adinstbpm - Task #20521

Milestone # 20350 (New): IOTA BPM deployment

Milestone # 19607 (New): IOTA ACNET Interface

IOTA BPM Raw Array Device

08/03/2018 09:19 AM - John Diamond

Status:	Closed	**Start date:**	08/03/2018
Priority:	Normal	**Due date:**	
Assignee:	Elliott McCrory	**% Done:**	100%
Category:		**Estimated time:**	4.00 hours
Target version:		**Spent time:**	12.00 hours

Description

An ACNET device for reading the latest Raw Reading.

History

#1 - 08/03/2018 09:20 AM - John Diamond

Nathan's specifications:

```
Raw Data Readback by "paging" bpm raw data readback
  N:IBPMIN - index for selecting bpm to read (1-21)
  N:IBPMPG - page to report from each channel (1-16) to support up to 128k samples
  N:IBPMRA[0:N] - Raw ADC samples for channel A for selected bpm
  N:IBPMRB[0:N] - Raw ADC samples for channel B for selected bpm
  N:IBPMRC[0:N] - Raw ADC samples for channel C for selected bpm
  N:IBPMRD[0:N] - Raw ADC samples for channel D for selected bpm
```

The existing SSDNs Channel IDs stop at 216 (0x00d8), so we will use 220 (0xdc)

This will be six (6) new SSDNs *(0?dc/0000/0000/0000)*:

- **Chan 0** - The reading/setting of the BPM to return *(00dc/0000/0000/0000)*
- **Chan 1** - the reading/setting of the page number of the raw data to return *(01dc/0000/0000/0000)*
- **Plate P** - The plate reading. *(0Pdc/0000/0000/0000) - P=2, 3, 4, or 5 for A, B, C, or D, respectively*

Note that the last three words of the SSDN are ignored.

Thus, setting the device with the (00dc) SSDN to 1 and the (01dc) SSDN to 5 will cause readings on each of the four other SSDNs to point to the raw array values of the second BPM at the 6th page of the full data array.

#2 - 08/30/2018 12:15 PM - Elliott McCrory

- % Done changed from 0 to 70

#3 - 10/16/2018 11:08 AM - Elliott McCrory

- Status changed from Assigned to Closed

- % Done changed from 70 to 100

- Estimated time set to 4.00 h