Development of the EPICS-based Monitoring and Control System for EAST Fast Control Power System

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What and Why

- Fast control power system is used for Internal coils to control plasma vertical displacement.
- composed of the main circuit, and the control and protect section.

Diagram:
- DSP Main Controller
- Serial interface
- Main circuits:
  - Power Supply Unit1
  - Power Supply Unit2
  - Power Supply Unit3
  - Power Supply Unit4
  - Power Supply Unit5
  - Power Supply Unit6
- WAGO Monitor
- Internal Coils
How and Result

- communicate with controller by serial interface, WAGO to monitor the status of power supply and receive commands from RFM
- the whole software is based on EPICS and Linux.
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- the whole software is based on EPICS and Linux.
- CSS is used for developing human interface and alarm interface.