

## VME BPM - Bug #9939

Milestone # 9746 (Closed): Comission F4 and SSB nodes

### Digitizers at SSB have the wrong firmware.

08/27/2015 10:21 AM - John Diamond

<b>Status:</b>	Closed	<b>Start date:</b>	08/27/2015
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	John Diamond	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Spent time:</b>	3.50 hours
<b>Description</b>			
It looks like the digitizer's at SSB have the wrong firmware:			
<pre>sbpmsb:vmebpm&gt; d 0xfbff22a8 fbff22a0:          000e ac0a 8000 0000  *          .....*</pre>			
<pre>sbpmsb:vmebpm&gt; d 0xfbff32a8 fbff32a0:          000e ac0a 8000 0000  *          .....*</pre>			
I expect something like 0x000fad0b --			
<pre>sbpmf4:vmebpm&gt; d 0xfbff22a8 fbff22a0:          000f ad0b 8000 0000  *          .....*</pre>			
Ning will re-flash them.			

### History

#### #1 - 08/27/2015 11:53 AM - John Diamond

Re-installed the digitizers at SSB and I still see the following:

```
sbpmsb:vmebpm> d 0xfbff22a8
fbff22a0:          000e ac0a 8000 0000  *          .....*

fbff32a0:          000e ac0a 8000 0000  *          .....*
fbff32b0:  0000 0000 0000 0000 0000 0000 0000 0000  *.....*
```

Then I noticed that...

```
0fad0b = 0000 1111 1010 1101 0000 1011
0eac0a = 0000 1110 1010 1100 0000 1010
```

It looks like the LSB in each 16-bit word is always 0 when it should be 1...

#### #2 - 08/27/2015 05:11 PM - John Diamond

Took the processor and digitizers from SSB and put them in Ning's crate. Found that the processor board wasn't making a total connection with the backplane. Ning found that the problem went away when we screwed in the processor into the front panel.

#### #3 - 08/28/2015 09:42 AM - John Diamond

- Status changed from New to Resolved

- Assignee set to John Diamond

Placed the processor and digitizers back in the SSB crate. Screwed the processor in tightly. It appears that the CPU is now communicating with the digitizers over the VME bus correctly:

```
fbff22a0:          000f ad0b 8000 0000  *          .....*

fbff32a0:          000f ad0b 8000 0000  *          .....*
```

Forgot to hook up TCLK signal and did not know where to hook up BPM signals. Troy will go out later to hook those up.

**#4 - 08/28/2015 09:43 AM - John Diamond**

- *Status changed from Resolved to Closed*

- *% Done changed from 0 to 100*