

## adinstbpm - Feature #17771

Milestone # 17719 (New): Booster operational test of one crate alongside existing BPM system

### Support for flash-turn and flash-orbit measurements

09/25/2017 01:31 PM - John Diamond

<b>Status:</b>	Work in progress	<b>Start date:</b>	09/25/2017
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	John Diamond	<b>% Done:</b>	90%
<b>Category:</b>		<b>Estimated time:</b>	40.00 hours
<b>Target version:</b>		<b>Spent time:</b>	48.00 hours
<b>Description</b>			
Support for single-sample measurements that can be stored in circular buffer.			

#### History

##### #1 - 10/05/2017 10:09 AM - John Diamond

- % Done changed from 0 to 80

Refactored where DAQ data is stored -

- DAQ data buffers are no longer a part of Measurement
- A new class-hierarchy called IReading was created with descendants such as TBTReading and FlashReading
- The IReadings are basically data buffers. Measurements can produce multiple readings. For example, in a typical booster cycle the DAQ modules may digitize all 20000 turns but the user may only be interested in a single-turn ("flash-turn") reading of the DAQ modules. On another cycle the user may request a turn-by-turn and a flash-turn reading.
- The Measurement table now contains far-less data and may be expanded to thousands of entries to give the user a history of the DAQ module activity
- Implemented dump\_flash\_turn and dump\_flash\_turn\_history CLI commands for viewing flash-turn readings
- Expanded the Control readout command to support specifying which readings to make and which turn/orbit to readout

Need to implement support for reading Flash-Orbit and Raw data.

##### #2 - 10/06/2017 01:02 PM - John Diamond

Raw reading support has been implemented.

##### #3 - 10/06/2017 01:02 PM - John Diamond

- % Done changed from 80 to 90