

## CAMAC - Feature #25026

### Add BBM support to MADC burst driver

09/29/2020 08:27 AM - Richard Neswold

<b>Status:</b>	Assigned	<b>Start date:</b>	09/28/2020
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Richard Neswold	<b>% Done:</b>	0%
<b>Category:</b>	MADC "burst" driver	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
<p>The BBM application needs information from M:TOR107 but, because the information comes in short bursts, it can't collect it properly. The "MADC Waveform" or "burst" driver (<a href="#">#18749</a>) reliably reads this device. We propose to add support for BBM to this driver.</p> <p>The following modifications will be made:</p> <ul style="list-style-type: none"><li>• A new, 32-bit accumulator will be added which simply sums every reading. This total is allowed to wrap because BBM subtracts it from the previous total. Two's complement arithmetic works correctly for this case.</li><li>• If the driver doesn't already have one, it needs to keep a count of the number of pulses.</li><li>• The setting property needs to support the settings that BBM uses. This includes the reading of the setting. Since the driver already knows which MADC channel to read and at what rate, most (all?) of the information in the setting will be ignored.</li><li>• The reading property needs to support the reading structure that BBM uses.</li></ul> <p>To access these two new properties, an new ACNET device will be created.</p>			

#### History

##### #1 - 09/29/2020 09:41 AM - Richard Neswold

A recent change to the burst driver was to not include pulses that were less than or equal to zero. This was done to remove noise and not include pulses that didn't go out even though there was a clock event.

The BBM summation, therefore, won't include the zero data either (really this means the counts won't increase.)

##### #2 - 09/29/2020 02:30 PM - Richard Neswold

The BBM support for M:TOR107 is ready to be tested (commit [58e99f40](#))

The front-end needs to be rebooted, a new ACNET device needs to be made and the BBM application needs to know the new device before we can test it.