN and the SDGs

In September 2015, the "Transforming our world: 2030 Agenda for Sustainable Development" was adopted by the United Nations General Assembly. In this agenda, the "SDGs: Sustainable Development Goals," which comprise 17 goals and 169 targets, were formulated. Upholding the realization of harmony with the natural environment and an affluent society as its corporate philosophy, IBIDEN has continued to develop by creating products that lead to solving social issues with its innovative technologies. We believe that to positively contribute to achieving the SDGs through its businesses is a mission that IBIDEN should fulfill for society based

SUSTAINABLE GOALS DEVELOPMENT GOALS





















Major inputs







39 bases in 17 countries & regions around (End of March 2019)

Total R&D expenses FY 2014~2018 **74.9**billion ven No. of patents held 3,205











External environmental risks Slowdown in the PC market Sluggish growth of the high-end smartphone market Electric passenger vehicle market Climate change and natural disasters Reduction in the domestic working population Geopolitical risks

Opportunities

Expansion of ICTs Strengthening of

environmental regulations in emerging countries

Increase in populations of emerging countries

Growing needs for reducing environmental burdens in manufacturing processes



4 pillars of our activities

3 Nurtuing human resources

Diversity Improvement of productivity

Compliance Risk management

Driving

ESG-central

operation

Energy conservation

Resource circulation

Management targets for FY 2022

Net sales 430 billion yen

Operating income **45**billion yen (10.5%)

Total capital investment FY 2018 to FY 2022 200 billion yen

R&D expenses Ratio of consolidated net sales Continuously maintain a ratio of

"at least 5%."

Values provided

Contribution to information communications technology



Strengthening of infrastructure of the Data Center supporting 5G and ICT society

Contribution to reduction





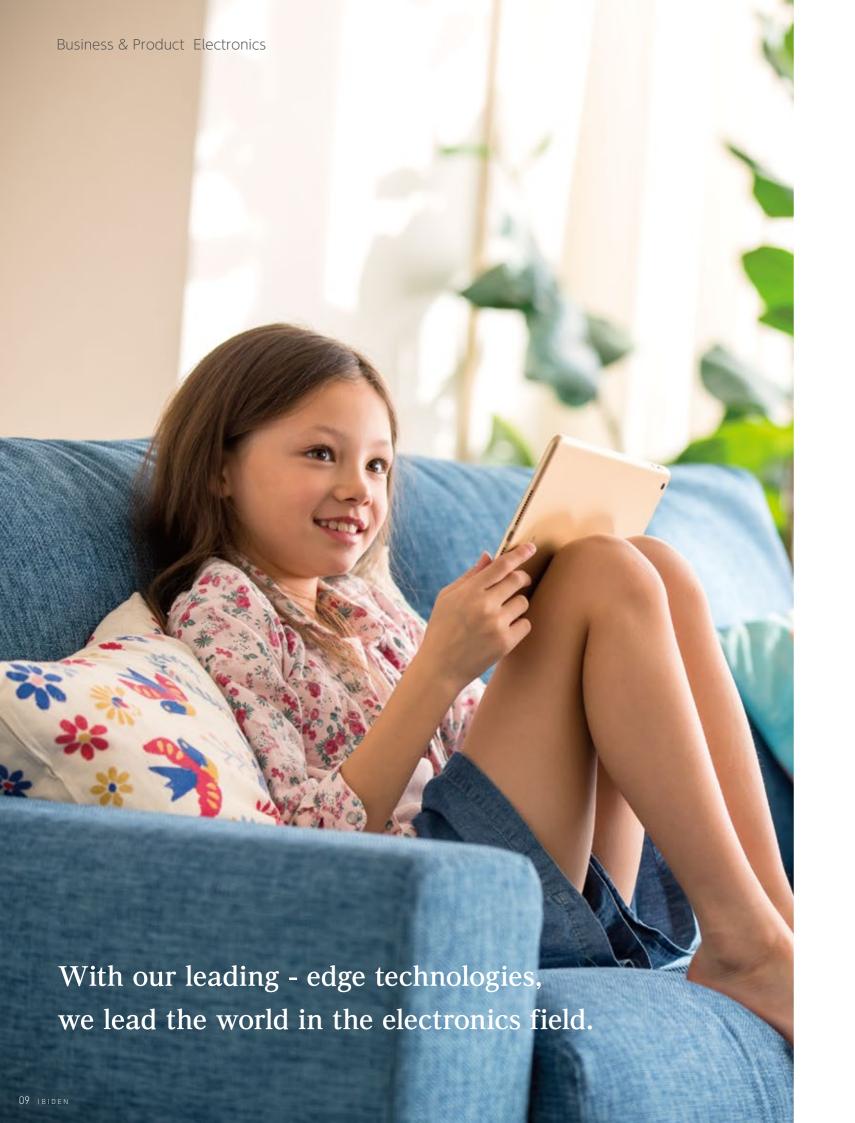
manufacturing perspective

ESG-central operation

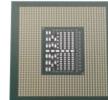
Corporate governance

IBIDEN WAY

07 IBIDEN CORPORATE PROFILE 08







IC Package Substrate

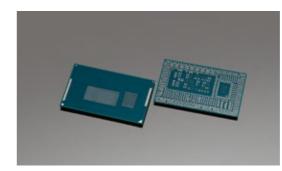
Focusing on MPUs (micro processor unit) for personal computers and the Data Center, and GPUs (graphic processor unit) for AI and vehicle-mounted applications, we provide state-of-the-art IC packaging substrates. IC packaging substrate is an important component that functions together with IC chips. IBIDEN has always enhanced added values along with IC chip evolution.

Printed Wiring Board

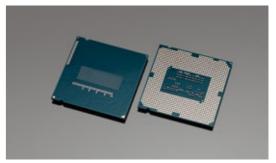
Focusing on high-end smartphones, we provide high-function and high-density printed circuit boards. A printed circuit board is an important component that supports the manufacturing of small and high-function products in line with the full-fledged dissemination of 5G. IBIDEN meets its customers' needs using Modified Semi Additive Process (MSAP) which enables free circuit design and high-density wiring.



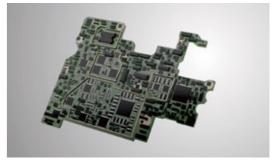
IC Package Substrate



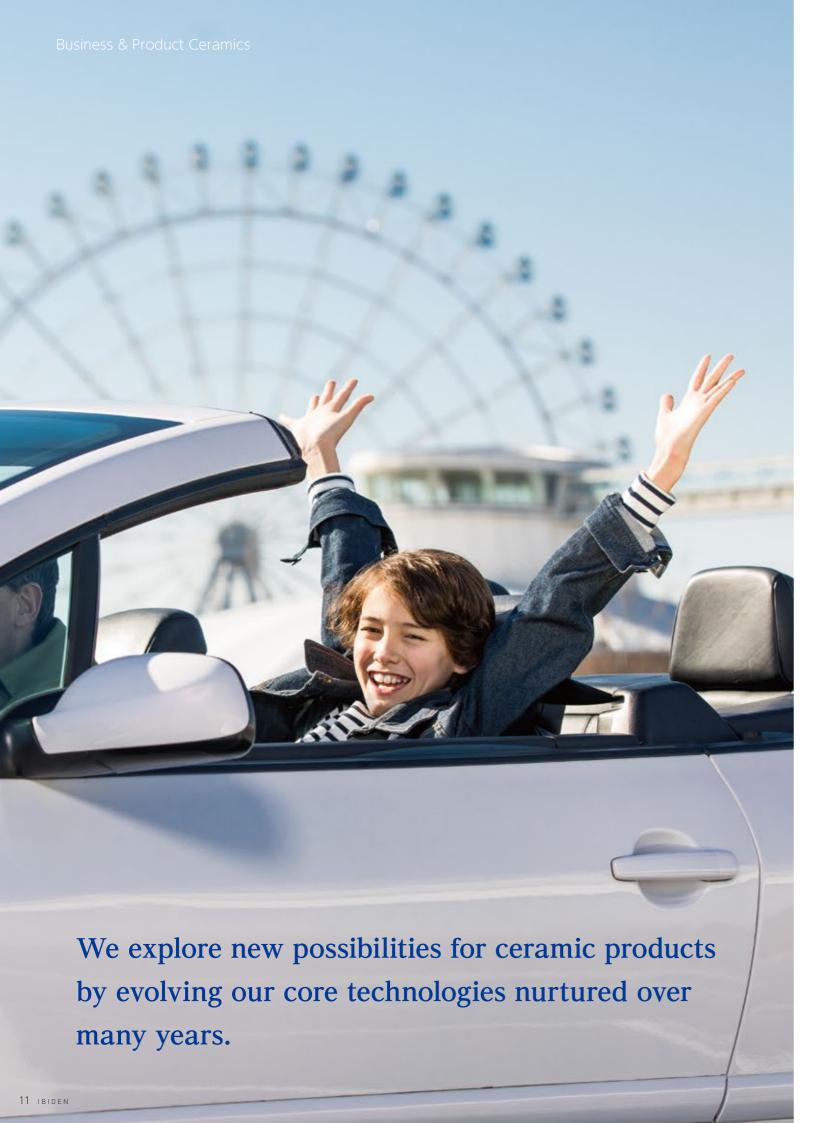
IC Package Substrate for mobile PC



IC Package Substrate for desktop PC

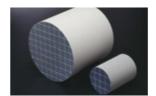


Printed Wiring Board for Smartphones



Automotive Exhaust System Components (DPF•AFP)

Diesel Particulate Filter (DPF), have grown as a standard component of the industry due to their performance and reliability. In the category of Substrate Holding Mat (MAT), we also provide products that meet market trends, achieving a high reputation and share in the market. We will continue to develop high-performance products and to reduce damage to the environment for the





Catalyst for Industrial Plants (SCR)

NOx reduction catalysts are used by customers around the world as a key component of systems to effectively and efficiently reduce the NOx content of exhaust gas, helping to improve the global environment.





High Temperature **Insulation Wool**

Offering excellent heat resistance and insulating performance, this is available as both material and formed products, and is widely used in industrial products such as sintered bodies and fuel cells.



Silicon mono crystalline ingot puller



Graphite Specialty (FGM)

Made with the excellent properties of high strength, high purity and highly durability, our graphite products are contributing to the growth of leading-edge industries of every type including high-grade materials for semiconductor manufacturing equipment, electrode materials for electricdischarge machining use, materials for solar cell manufacturring equipment, and more.





Graphite Crucible



Electrodes for electric discharge machining EDX-7

Technologies and products developed through "IBI-TEC HNO" are applied extensively in a variety of fields.





Construction Business

IBIDEN Greentec Co., Ltd.

3-55, Gama-cho, Ogaki, Gifu 503-0021, Japan Tel:0584-81-6111

Slope and garden construction, greenery planting,

IBIDEN Engineering Co., Ltd.

1122, Kido-cho, Ogaki, Gifu 503-0973, Japan Tel:0584-75-2301

Environmental measurement and analysis, design and installation of mechanical facilities

Housing Materials Business Other Business

IBIKEN Co., Ltd.

1-60, Gama-cho, Ogaki, Gifu 503-8561, Japan Tel:0584-74-3355

Manufacture and sale of interior decorative plywood, residential equipment, housing materials, unique component housing etc.

IBIDEN Industries Co., Ltd.

1-197, Uchiwara, Ogaki, Gifu 503-0936, Japan Tel:0584-89-0777

Sale of petroleum products, mobile communications equipment, sale and maintenance of automobiles, services of logistics

IBIDEN Chemical Co., Ltd.

300, Aoyanagi-cho, Ogaki, Gifu 503-8503, Japan Tel:0584-89-7491

Manufacture and sale of industrial gases, the related products and chemical goods, as well as environmental business

TAK Co., Ltd.

4-35-12, Kono, Ogaki, Gifu 503-0803, Japan Tel: 0584-75-6501

Software development, network design and construction

IBIDEN Graphite Co., Ltd.

300, Aoyanagi-cho, Ogaki, Gifu 503-8503, Japan Tel:0584-89-6425

Machining and sale of graphite specialty

IBIDEN Jushi Co., Ltd.

360, Shirotori, Ikeda-cho, Ibi-gun, Gifu 503-2413,

Tel:0585-45-2405

 $\label{lem:manufacture} \mbox{Manufacture and sale of foamed-resin products}$

| IBIDEN CAREER TECHNO Corp.

300, Aoyanagi-cho, Ogaki, Gifu 503-8503, Japan Tel:0584-89-7435

Business process outsourcing, business contracting

IBIDEN Bussan Co., Ltd.

339, Arisato, Motosu, Gifu 501-0415, Japan Tel:058-324-1151

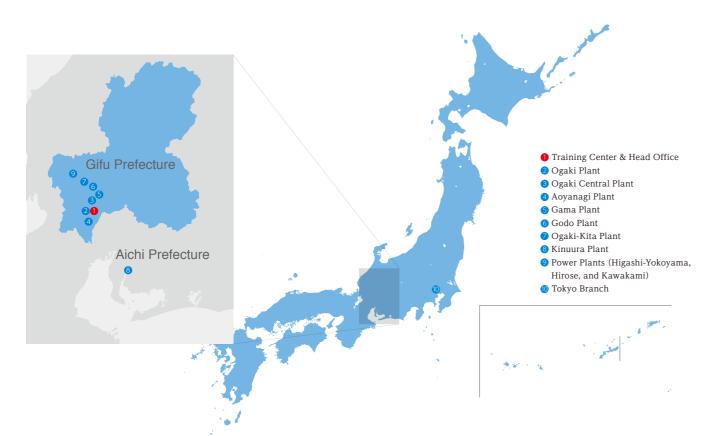
Development, processing and sale of agricultural and marine products

IBIDEN OASIS Co., Ltd.(Special-purpose subsidiary)

100-1, Kasanui-cho, Ogaki, Gifu 503-0027, Japan Tel:0584-47-5181

Building maintenance

13 IBIDEN CORPORATE PROFILE 14



1 Training Center & Head Office



2-1, Kanda-cho, Ogaki, Gifu Tel: 0584-81-3111 Established: December, 1917

4 Aoyanagi Plant



300, Aoyanagi-cho, Ogaki, Gifu 503-8503, Japan Tel: 0584-89-3312 Established: November, 1943 Land area: 98.777m Products: Printed Wiring Board, Graphite Specialty,

Ogaki-Kita Plant



1-1, Kitagata, Ibigawa-cho, Ibi-gun, Gifu 501-0695, Japan Tel: 0585-22-1111 Established: April, 1989 Land area: 104,000m Products: SiC-DPF, Graphite Specialty, Fine Ceramics products

Ogaki Plant



905, Kido-cho, Ogaki, Gifu 503-0973, Japan Tel: 0584-81-3102 Established: December, 1917 Land area: 77,626m Products: IC Package

5 Gama Plant



3-200, Gama-cho, Ogaki, Gifu 503-8559, Japan Tel: 0584-81-4472 Established: August, 1939 Land area: 56.237m Products: IC Package, High Temperature Insulation Wool

8 Kinuura Plant



5-1-7, Shinden-cho, Takahama, Aichi 444-1301, Japan Tel: 0566-53-4111 Established: June, 1969 Land area: 142,214m

Products: Substrate Holding Mat, Graphite Specialty, Foamed-resin products

3 Ogaki Central Plant



100-1, Kasanui-cho, Ogaki, Gifu 503-0027, Japan Tel: 0584-83-8620 Established: April. 2007 Land area: 113,059m Products: IC Package

6 Godo Plant



1120-1, Suemori, Godo-cho, Anpachi-gun, Gifu 503-2321, Japan Tel: 0584-28-1150 Established: October, 2010 Land area: 68.239m Products: Graphite Specialty

9 Energy Control Unit



Higashi-Yokoyama Power Plant Electric power supply inception: June, 1921 Power output: 27,900kW (Higashi-Yokoyama, Hirose and Kawakami power plants) (As of March 31, 2018)

ASIA Co.,Ltd. ■ Electronic Production Base Ceramic Production Base Sales Companies and Branches **ASIA** IBIDEN Electronics (Beijing) Co., Ltd. 5 IBIDEN Taiwan Co., Ltd. 9 IBIDEN Philippines, Inc. 2 IBIDEN Electronics (Shanghai) Co., Ltd. 6 IBIDEN Graphite Korea Co., Ltd. 10 IBIDEN Electronics Malaysia Sdn. Bhd. 3 IBIDEN Asia Holdings Pte., Ltd. IBIDEN Korea Co., Ltd. 4 IBIDEN Singapore Pte., Ltd. 8 IBIDEN CERAM Frauenthal Korea Co., Ltd.



India Branch

IBIDEN Electronics (Beijing) Co., Ltd. (Printed Wiring Board)



IBIDEN Graphite Korea Co., Ltd.



IBIDEN Philippines, Inc. (IC Package)



IBIDEN Electronics Malaysia Sdn. Bhd. (Printed Wiring Board)

EUROPE

- 1 IBIDEN Europe B.V.
- 1 Amsterdam (Head office)
- London Branch ■ Paris Branch ■ Stuttgart Branch ▼ Torino Branch
- 2 IBIDEN Hungary Kft.
- 3 IBIDEN Ceram GmbH



IBIDEN Hungary Kft.



Frauenthal GmbH

NORTH AMERICA

- 1 IBIDEN U.S.A. Corp.
- 1 Santa Clara (Head office)
- Boston Branch Detroit Branch ▼ Austin Branch
- VI San Diego Branch
- 2 Micro Mech, Inc.
- 3 IBIDEN CERAM Environmental Inc.
- 4 IBIDEN Mexico, S.A. de C.V.



IBIDEN U.S.A. Corp.



IBIDEN Mexico, S.A. de C.V.

Company Outline (As of March 31,2018)

Trade name: IBIDEN Co., Ltd.
Established: November 25, 1912
Capital: ¥64,152 million

Representative: Takeshi Aoki, President & CEO

Number of 14,718 (Consolidated) employees: 3,525 (Non-consolidated)

Office and Plants

Head office: 2-1, Kanda-cho, Ogaki City, Gifu 503-8604, Japan

Tel: 0584-81-3111

Branch: Tokyo

Plants: Gifu Prefecture (Ogaki, Ogaki Central, Aoyanagi,

Gama, Ogaki-Kita, Godo);

Aichi Prefecture (Kinuura)

Products

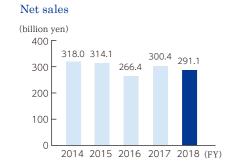
IC Package, Printed Wiring Board, SiC-DPF, SCR, Substrate Holding Mat, Graphite Specialty, High Temperature Insulation

Wool

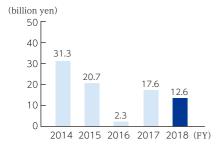
Number of Subsidiaries

Consolidated subsidiaries: 39 (18 in Japan, 21 in overseas)

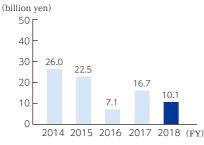
Change in Business Results



Ordinary income



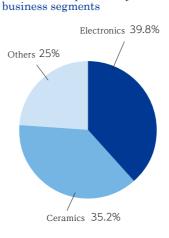
Operating income



Net income



Net sales composition by



■ Disclosure of Financial Information

Website for shareholdersand investors https://www.ibiden.com/ir/



IBIDEN takes steps to disclose information at appropriate times to shareholders and investors in a fair, accurate, and easy-to-understand manner. Pursuant to the Timely Disclosure Rule of the Tokyo Stock Exchange, our information disclosure standards require the disclosure of information relevant to our operations, scope of business, and assets that could significantly affect investment judgments, as well as any changes or suspension of important corporate information that has already been published. Our policy is to disclose such information proactively and fairly. We will also disclose corporate information that could significantly influence investment judgments even if the Timely Disclosure Rule does not apply, as accurately, promptly and appropriately as possible.

Executives/Organization

■Directors

Representative Directors

Hiroki Takenaka Takeshi Aoki Kozo Kodama

Director

Masahiko Ikuta

Outside Directors

Chiaki Yamaguchi Toshio Mita Koichi Yoshihisa

Audit & Supervisory Committee Members

Audit & Supervisory Committee Members (Full-time)

Keiichi Sakashita Yoichi Kuwayama

Audit & Supervisory Committee Members (Outside)

nittee Members (Outside Fumio Kato Masaki Horie Nobuko Kawai

Substitute Audit & Supervisory Committee Member (Outside)

Shogo Komori

■ Executive Officers

Chairman of the Board Hiroki Takenaka

:1.... O CEO

President & CEO Takeshi Aoki

Executive Vice President

Kozo Kodama

Executive Managing Officer

Masahiko Ikuta

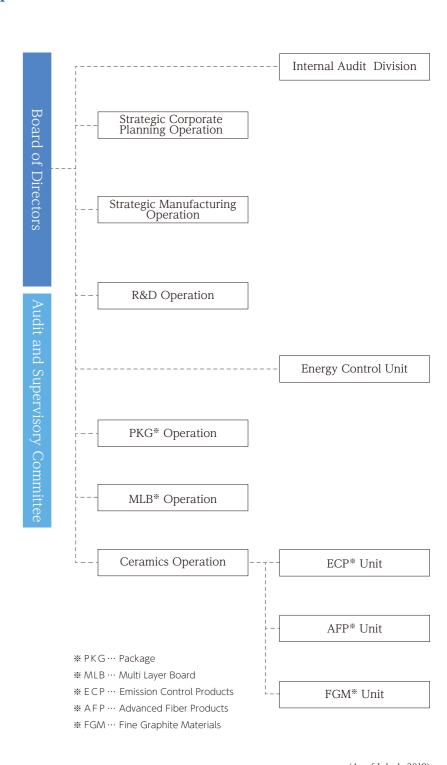
Senior Managing Officers

Sotaro Ito Koji Kawashima Shuichi Kubo

Managing Officers

Honchin Endo Yasuji Hiramatsu Hisashi Sano Yasushi Inagaki Kota Noda Kazushige Ohno Keiji Yamada Yasunori Kawasaki

(As of July 1, 2019)



(As of July 1, 2019)

17 IBIDEN CORPORATE PROFILE 18