SVT L1-3 status

Sho Uemura

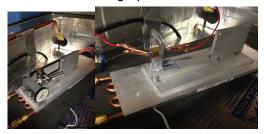
SLAC

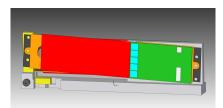
1/5

Sho Uemura SVT L1-3 status June 16, 2014

L1–3 supports

- Prototype module support tested summer 2013
- Pivot moves smoothly during temperature changes
- Far end of sensor adequately cooled through pivot







Disassembly of test run tracker

- Unmount modules, unpair half-modules, clean and mount on storage plates
- 10/20 half-modules processed, starting with L3-5 (fewest bad channels)









QA, round 2

- 30 half-modules built for test run: 1 prototype ("gimp"), 20 used, 9 spares
- Need 12 half-modules
- QA goals:
 - Bad channels in test run data: distinguish between actual half-module defects and bad runs (DAQ issues)
 - Re-QA all half-modules with better understanding, less time pressure, more consistency (full pulse shape cal for all channels, room T and cold)
- 14 half-modules QA-ed; 7 perfect (no bad channels)

Side project: laser test stand

- APV25 internal calibration circuit poorly calibrated for absolute gain
- Cd-109 source provides gain calibration, but very low rate
- Laser test stand built at SLAC last decade but never set up; setup mostly completed last fall
 - 3-axis motion with micron precision in X and Y
 - Pulser with 2-50 ns pulse width
 - Laser diodes and diffraction-limited optics for 840 and 1060 nm
 - Zero to 200 MIPs into single strips
- Not necessary for HPS, but very close to being useful

