#### Detector Startup Procedure Pixel Online Software – Detector Control Software Integration

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## **Applications Involved**

- Three XDAQ Applications are chiefly involved:
- PixelFECSupervisor Controls a crate of PixelFECs. Uses tri-state A4603 voltage information (LV\_OFF, LV\_ON\_REDUCED, LV\_ON) for 8 segments of the detector.
- PixelTKFECSupervisor Controls a TKFEC board. Uses bi-state A4602 voltage information (LV\_OFF, LV\_ON) for 8 segments of the detector.
- PixelDCSFSMInterface Is queried for A4603 and A4602 voltage information.
- → PSXServer Is queried for currents.

## Power Supply Granularity



→ The Pixel Detector is partitioned into 8 segments:

(*Fpix/Bpix*), (*m/p*), (*I/O*)

A typical string coordinate would be "*Fpix\_BmO*". This takes us to CCU level granularity which is controlled by a channel on the power supply.

#### PixelSupervisor



- Configure LTC, TTC
- Transition to Configured

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# PixelFECSupervisor



# PixelTKFECSupervisor

