



## Preface

# Special Issue on Innovative Manufacturing and Engineering

Toshihiko Ono  
Corporate Senior Executive  
Vice President and  
Representative Director

Fujitsu is a leading worldwide provider of customer-focused Information and Communication Technology (ICT) solutions that include servers, network devices, personal computers, mobile phones, and LSI devices. Since its establishment in 1935, Fujitsu has been focusing on ensuring highly reliable manufacturing and engineering under the slogans of “Reliability and Creativity” and “Turning Dreams into Reality” so that customers can use Fujitsu products with complete confidence. Our mission is to deliver comprehensive solutions with highly reliable products and services based on pace-setting technologies and our extensive experience in manufacturing.

As is well known, the ICT industry is rapidly changing along with the creation of new businesses and services and sophisticated, complicated, miniaturized, and highly integrated technologies that have drastically changed the performance and appearance of ICT products. The global environment for manufacturing has become all the more severe due to offshore development and the emergence of large-scale electronic manufacturing suppliers (EMSs) based on a horizontal division of work — whereby products are made through a regional division of work in China and other countries around the world.

In response to these rapid changes taking place in the ICT industry and manufacturing environment, Fujitsu has carefully selected and focused its business activities. Also, the employees at Fujitsu factories and affiliated companies have exercised their own creativity from the perspective of the work front to enhance manufacturing with both top-down and bottom-up approaches.

However, to attain the goal of innovative manufacturing based on the customer focus — which means meeting our customers’ quality standards and delivery deadlines and increasing our management speed

so we can rapidly respond to customer requests — it is now more important than ever to accelerate our efforts toward innovative manufacturing and engineering.

Therefore, in 2003, Fujitsu implemented the Toyota Production System (TPS) in all its factories and conducted production innovation activities to double productivity within two years. TPS was implemented not only to promote innovative manufacturing by introducing a new culture to Fujitsu, but also to develop human resources cultivated on the *genba*, *genjitsu*, and *genbutsu* realities of the work front. The TPS production activities at each factory have achieved significant results. Beginning with innovative manufacturing at the production sites, Fujitsu has recently been promoting a total innovative manufacturing activity throughout entire product life cycles that involves innovation in supply-chain management (SCM) and development at the upstream design stage.

This special issue describes Fujitsu's innovative manufacturing and engineering activities and also focuses on products that have resulted from these activities. These activities include innovative production through TPS and the development of production technologies that support powerful manufacturing, as well as visualization of the development process with IT tools, quality engineering (using the Taguchi Method), and the elimination of wasteful development when utilizing these tools and quality engineering.

The innovative manufacturing activities that have been started at the production sites visualize problems at the sites and eliminate the root causes of these problems at the upstream production and design stages. We firmly believe that these activities will help us provide highly reliable, customer-friendly products and services based on the customer focus.

Fujitsu will continue its steadfast efforts toward achieving manufacturing and engineering process innovation and providing valuable products and services that help our customers in their business. In this way, we will further strengthen our excellent reputation as an ICT service supplier as well as a trusted business partner.