

# Lead Reduction / Eco-Friendly Purchasing

## Elimination of Lead Solder

Fujitsu has been developing non-lead solders, with the aim of introducing them into all of its products during the next phase of the lead reduction plan, thereby, in time, completely eliminating the use of lead solder.

### Lead reduction plans

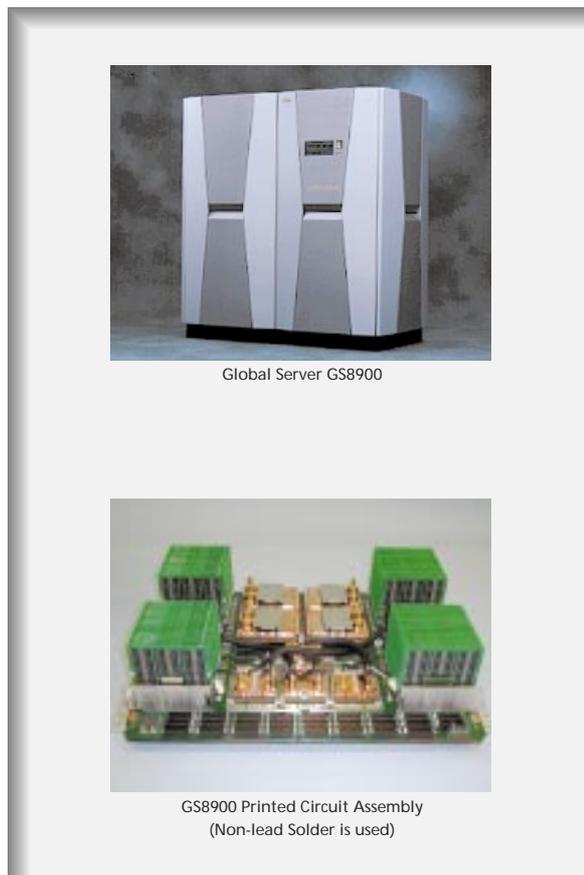
- Switch completely to non-lead solder with all LSI products from October 2000
- Reduce use of lead solder in 50% of all printed circuit assemblies by 50% from December 2001
- Elimination of lead solder from all product lines from the end of December 2002

### Development of technology

In conjunction with Fujitsu Laboratories Ltd., the company has developed highly reliable forms of non-lead solder. These were first employed in the printed circuit assemblies used in the GS8900 global server model launched in October 1999.

### Development items

- Development of materials and junction methods for solders made from a tin-silver mixture
- Development of materials and junction methods for solders made from silver and a tin-bismuth eutectic mixture
- Development of manufacturing processes at multiple temperature levels using solders developed from the above two types that have multiple melting points



Global Server GS8900

GS8900 Printed Circuit Assembly  
(Non-lead Solder is used)

## Eco-friendly purchasing

Starting in fiscal 1998, Fujitsu's ISO 14001-certified manufacturing plants began conducting surveys of their suppliers to determine how their business activities conformed to environmental regulations, and to find out their approaches to environmental issues. In fiscal 1999, this survey was extended to include the suppliers (a total of 49 firms) of the Kawasaki Plant, which is the company's main design and development center. This brought the total number of surveyed firms to 320. The results obtained from the 271 firms surveyed in fiscal 1998 were also compiled in a database. Fujitsu began using an Internet-based system to work with suppliers in designing and developing more eco-friendly products, exchanging information via a home page.