Mobiis Co., Ltd.

CEO	Kim Jee Hun	Phone	+82-31-8018-8484
E-mail	C-203, 253, Pangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do Korea		
Address	100, Nambusunhwan-ro 356-gil, Seocho-gu, Seoul, Korea		
major business	EX) Vacuum system/Residual gas analysis system/Helium leakage detection system/ Pump repair/Pump parts		

Mobiis develops state-of-the-art hardware and software, with the highest level of performance, for the fields of nuclear fusion and particle accelerators. Mobiis scientists and engineers participate already in he ITER project via several contracts for CODAC and the Central Interlock System, as well as for the tokamak coil power supply control systems. Mobiis has been successfully carrying out these projects to date. Mobiis also has also large expertise developing precision beamline instrumentation, such as LLRF and BPM controllers, for the main particle accelerators in Korea like PAL-XFEL and RAON. Moreover our company has become the main provider of EPICS-based solutions for scientific instruments and distributed control systems in Korea and several projects overseas. In addition to its work in the Big Science field, Mobiis has recently created a division in charge of developing solutions based on Blockchain and Machine Learning technologies, which can be applied to nuclear fusion and particle accelerator projects, as well as other areas such as finances, biology and logistics.

Products

MES Solution	Use	Smart Factory Solutions Increase Enterprise Competitiveness and Management Efficiency
	Description	QRP is in charge of a wide range of management functions. It is reflected in many factories as MES and is being operated and complies with global standards such as ISO/TS/IATF
LLRF Controller	Use	Equipment for real-time measurement and correction of the distortion and deformation of the resonance RF accelerators.
	Description	Excellent stability performance of 0.02%(amplitude) and 0.03°(phase) Independent channel amplifier control Embedded EPICS IOC and Channel Access
BPM Controller	Use	Equipment that analyzes the RF signal coming through the pick-up device and measures and displays the exact position and phase of the accelerated beam.
	Description	16 RF inputs and 4 BPM processors per controller Position and phase resolution better than 5μm and 0.1° Embedded EPICS IOC and Channel Access
SMC108	Use	Equipment controlling all motors comprising an accelerator
	Description	Fast and stable control of up to eight motors Compact design with Ethernet communication Embedded EPICS IOC, Channel Access 400MHz CPU to quickly and stably control a maximum of 8 stepping motors

Technical Capacity

» EPICS Total Solution

We have the greatest number of EPICS-related engineers in Korea as a company, and we hold all component development application technology comprising EPICS and apply this to cutting-edge scientific instruments

» RF Control and Analog Device Design

We produce various FPGA-attached devices for control systems requiring microsecond real-time responses and develop and supply various analog and digital circuit devices

» Developing of Various Algorithms Needed for Machine Leaning

We are currently carrying out various projects to meet the demand for big data processing analyses of big-science instrument control systems, the satisfy the demand for cutting-edge technology to improve control precision, to realize the industrialization of acquired basic science technologies, and to expand businesses

» MES(Manufacturing Execution System)

The six core tools of ISO/TS/IATF, APQP, C.P, FMEA, PPAP, SPC, and MSA, are standard technical specification management within the QRP. It is supported through QMS, SPC/statistical analysis, and production/quality management is possible. We are systematically supporting customer company Audit(Hyundai-Kia quality 5Star, SQ certification, Samsung Electronics, etc