

# DHH Slow Control

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## Update of the DHH EPICS Driver

## Update of the PV Names



# Reduced Power Up Sequence

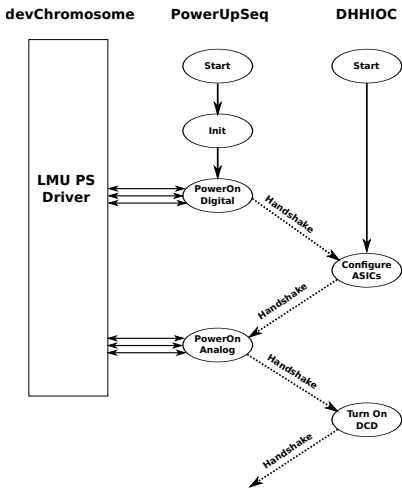


Figure : Initial idea of the power up sequence

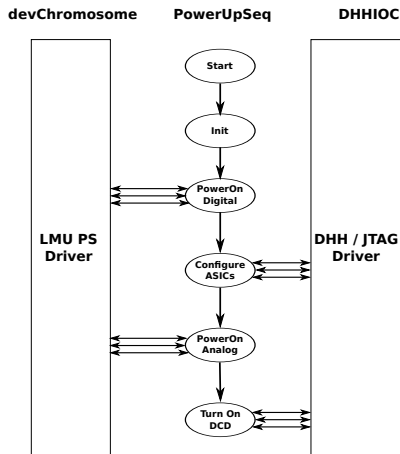


Figure : Reduced power up sequence



# Functionality Updates

- JTAG reinitialization without restart of the IOC
  - necessary for full automatic power up sequence
  - resets JTAG chain information and EPICS PVs
  - chain status (initialized/uninitialized) exported as an EPICS PV
- PV for monitoring of the status of the DHPT IO voltage

Update of the DHH EPICS Driver

Update of the PV Names



# Update of the PV Names

- Renaming of the EPICS PVs from custom to Belle II scheme
- e.g. **dhh0:dhpt0:dcd\_jtag\_en\_out\_w** → **PXD:H01:D1:dcd\_jtag\_en\_out:S:set**
  - dhh0 → H01: index starts with '1', padded by '0'
  - dhpt0 → D1
  - \_w → set: output PV
  - S: PV of type flag
- 2658 PVs renamed (only for new ASICs):
  - EPICS database files
  - GUI
  - start scripts
  - initialization files
- Work almost done, will be committed into SVN after last tests



## Before

- One script to start the IOC
- Configuration defined in the script
- Limited possibility for reconfiguration
  - No easy way for remapping

## Now

- IOC start script generated on the fly by a bash script
- Configuration separated from logic, stored in a separate file
- Possibility to build in complex logic in the generator script:
  - sanity checks
  - remapping according to geometry(e.g. 1 -> 3)
  - database connection to retrieve mapping



# Summary

- Power up sequence simplified, handshakes removed
- Implemented re-initialization of the JTAG chain without restarting the DHH IOC
- EPICS PV names renamed according to the Belle II naming scheme

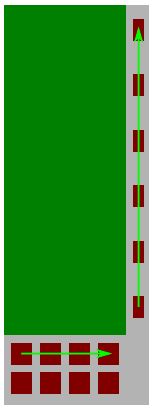




Thank you for your attention!  
Questions?

# Back up slides

### Outer Backward



DCD1   DCD2   DCD3   DCD4  
DHP1   DHP2   DHP3   DHP4

### Outer Forward

