

FUJITSU INTEGRATED MICROTECHNOLOGY LIMITED

Environmental Report

2010



1. Welcome



Fujitsu Integrated Microtechnology
Limited

President, Hideo Monma

Fujitsu Integrated Microtechnology Limited has its plants located in Aizuwakamatsu in Fukushima, Murata-machi Shibata-gun in Miyagi, and Satsumasendai in Kagoshima. All of those plants are located in the areas rich in nature, surrounded by pastoral lands with national nature parks nearby.

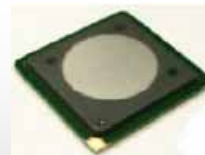
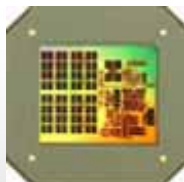
In 2009, the Fujitsu Group developed the “Fujitsu Group Biodiversity Action Principles” and has been promoting the activities for preserving biodiversity. To pass on this rich natural environment to our next generations, Fujitsu Integrated Microtechnology is participating in activities of biodiversity preservation in each area to contribute the preservations in local communities and in the global environment.

In addition, as one of our environmental activities, we have worked on “Green Process Activities” aiming to continually improve work processes and to reduce environmental loads.

In the year 2010, we strive for effectively reduce environmental loads throughout all production activities integrating this green process initiative with various productivity improvement activities such as the Toyota Production System.

At the same time, we aim to differentiate ourselves in terms of QCDSEE (quality, cost, delivery, service, environment, and education) based on an objective to grow and develop together with the community while striving to preserve the environment.

2. Company Profile

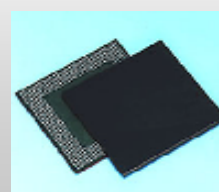


TBGA

FCBGA



QFP family



PBGA, FBGA, and FLGA

Fujitsu Integrated Microtechnology Limited was established as a specialized company for semiconductor post-processing in October 2003 through the integration and restructure of four semiconductor post-processing subsidiaries of the Fujitsu Group into a single company with four plants. Our business focuses on the assembly and testing of logic LSIs, and we are actively developing the contract-based business with clients outside of the Fujitsu Group. In October 2008, we integrated the basic logic production line located in the Gifu Plant into the Kyushu Plant and established a new structure with three domestic plants.

Name: FUJITSU INTEGRATED MICROTECHNOLOGY LIMITED

Established: 1st October, 2003

Number of employees: 1,990

Business: Development, production, and sales of electronic devices

■ **Aizu Headquarters/Plant** 1 Takaku-kogyodanchi, Aizuwakamatsu, Fukushima

■ **Miyagi Plant** 1-1 Nishigaoka, Murata, Murata-machi, Shibata-gun, Miyagi

■ **Kyushu Plant** 5950 Iriki-cho Soeda, Satsumasendai, Kagoshima

3. Aim and Achievement in Environmental Activities

■ Report on objectives and results of activities in the year 2009

Fujitsu Integrated Microtechnology has been working on the following activities with the aims of preserving the environment, cooperation with the local communities, and environmental improvements in the overall and medium-term perspectives based on our environmental policies and due to significant environmental aspects. The objectives and their results of activities in the year 2009 are listed below.

We worked on reducing the amount of CO₂ emission through energy consumption, of produced wastes, and of emitted chemical substances, and we achieved our objectives in all the set items.

Objectives in the Year 2009	Results	Achievement Status
Reduce CO ₂ emitted through energy consumption by the end of year 2009 to the amount of 54,900 ton-CO ₂ or less.	53,017 ton-CO ₂	Success
Reduce the produced wastes by the end of year 2009 to the amount of 982 ton or less.	727 ton	Success
Reduce VOC-target chemicals emission by the end of year 2009 to the amount of 5.9 ton or less.	4.1 ton	Success
Promote green procurement from parts suppliers <(1) FJEMS level II or higher, (2) CMS establishment ratio 100%>	100% for both (1) and (2)	Success
Reduce environmental loads through operational improvements (Year 2009: 70% or higher for the number of achieved divisions in each area)	80% or higher in each area	Success
Carry out activities to improve employee awareness of the environment protection and to contribute to the local communities (6 activities or more per year in each area)	6 activities or more in each area	Success

■ Objectives of activities in the year 2010

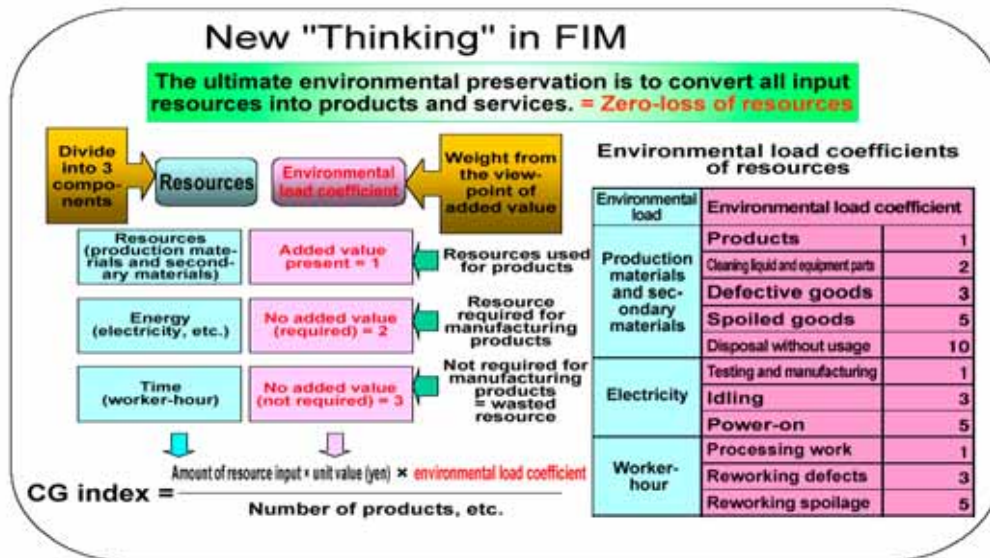
In this fiscal year, we added the environmental contribution activity in each plant in terms of biodiversity preservation in order to plan for and promote objectives according to the Sixth Fujitsu Group Environment Action Plan.

Objectives in the Year 2010
Reduce CO ₂ emitted through energy consumption by the end of year 2010 to the amount of 55,770 ton-CO ₂ or less.
Reduce the produced wastes by the end of year 2010 to the amount of 795 ton or less.
Reduce the emission of top priority chemical substances* by the end of year 2010 to the amount of 5.35 ton or less. (* Miyagi: IPA, Kyushu: Ethanol)
Promote green procurement <(1) reduce the emissions of CO ₂ (2) promote the procurement from suppliers taking actions to preserve biodiversity.>
Reduce the environmental loads of our core activities through the green process activities. [The number of achieved divisions: 80% or higher in each area]
Carry out preservation activities related to biodiversity (1 activity or more per year in each area) Carry out other environmental contributions and activities to raise awareness (4 activities or more per year in each area)

4. Green Factories

Green process activities

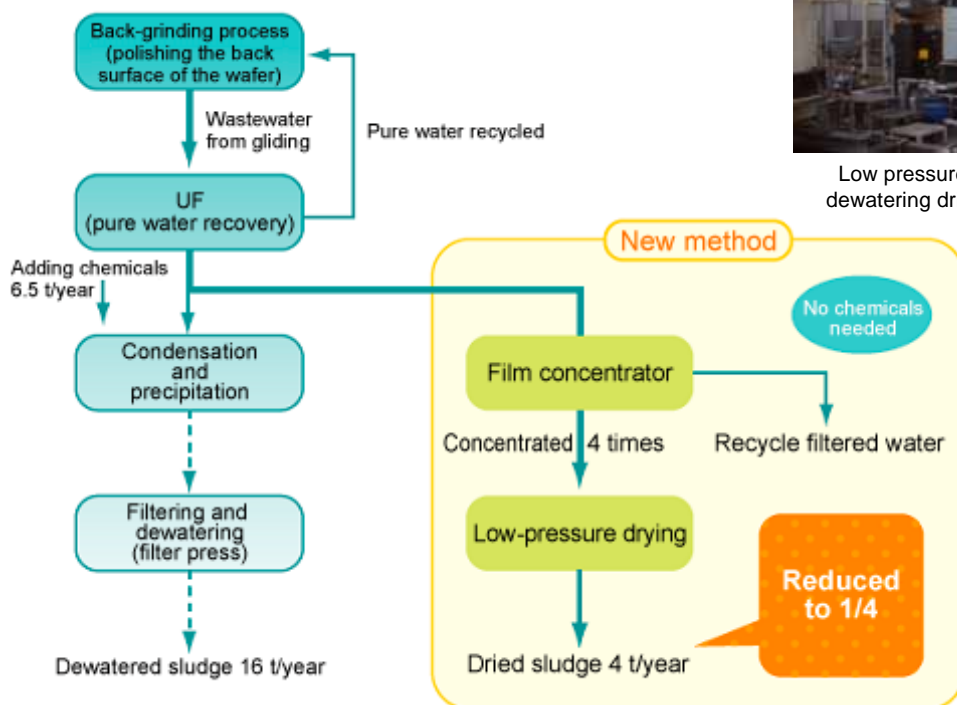
The green process activities are linked with the activities for improving productivity and aim to continually improve business processes and to reduce the environmental loads in each division. Since the year 2008, Fujitsu Integrated Microtechnology has been conducting activities to reduce environment loads with the participations of all the divisions including indirectly-related divisions by reviewing mechanisms that are appropriate for post processing.



Examples of main improvements in year 2009

Since April 2009 at the Kyushu Plant, the amount of silicon sludge in the effluent from the silicon wafer back-grinding process, which is performed first in the assembly process, has been cut to one quarter through a chemical-free high concentration and drying process in a newly installed equipment. Because this uses absolutely no chemicals, unlike conventional processes, it has been able to reduce the amount of chemicals by approximately 6.5 ton per year and has contributed to reducing cost and environmental risks. Furthermore, there is a plan to sell silicon sludge to iron foundries as a deoxidizing agent, and its evaluation is currently under investigation. It is expected that selling the sludge as a valuable product not only leads to reducing the amount of produced wastes but also makes a large contribution to environmental management activities throughout the plant.

The Process of Treating Wastewater from Gliding



New treatment system for back-grinder sludge effluent



Low pressure dewatering drier

Membrane concentration equipment

5. Environmental Social Contribution Activity

Each plant is engaging in activities of environmental social contributions focusing on cleaning its local areas, such as cleaning up rivers, weeding the afforestation sites, and distributing organic fertilizer created from wastes from the plant cafeteria to local elementary and middle schools.



Cleaning Agagawa and Nippashigawa rivers (Aizu)



Participating in weeding afforestation site in Aso (Kyushu)



Free distribution of organic fertilizer created from company cafeteria leftovers to local government and others (Miyagi and Kyushu)

6. Environmental Awareness Activities for Employees

Environmental awareness activities such as environment seminars and on-site and off-site tours of environmental facilities are conducted for employees at each plant as the activities for environment awareness month. Furthermore, in FIM, the environmental offices at each of the three plants take turns to issue the “Ecology Report” the internal company environmental information every month to inform all employees on environmental information in each area.



Environmental seminars by external instructors

Seminar topic [Forestry in Aizu]



Field trips to off-site facilities (FIT Frontier, Miyagi)



Training for internal company waste supervisors (Miyagi)

7. Efforts for Safe and Secure Plants

We carry out drills for emergency situations such as leaks or dispersals of chemicals in each plant as the countermeasures against environmental risks.



Drill for handling heavy oil and chemical leaks (Miyagi)



Drill for handling heavy oil leaks and preventing outflow (Aizu)



Drill for handling chemical and oil leaks (Kyushu)

8. Compliance with Environment-Related Rules and Regulations

In terms of compliance with rules and regulations in the year 2009, during periodic noise measurement (nighttime) at the Kyushu Plant, the regulated value (50 dB) was exceeded (measured value: 52 dB). Its cause was the cutwater sound when the city water supply inflows the pure water equipment. Therefore, we adjusted the amount of city water flow to reduce the noise and measured the sound again. We confirmed its compliance with the regulation and with our standard. Since then, we have been monitoring the sound to ensure no recurrence. There were no other deviations from rules, regulations, and our own standard.

9. Environmental Accounting

We have “Environmental Accounting” to quantitatively understand the costs and outcomes related to environmental protections and to evaluate the environmental investment and its outcomes.

Year 2009 Environmental accounting results table (unit: million yen)

Item	Scope	Cost	Outcome
Costs and outcomes within the operation area	Preventing pollutions, preserving the global environment, recycling resources, etc.	197	244
Costs and outcomes in upstream and downstream processes	Waste product recycling, green procurement, etc.	0	12
Management activity costs and outcomes	ISO14001, environmental education, environmental public relations, etc.	30	2
Research and development and solutions business costs and outcomes	Research of environmentally friendly technology for products, etc.	0	0
Social activity costs and outcomes	Donation to and support of environmental preservation groups, etc.	0	0
Handling environmental damage costs and outcomes	Restoration from soil and groundwater contamination, etc.	0	0
Total		227	258

10. Environmental Management Systems



Fujitsu Integrated Microtechnology has established the integrated environmental management system integrating each plant and acquired the international standard ISO14001 certification from Japan Audit and Certification Organization (JACO) in September 2004. In order to promote more effective and highly practical environmental activities, the Fujitsu Group worked on the group certification and acquired ISO14001 certification as the “Fujitsu Group World-Wide” in March 2006. We continue to promote environmental preservation activities through our daily corporate actions and to strive for cooperations with our local communities and for the environmental improvements.

FUJITSU INTEGRATED MICROTECHNOLOGY LIMITED

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