

MT 1070 RCP

High-performance

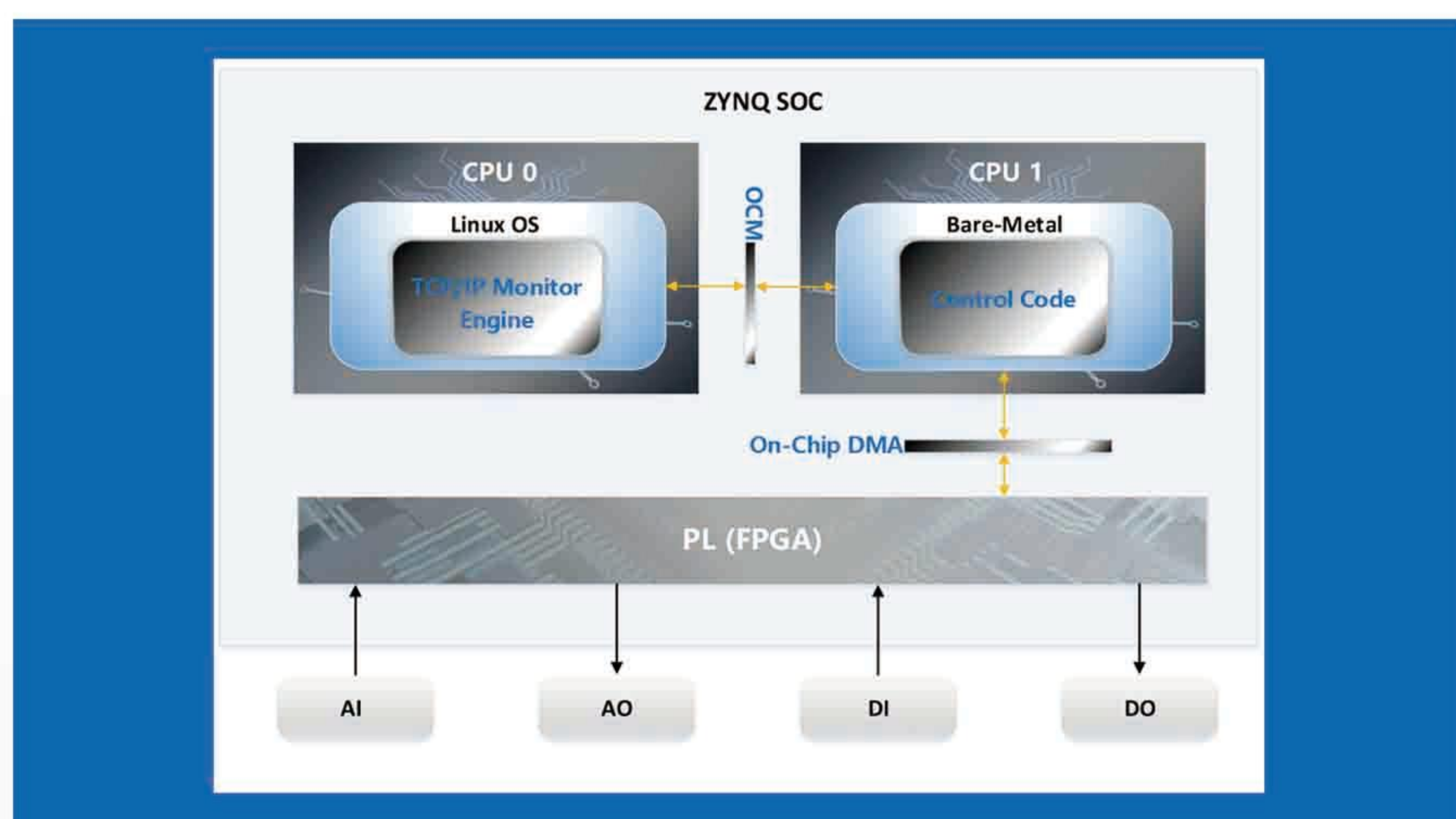


MT 1070 RCP, as a rapid control prototype independently developed by ModelingTech, has abundant analog input and PWM output interfaces, besides, its digital output interface supports wide voltage range. It is suitable for large-scale power electronic system control applications such as parallel inverters and multi-level converters.

Detailed Highlights

Rich PWM and I/O

With 64 PWM channels and 32 AI channels per single machine, the product is suitable for the control requirements of multi-inverter and multi-level systems.

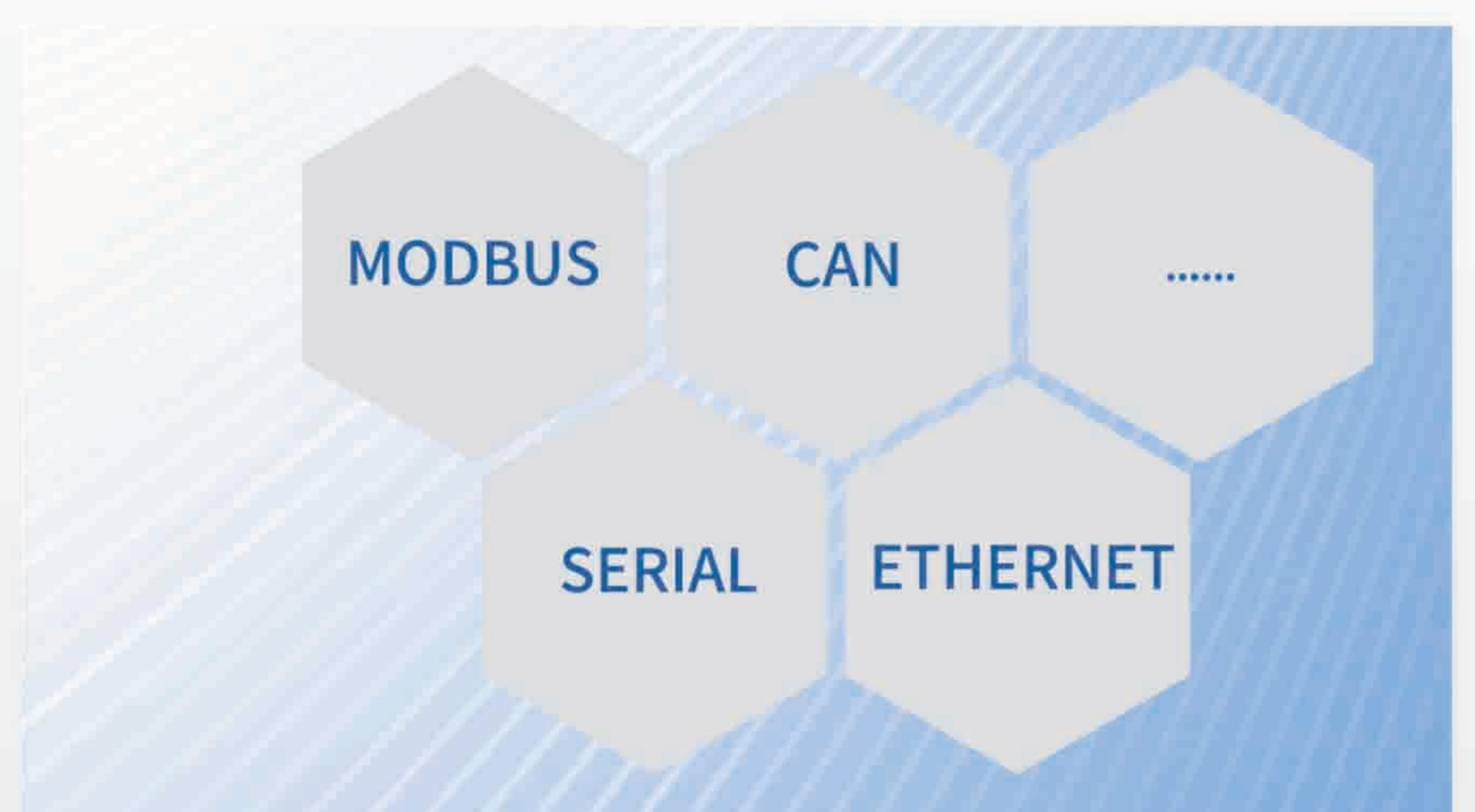


High-frequency control of 50K

Based on bare metal technology with high speed and low latency, thus realizing high switching frequency control.

Support common industrial communication

Supporting Modbus TCP/RTU, CAN, Ethernet TCP/UDP, Serial and other industrial communication protocols to meet the needs of industrial-grade power hardware control.



System schemes



Technical Parameters

Model	MT 1070
Processor	Dual-core ARM Cortex-A9, Main Frequency 800MHz
Memory	2GB DDR3 SDRAM
FPGA	444K Logic Cells , 26.5Mb Block RAM, 2,020 DSP Slices
Analog Output	8 channels, 16bit, 1MSPS, $\pm 10V$
Analog Input	32 channels, 16bit, 1MSPS, $\pm 10V$
Digital Input	16 channels
Digital Output	16 channels DO, 0~5V TTL; 64 channels PWM output, 0~5V TTL
Communication	Modbus TCP/RTU, CAN, Ethernet TCP/UDP, Serial, 4 SFP+
Dimension	483mm*337mm*189mm (L*W*H)

Application Scenarios



RCP Power Device Control

The distinctive Power Device Control System launched by Modelingtech combines virtual and physical elements, which enables better cultivation of students' practical and hands-on abilities.



Microgrid Research

Running microgrid EMS algorithms and the underlying inverter control of photovoltaic, wind energy storage, etc., to quickly realize the verification and testing of control strategies.



Innovative Teaching Experiments

As a part of the MT simulation experiment platform, it helps students to complete experiments of basic power electronic control, grid-connected control of renewable energy inverters, motor control and so on.



Renewable Energy Inverter Control

Capable of rapid verification and testing of renewable energy inverter control algorithms and systems, helping users save time and reduce costs in the process of product development and release.