

inst-bpm - Task #9385

Milestone # 9017 (Accepted): State Machine subsystem

State Machine subsystem test

07/07/2015 02:15 PM - John Diamond

Status:	New	Start date:	07/17/2015																				
Priority:	Normal	Due date:																					
Assignee:	John Diamond	% Done:	20%																				
Category:	bpmd	Estimated time:	0.00 hour																				
Target version:		Spent time:	5.00 hours																				
Description																							
Test the state machine with the following command list:																							
<table border="1"><thead><tr><th>Index</th><th>Event</th><th>Command</th><th>Parameter List</th></tr></thead><tbody><tr><td>0</td><td>Immediate</td><td>TB_SEND</td><td></td></tr><tr><td>1</td><td>0.010s</td><td>ARM</td><td>measurement = RAW samples = 65535 trigger = immediate</td></tr><tr><td>2</td><td>TCLK \$1F</td><td>READOUT</td><td>source = RAW</td></tr><tr><td>3</td><td>TCLK \$1F</td><td>IDLE</td><td></td></tr></tbody></table>				Index	Event	Command	Parameter List	0	Immediate	TB_SEND		1	0.010s	ARM	measurement = RAW samples = 65535 trigger = immediate	2	TCLK \$1F	READOUT	source = RAW	3	TCLK \$1F	IDLE	
Index	Event	Command	Parameter List																				
0	Immediate	TB_SEND																					
1	0.010s	ARM	measurement = RAW samples = 65535 trigger = immediate																				
2	TCLK \$1F	READOUT	source = RAW																				
3	TCLK \$1F	IDLE																					
Subtasks:																							
Task # 9658: Instrument bpmd control commands and display their execution time in syslog			New																				

History

#1 - 07/07/2015 02:34 PM - John Diamond

The first test should prove that we can acquire and readout a channel at 15Hz.
The next test we will try to use the array plotter to plot 8192 raw samples at 15Hz.

#2 - 07/07/2015 02:36 PM - John Diamond

We should instrument the length of the IDLE state to find out how much time we spend between booster cycles.

#3 - 07/07/2015 02:37 PM - John Diamond

- Estimated time set to 8.00 h
- Parent task set to #9017

#4 - 07/09/2015 10:54 AM - John Diamond

- Category set to bpmd
- Assignee set to John Diamond

No transition board hardware yet so the TB_SEND command is just a placeholder for now.

#5 - 07/16/2015 09:09 PM - John Diamond

- % Done changed from 0 to 70

This week we verified that the state machine works for command lists that do not include timers. See [#9610](#) and [#9383](#).

#6 - 07/16/2015 09:10 PM - John Diamond

We should run this test with the ARM command triggered immediately and at 15Hz.