

How to run EPICS on F3RP61

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- How to develop and execute applications
- Our policy on the system configration (so far)
- Development of custom embedded Linux system



How to develop and execute

- Needs cross compile
 - Development environment on host machine
 - Run a build tool chain included in the Board Support Package (BSP) of F3RP61
 - Red Hat-based Linux is recommended for the host
 - Target system on CF card
 - The other boot methods are also supported
 - Boot from a flash memory on board
 - Network boot
 - Can make custom embedded Linux system included in the BSP for your needs



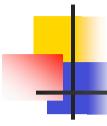
Our policy (so far)

- Linux system goes onto the CF
 - Assuming not so frequent changes once established
 - Can boot-up as a stand-alone IOC
- EPICS (built for F3RP61) stays on the host machine
 - Assuming frequent changes in the application
 - Can manage version issues easily
- F3RP61 mounts host file system to start EPICS upon boot-up



Custom Linux system (1/2)

- We have developed custom Linux system based on the BSP of F3RP61
 - A work started by
 - A. Uchiyama (SAS)
 - SAS stands for "Sumiju Accelerator Service", not famous (infamous?) "Special Air Service"
 - Heavily extended by
 - S. Yamada (KEK)
 - A ready-to-practical-use embedded Linux system
 - Anyone licensed by YOKOGAWA can get them for nothing with NO WARRANTY condition



Custom Linux system (2/2)

- The latest version supports
 - DHCP
 - NTP
 - screen
 - Custom indicator for safe shutdown
 - Enriched terminal database
 - Emacs
- For more details, please contact
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