AD Instrumentation

	2021-2				2021-3				2021-4					2021-5				2021-6					2021-7			
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
AD Instrumentation		AD Instrumentation																								
Implement Mooc 720 Hz Upgrade		New																								
adinstbpm																										
Booster operational test of one crate (...)		New																								
Booster BPM ACNET Interface		Work in progress																								
ACNET device BPM Numbers (0x0017)		Work in progress																								
ACNET device BPM Offsets (0x0016)		Resolved																								
ACNET device BPM Digitizer (...)		Resolved																								
ACNET device BPM Turn-by-Turn (...)		Work in progress																								
ACNET device BPM Single Turn (...)		Resolved																								
ACNET device BPM Single Turn (...)		Resolved																								
ACNET device BPM Turn-by-Turn (...)		Resolved																								
ACNET device BPM Average Position (...)		Work in progress																								
ACNET device BPM Orbit Group (...)		Work in progress																								
ACNET device BPM Closed Orbit (...)		Resolved																								
ACNET device BPM Orbit Correction (...)		Work in progress																								
bpmd error facility		Work in progress																								
Verify DAQ operation with at least (...)		Work in progress																								
Support for flash-turn and flash-orbit (...)		Work in progress																								
Support for DMA transfers from (...)		New																								
Locking mechanism for shared memory (...)		Resolved																								
Create ACNET devices for B38 and (...)		Resolved																								
Test B38 and B40		Work in progress																								
Driver for Booster BPM transition (...)		Resolved																								
Support flagging that data could (...)		Resolved																								
No beam threshold		Resolved																								
Implement Booster BPM scaling		Resolved																								
Configure BPMs for test stand at (...)		Work in progress																								

Why do soft reboots sometime hang?	New
Implement polynomial scaling	Resolved
bpmcli command to reload bpmd.conf	Assigned
Refactor to use getopt	Resolved
Support BPM lists in dump commands	Resolved
Refactor bpmcli 'abort' command (...)	Resolved
Refactor bpmcli 'arm' command to (...)	Resolved
Refactor bpmcli 'dump_flash_history' (...)	New
Refactor bpmcli 'help' command (...)	New
Refactor bpmcli 'readout' command (...)	Resolved
Refactor bpmcli 'show' command (...)	Resolved
Refactor bpmcli 'shutdown' command (...)	Resolved
bpmcli commands for enabling/disabling (...)	Work in progress
Improvements to bpmcli	New
Booster BPM State Machine	Work in progress
Support for GigE ADCs	New
x86 support for Technobox XMC GigE (...)	Work in progress
IOTA BPM deployment	New
IOTA ACNET Interface	New
Crate status and control device	Work in progress
Support for 4-channel 2-dimensional (...)	Resolved
Startup despite missing timing (...)	Resolved
Adapter for NML timing module	Work in progress
Adapter for IOTA DAQ module	Resolved
IOTA State Machine	Resolved
Functional specification document	Assigned
The number of samples argument (...)	New
Control message queue is not destroyed (...)	Resolved
Enter BPMs into bpmd.conf	Resolved
Create separate "stable" branches (...)	Resolved
IOTA BPM TBT Array Device	Assigned
ACNET device for Arming IOTA BPMs	Assigned
BPM-level delay configuration	New
Separate IOTA ACNET code from BoosterBPMACNET (...)	Work in progress

Orbit structure device for IOTA (...)	Work in progress
Support multiple sets of coefficients (...)	New
TCLK-driven arm and TBT readout (...)	New
Request ethernet connection for (...)	Resolved
Request ACNET node assignment	Resolved
BPM Diagnostics Application	New
ACNET interface for adjusting TSG and (...)	Assigned
Deploy IOTA BPM hardware	New
Booster BPM deployment	New
Gather crate and CPU MAC addresses (...)	Work in progress
Request ethernet connection for (...)	Assigned
Request ethernet connection for (...)	Assigned
Request ethernet connection for (...)	Assigned
Request ethernet connection for (...)	Assigned
Request ACNET node assignment for (...)	Work in progress
Request ACNET node assignment for (...)	Work in progress
Request ACNET node assignment for (...)	Work in progress
Request ACNET node assignment for (...)	Work in progress
bpmd.conf for BBPL15	New
bpmd.config for BBPL15	New
Change node name for all BBPM15 (...)	Resolved
Change node name for all BBPM06 (...)	Resolved
Change node name for all BBPM21 (...)	Resolved
Change node name for all BBPM12 (...)	Resolved
Change node name for all BBPM18 (...)	Resolved
Change node name for all BBPM24 (...)	Resolved
Snapshot plot support for Booster BPMs	Assigned
PIP2IT BPM Project	New
Refactor to store positions inside (...)	New
Position calculation thread	New
IPC to broadcast events from bpmd	New
Support GigE readout	New
Python API for accessing BPM data	New
Merge iota_stable, booster_stable	New

Support for I&Q, phase space data (...)	New
Support displaying bpmd broadcasts	New
Support displaying data in gnuplot	New
RMS analysis process	New
Interactive bpmcli	New
Support for Analysis Processes	New
Support rack-mount server architecture	New
Review request [commit:9d6fb8c32be2b760ee7030952422308551c178991: (...)	New
Missing Mutual Exclusion with linked (...)	New
TRACE buffer levels need to be in enumeration	New
drvgen	
Remove redundant or unnecessarily long (...)	New
TSI-148 bridge does not support a master (...)	Assigned
Support for VME A24	New
A24 Registers Support	Assigned
A24 Data Regions Support	Assigned
Constants generated for bitfields and (...)	Resolved
runtime_error in generated getDeviceInSlot() (...)	Resolved
Kernel-level xxxmod_device_get() routine (...)	Work in progress
Make the VME A16 scanning increment (...)	Work in progress
Image Tool	
Live Images not working	Resolved
Remember fit selection between acquisition (...)	Resolved
Error notifications on multi-screen (...)	Resolved
Picture Stops Updating	Resolved
Incorrect amplitude scaling on ROI	Accepted
Saturated Pixels incorrect on Background (...)	New
Java Security Blocks	New
Input is not in the .gz format	Resolved
Camera Ordering	New
Error on One-Shot Acquisition	Accepted
Defalut camera?	New
Device List in Meta	New
Incorrect Horz Histogram window on ROI	New

Frequent Errors in Live Acquisition	New
Camera-Switch Instability	New
inst-bpm	
Refactor pointer usage to smart pointers	Accepted
Booster frequency curve	Accepted
State Machine subsystem	Accepted
Implement timer-triggered commands	New
Instrument bpmd control commands (...)	New
BPMDRO does not release on exit	New
adc250x12xs VXS interface	New
StateMachine refactor	New
Design ACNET interface for command (...)	New
Use the GoF State pattern in StateMachine (...)	New
Move the Command and CommandList (...)	New
Rename the IDLE command the EXIT (...)	New
Turn off interrupts when module is removed.	New
Execute CommandLists	Assigned
Find a replacement for the CT VX405/04x (...)	New
Down Converter Test	New
bpmcli command for loading the (...)	New
Test command list for reading out (...)	New
Make Synoptic pages for displaying (...)	Feedback
Timing board stops generating TCLK (...)	Assigned
btimemod_device_release does not release (...)	Resolved
State Machine subsystem test	New
PXIE BPM Deployment	New
PXIE BPM Test Node	New
Network connection and kerberos (...)	Assigned
Boot flash for PXIE BPM test (...)	New
Instrumentation Drivers	Instrumentation Drivers
DCCT ADC Driver	Assigned
Driver for VFRT-VUCD TSG	New
Driver for CMTF Interlocks ADC	New
ACNET interface for CMTFInterlocksADC	Assigned

80MHz board driver could be a little (...)	Resolved
slowness of init of 80MHz driver ??	New
Raw data device does not support channels	Accepted
Develop a Prototype VME Driver Writer	New
80MHz Digitizer requires repeating commands (...)	Resolved
80MHz digitizer driver should sanity (...)	Resolved
57 -97 errors on raw/triggered data (...)	New
Add offset to add into waveform points	New
Driver for 12-channel NML Timing Board	New
Setup a test crate	New
Submit network connection (...)	New
Create drvgen register map	New
Commission nmltrg	Assigned
Verify operating of ACNET devices (...)	Accepted
Firmware loading tool for Linux	Assigned
Driver for IOTA BPM Timing Module	New
drvgen specification for NML timing (...)	Work in progress
Device driver for IOTA DAQ module	Assigned
drvgen specification for IOTABPM250x8	Resolved
Implement DMA readouts for Raw (...)	Work in progress
Commission IOTATG	New
Request ethernet connection for (...)	Work in progress
Request ACNET node assignment for (...)	Assigned
Create startup script for IOTATG	Assigned
Configure startup parameters for (...)	Assigned
Create ACNET devices for IOTATG	Assigned
Verify ACNET devices and operation (...)	Assigned
Channel level delays for IOTA BPM DAQ	Work in progress
Linux on MVME8100	
Need extra mini db-9 cables, null modem (...)	New
Linux Kernel booting on the MVME8100	New
Setup build area	Assigned
Network connection for booster (...)	Assigned
Main Injector BPM	

Upgrade all BPM nodes to ACNET/MOOC (...)	New
Upgrade to VxWORKS 6.7	New
MI/RR IPM	
Single turn plot does not work when (...)	New
Necessary LabView parameters are no (...)	Resolved
State machine devices for Booster IPMs	Resolved
Plotting Charge, Sigma and Turns does (...)	New
Single turn plot not showing current (...)	Resolved
Excessive delay in first plot, capturing (...)	New
rbpm	
Setup test node	Assigned
Add test node to R143	Assigned
Verify test node	Assigned
Commission Muon Houses S60, F1 and F23	New
Network connections for new muon (...)	New
Configure startup scripts for ubpm6s, (...)	Assigned
ACNET devices for ubpm23 BPMs	Assigned
Support 53MHz, 53MHz stacked and (...)	Assigned
Recycler BPM	
New P1 Line BPMs	Accepted
Upgrade to MOOC v4.1	New
Build gbpm, rrbpm and rrtb code (...)	Assigned
Deploy MOOC 4.1 to test stand and (...)	New
Deploy MOOC 4.1 to a single rbpm (...)	New
Deploy to remaining rbpm houses	New
Missing first injection and other odd (...)	Assigned
Support Notes	
Re-Write "RFIES Variants - Detailed" (...)	New
Timing Library	
Support for Charlie's evttrig library	Accepted
ubpm	
Establish Test Stand	New
Assemble crate	New
Network connection	New

Request ACNET node name	New
Create git repository	New
Establish Targets file, startup (...)	New
Rename RRXxx classes to MuonXxx	New
Create ACNET devices for test node	New
Add Muon Campus Devel 'area' to (...)	New
Modify MuonStateMachine to respond (...)	New
VME BPM	
Add nodes to save list	New
Move scaling into the frontend	New
VP94 and HP103 show identical data when (...)	New
Release 201603A	New
Upgrade ClassACNet/Mooc	Assigned
SY BPMs won't boot	Resolved
F4 node won't boot	New
Replace SBC at F4	Resolved
BBM Interface	Assigned
Attenuation tables won't initialize (...)	Resolved
Improvements for auto-tune operation	New
Flat positions being reported intermittently	New
Put together a test stand	New
Establish alarms for SBPMxx nodes	New
ACNET support for beam threshold	New
Error state during spill	New
Investigate reading back attenuator (...)	New
Improve error handling of CAN bus (...)	New
VME Intensity Monitor	VME Intensity Monitor
BBB devices are returning stale data	Feedback
BBB standard deviation device	New
2015 Shutdown	New 95%
Implement MDAT Receiver	Assigned
Request remote reboot devices	Work in progress
Configure MDAT frames	Assigned
ANUB Startup	New 96%

Normalized BEL devices	Assigned
Support beam before extraction (...)	New
Deploy New MI Tororid Nodes	Resolved
Refactor to use the PMCUCDTimingSystem (...)	Assigned
Simplify Script Set Register Functions	Work in progress
ACNET settings for ADC parameters	Resolved
Reset sum on disarm event + delay	Assigned
Acnet Device Set Toroid ADC Registers (...)	Work in progress
Confirm ADC Present and Correct	Work in progress
Injection and Extraction Cycle Devices	Assigned
Beam Energy Loss Devices	Assigned
Cycle devices for anub	Accepted
Use Trace for logging & error reporting	Assigned
April Release - 201604A	New
Refactor to useAD/Control's concurrency (...)	New
Move ADC drivers to adinsthw	New
TSG Support	Assigned
Support Alexei's changes to the (...)	Assigned
Remove Conditional Compilation (...)	Work in progress
Turn of tracing for ACNET tasks	New
Refactor TRACE0 calls with the (...)	New
Support new digitizer gate mode (...)	Resolved
201602A Replace Latch with ATR	Work in progress
201602A Document ATR	Work in progress
Create new sum devices	Assigned
Rename *.h Files to *.hpp	Work in progress
Scale Factor EVENT OVERLAP Error Message (...)	New
Transition operational Recycler DCCT (...)	Assigned
Rename ANUB	Assigned
Array Data Timeout Request	New
MI/RR DCCT Configuration Update	Assigned
Transfer MI DCCT Acnet devices (...)	New
Cleanup DcctDrv & Calls to DcctDrv	Work in progress
New DCCT V2.1 Firmware Driver	New

MDAT requires Baseline Filter	New
Pxint Firmware Update to ABB0E	Work in progress
Pxie Scrapers Clean Up	Work in progress
DCCT: Transfer Recycler Devices from (...)	Assigned
Support different DcctDrv firmware running (...)	Assigned
Update Pxie Gate Width Calibration Mode	Work in progress
Replicate PXINT on NBEAM Request	New
ACNET device support for new MPS features (...)	Assigned
Support tracking the chopper's pulse (...)	Assigned
Configure second ring pickup for PXIE	Assigned
Fix scaling for ring pick MPS thresholds	Assigned
ADC configuration commands for PXIE (...)	Assigned
BBM for R:TOR703	Assigned
Configure pulse width tracking for PXIE (...)	Assigned
Write integrated pulse readings to file	Assigned
New scale factors for PXIE Ring Pickups (...)	Work in progress
Support for Rich's MPS transmission (...)	Assigned
Support for PXIE digitizer firmware (...)	Assigned
Request for I:13SUM1	New
Support plotting MDAT transmitter frames (...)	New
Create devices for Ring Pickup study (...)	Work in progress
Configure R:TOR703 for g-2 operation	Assigned
Configure a cycle device for R:TOR703 (...)	Resolved
Build support into Cycle Devices that (...)	Assigned
Commission new toroid nodes at NML	New
Install hardware for NMLTR2	Work in progress
Install hardware for NMLTR3	Work in progress
Create ACNET devices for new toroids	Work in progress
Verify new devices with a test (...)	New
Verify BBM interface with Bill (...)	New
Commission new scrapers for PXIE	Resolved
ACNET devices for new scrapers at PIP2IT	Assigned
Comission M40TOR front end	New
Configure M40TOR CPU board	Resolved

Request ACNET node ID assignment (...)	Resolved
Configure startup script	Assigned
Configure MDAT transmitter	New
Test & Verify	New
Sum device for muon campus toroid (R:TOR703)	New
More summation devices requested	New
Commission F16TOR	Assigned
Install and configure hardware (...)	New
E:NUMIPWR	Assigned