Cavity BPMs Analog Output

Ye Tian Syracuse University

Parasitic Run Analogy Output

Cavity BPMs Position Calibration

Milestone and Outlook

2/15/2019

Cavity BPM Electronics



Beam Off Pedestal Correction



Cavity BPMs Parasitic Calibration



4B and 4C are done, after we satisfy the behavior, John will lock the parameter access.

Beam Tuning and Steering Test Runs

prexALL_1225.root Raw signal without Calibration



See the correlation between cavity and SEE BPMs

Beam Tuning and Steering Test Runs

prexALL_1228.root Raw signal without Calibration



See the correlation between cavity and SEE BPMs

Calibration for Cavity BPMs Signals



Cavity BPMs Position Calibration



Signal Delay Issues

cav4cq:CodaEventNumber/30 {CodaEventNumber>47400 && CodaEventNumber<48000}



cav4bq:CodaEventNumber/30 { CodaEventNumber>47400 && CodaEventNumber<48000}



cav4dq:CodaEventNumber/30 {CodaEventNumber>47400 && CodaEventNumber<48000}



Cavity BPMs Milestone



Discussion and Outlook

- Send the required BW and position calibration factors v/mm to John by this afternoon. -----applying the calibration factor to japan
- 1 Week Parasitic APEX beam time to test John's new cavity BPMs receiver frame.
 -----100kHz BW delay time and the switch ability.
- Complete low current cavity BPMs beam test?
 ----- with the new receiver frame

Thank you !

Thanks to John, Chad, Bob, Paul King, and

.

Back Up

Typical Analog Superhet Receiver



Figure 1. Functional block diagram of a basic superhet receiver, describing major subsystems.

Cavity Modes





- TM010 is the mode for I
- TM110 is the mode for X/I and Y/I



New Hall A BCM Digital Readout

