

Mitsubishi Electric TOKKI Systems Corporation

Corporate Profile

Mitsubishi Electric TOKKI Systems Corporation conducts all its enterprises following the fundamental vision of a concord between technology and people, aiming to maintain its status as a corporation that is trusted and loved by both its employees and the society at large.

Corporate name	Mitsubishi Electric TOKKI Systems Corporation
Representative Director	Yukihiro Honda , President
Location	Mitsumura Bldg. 1- 5- 9 Osaki, Shinagawa- ku, Tokyo 141- 0032
Date of Establishment	July 1, 1972
URL	http://www.melos.co.jp
Capital	600 million yen
Numbers of Employees	1,250
Consolidated Net Sales	23,600 million yen
BUSINESS ENTERPRISES	■ Defense services
	■ Services for applied electronic devices
	■ Space and satellite communications services

Protecting the future of society, forging ahead with new services.

Since its establishment in 1972, Mitsubishi Electric TOKKI Systems has been offering its service to society through the wide range of advanced technologies it develops, from the array of instruments it manufactures for use in space and defense to technical advances in the area of systems engineering.

Working in partnership with Mitsubishi Electric Corporation, on the forefront of developments in this field, MELOS has been providing a number of technologies and service including radar systems, electronic devices for use in aircraft and ground networks, and space systems such as satellite systems.

*Mitsubishi Electric TOKKI Systems Corporation is commonly referred to in the industry as MELOS

Mitsubishi Electric TOKKI Systems Corporation

PRODUCTS

Low Level RF Control System

High Stability RF Control System for Accelerator

We will contribute to the forefront Accelerator Science throughout the System Design Support, Component Development, LLRF System Manufacturing and System Maintenance



Features

- L/S/C Band LLRF
 - Optical Reference Signal receive and conversion to RF distribution
 - D/C and U/C for IQ Modulation/Demodulation
 - SSPA with High-Stability of Phase and Amplitude
 - Various Equipment Interlock and PLC control
 - To obtain high stability RF control
 - Low-noise AC/DC Power Supply equipped
 - Temperature-controlled Water-cooled Rack and Unit employed
- L Band LLRF
 - IF Sampling Digital LLRF System
 - Digital D/C and U/C for IQ Modulation/Demodulation
 - Waveform Recording
 - Vacuum Equipment control
 - Tuner control
 - Various Equipment Interlock and PLC control
 - Embedded EPICS



XFEL LLRF SYSTEM
(courtesy of RIKEN)



S-KEKB LLRF SYSTEM
(courtesy of KEK)

Applications

- Accelerator for High energy physics and Energy/Environment/Materials/Life science
- For Injector, Main Linac and Ring

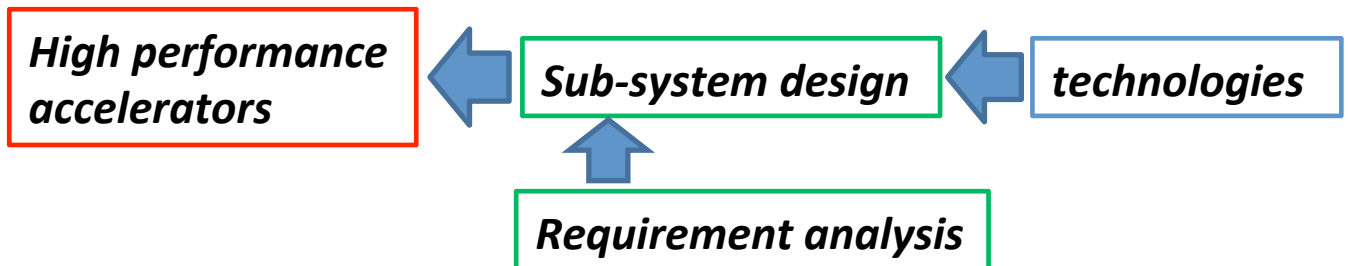


MITSUBISHI Electric TOKKI Systems Corporation

Mitsubishi Electric TOKKI Systems Corporation

Corporate Strategy

RF and digital technologies make high performance accelerators



Our products

(*under development)

Low level RF

- digital LLRF
- tuner control
- high efficiency RF control*

Beam position monitor*

- high accuracy
- compact

Solid State Amplifire*

- high efficiency device operation
- modular design and high power combiner

Optical fiber transmission

- RF reference and timing signal transmission
- precise fiber length control

xTCA board

- MTCA.0、MTCA.4
- ATCA



RF

- low noise
- high efficiency

digital

- large scale FPGA
- timing control

software

- EPICS
- Linux

Opt-Electronics

- low noise
- fiber length control