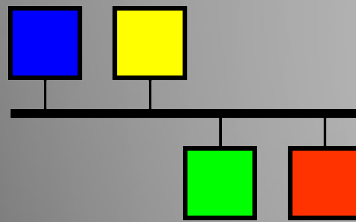




# EPICS



## BEST EPICS IOC

2.0.0

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Tuesday 23<sup>rd</sup> June, 2026

# 1 IOC RECORDS

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## 1.1 \$(P):TetrAMM0:Ch1

**Record Type:** waveform

**Fields:**

Field	Value
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**Long description:**

Waveform from input channel of TetrAmm picoammeter unit, BPM0. Default sampling frequency is 1kHz (decimation from 100kHz).

## 1.2 \$(P):TetrAMM1:Ch1

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Waveform from input channel of TetrAmm picoammeter unit, BPM1. Default sampling frequency is 1kHz (decimation from 100kHz).

## 1.3 \$(P):TetrAMM0:Ch2

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Waveform from input channel of TetrAmm picoammeter unit, BPM0. Default sampling frequency is 1kHz (decimation from 100kHz).

## 1.4 \$(P):TetrAMM1:Ch2

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Waveform from input channel of TetrAmm picoammeter unit, BPM1. Default sampling frequency is 1kHz (decimation from 100kHz).

## 1.5 \$(P):TetrAMM0:Ch3

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Waveform from input channel of TetrAmm picoammeter unit, BPM0. Default sampling frequency is 1kHz (decimation from 100kHz).

## 1.6 \$(P):TetrAMM1:Ch3

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Waveform from input channel of TetrAmm picoammeter unit, BPM1. Default sampling frequency is 1kHz (decimation from 100kHz).

## 1.7 \$(P):TetrAMM0:Ch4

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Waveform from input channel of TetrAmm picoammeter unit, BPM0. Default sampling frequency is 1kHz (decimation from 100kHz).

## 1.8 \$(P):TetrAMM1:Ch4

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Waveform from input channel of TetrAmm picoammeter unit, BPM1. Default sampling frequency is 1kHz (decimation from 100kHz).

## 1.9 \$(P):TetrAMM0:Range

**Record Type:** bo

**Fields:**

Field	Value
-------	-------

**Long description:**

Change TetrAMM range, BPM0.

## 1.10 \$(P):TetrAMM1:Range

**Record Type:** bo

**Fields:**

Field	Value
-------	-------

**Long description:**

Change TetrAMM range, BPM1.

## 1.11 \$(P):BPM0:PosX

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

X position, BPM0.

## 1.12 \$(P):BPM1:PosX

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

X position, BPM1.

## 1.13 \$(P):BPM0:PosY

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Y position, BPM0.

## 1.14 \$(P):BPM1:PosY

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Y position, BPM1.

## 1.15 \$(P):BPM0:Int

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Intensity, BPM0, waveform.

## 1.16 \$(P):BPM1:Int

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

Intensity, BPM1.

## 1.17 \$(P):BPM0:PosX\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PosX, BPM0, scalar.

## 1.18 \$(P):BPM0:PosY\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PosY, BPM0, scalar.

## 1.19 \$(P):BPM0:Int\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

Intensity, BPM0, scalar.

## 1.20 \$(P):BPM1:PosX\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PosX, BPM1, scalar.

## 1.21 \$(P):BPM1:PosY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PosY, BPM1, scalar.

## 1.22 \$(P):BPM1:Int\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

Intensity, BPM1, scalar.

## 1.23 \$(P):BPM0:PosX\_stdev\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(PosX), BPM0, scalar.

## 1.24 \$(P):BPM0:PosY\_stdev\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(PosY), BPM0, scalar.

## 1.25 \$(P):BPM0:Int\_stdev\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(Int), BPM0, scalar.

## 1.26 \$(P):BPM1:PosX\_stdev\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(PosX), BPM1, scalar.

## 1.27 \$(P):BPM1:PosY\_stdev\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(PosY), BPM1, scalar.

## 1.28 \$(P):BPM1:Int\_stdev\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(Int), BPM1, scalar.

## 1.29 \$(P):BPM0:PosX\_stdev\_filt\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(PosX), BPM0, scalar.

### 1.30 \$(P):BPM0:PosY\_stdev\_filt\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(PosY), BPM0, scalar.

### 1.31 \$(P):BPM0:Int\_stdev\_filt\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(Int), BPM0, scalar.

### 1.32 \$(P):BPM1:PosX\_stdev\_filt\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(PosX), BPM1, scalar.

### 1.33 \$(P):BPM1:PosY\_stdev\_filt\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(PosY), BPM1, scalar.

### 1.34 \$(P):BPM1:Int\_stdev\_filt\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

stdev(Int), BPM1, scalar.

### 1.35 \$(P):BPM0:ScaleX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

X position scaling parameter, BPM0.

### 1.36 \$(P):BPM0:ScaleX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

X position scaling parameter, BPM0, readback value.

### 1.37 \$(P):BPM1:ScaleX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

X position scaling parameter, BPM1.

### 1.38 \$(P):BPM1:ScaleX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

X position scaling parameter, BPM1, readback value.

### 1.39 \$(P):BPM0:ScaleY

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Y position scaling parameter, BPM0.

### 1.40 \$(P):BPM0:ScaleY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

Y position scaling parameter, BPM0, readback value.

### 1.41 \$(P):BPM1:ScaleY

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Y position scaling parameter, BPM1.

## 1.42 \$(P):BPM1:ScaleY\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

Y position scaling parameter, BPM1, readback value.

## 1.43 \$(P):NumberTetrAMM

**Record Type:** mbbi

**Fields:**

Field	Value
-------	-------

**Long description:**

Number of TetrAMMs/EnBOXes connected on the SFP.

## 1.44 \$(P):PID:Status

**Record Type:** mbbi

**Fields:**

Field	Value
-------	-------

**Long description:**

Status of PID controller.

## 1.45 \$(P):PID:Enable

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Enable/disable PID controller.

## 1.46 \$(P):PID:Reset

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Reset of PID controller.

## 1.47 \$(P):PID:SetpointX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Beam Setpoint on X position.

## 1.48 \$(P):PID:SetpointY

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Beam Setpoint on Y position.

## 1.49 \$(P):PID:SetpointI0

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Beam Setpoint on intensity.

## 1.50 \$(P):PID:SetpointX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

Beam Setpoint on X position, readback value.

## 1.51 \$(P):PID:SetpointY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

Beam Setpoint on Y position, readback value.

## 1.52 \$(P):PID:SetpointI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

Beam Setpoint on intensity, readback value.

## 1.53 \$(P):PID:OffsetX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Beam Offset on X position.

## 1.54 \$(P):PID:OffsetX\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

Beam Offset on X position, readback value.

## 1.55 \$(P):PID:OffsetY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Beam Offset on Y position.

## 1.56 \$(P):PID:OffsetY\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

Beam Offset on Y position, readback value.

## 1.57 \$(P):PID:OffsetI0

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Beam Offset on instensity.

## 1.58 \$(P):PID:OffsetI0\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

Beam Offset on instensity, readback value.

## 1.59 \$(P):PreDAC0:OutMux

**Record Type:** mbbo

**Fields:**

Field	Value
-------	-------

**Long description:**

Set Output multiplexer. Output multiplexer allows to switch control from HW PID (HW via FPGA) to software (SW via PCIe). PreDAC output is controlled by HW PID (HW via FPGA). User can then manually control PreDAC output channels (SW via PCIe).

## 1.60 \$(P):PreDAC0:OutMux\_RBV

**Record Type:** mbbi

**Fields:**

Field	Value
-------	-------

**Long description:**

Set Output multiplexer, readback value

## 1.61 \$(P):PreDAC0:OutCh1

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Manual drive PreDAC output, CH1. OutMux need to be set to SW via PCIe.

## 1.62 \$(P):PreDAC0:OutCh2

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Manual drive PreDAC output, CH2. OutMux need to be set to SW via PCIe.

### 1.63 \$(P):PreDAC0:OutCh3

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Manual drive PreDAC output, CH3. OutMux need to be set to SW via PCIe.

### 1.64 \$(P):PreDAC0:OutCh4

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Manual drive PreDAC output, CH4. OutMux need to be set to SW via PCIe.

### 1.65 \$(P):Login:UserPass

**Record Type:** stringout

**Fields:**

Field	Value
-------	-------

**Long description:**

Login command. Change user (cruise, user, admin).

## 1.66 \$(P):Login:Level

**Record Type:** mbbi

**Fields:**

Field	Value
-------	-------

**Long description:**

Current login level.

## 1.67 \$(P):PreDAC0:Ch1

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

PreDAC output data, CH1. OutMux need to be set to HW via FPGA.

## 1.68 \$(P):PreDAC0:Ch1\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PreDAC output data, CH1, scalar.

## 1.69 \$(P):PreDAC0:Ch2

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

PreDAC output data, CH2. OutMux need to be set to HW via FPGA.

## 1.70 \$(P):PreDAC0:Ch2\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PreDAC output data, CH2, scalar.

## 1.71 \$(P):PreDAC0:Ch3

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

PreDAC output data, CH3. OutMux need to be set to HW via FPGA.

## 1.72 \$(P):PreDAC0:Ch3\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PreDAC output data, CH3, scalar.

## 1.73 \$(P):PreDAC0:Ch4

**Record Type:** waveform

**Fields:**

Field	Value
-------	-------

**Long description:**

PreDAC output data, CH4. OutMux need to be set to HW via FPGA.

## 1.74 \$(P):PreDAC0:Ch4\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PreDAC output data, CH4, scalar.

## 1.75 \$(P):PID:KpX

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Kp on X position.

## 1.76 \$(P):PID:KiX

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Ki on X position.

## 1.77 \$(P):PID:KdX

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Kd on X position.

## 1.78 \$(P):PID:eminX

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID emin on X position.

## 1.79 \$(P):PID:ImaxX

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Imax on X position.

## 1.80 \$(P):PID:OminX

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Omin on X position.

## 1.81 \$(P):PID:OmaxX

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Omax on X position.

## 1.82 \$(P):PID:OgainX

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Kp Ogain X position.

## 1.83 \$(P):PID:KpY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Kp on Y position.

## 1.84 \$(P):PID:KiY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Ki on Y position.

## 1.85 \$(P):PID:KdY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Kd on Y position.

## 1.86 \$(P):PID:eminY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID emin on Y position.

## 1.87 \$(P):PID:ImaxY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Imax on Y position.

## 1.88 \$(P):PID:OminY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Omin on Y position.

## 1.89 \$(P):PID:OmaxY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Omax on Y position.

## 1.90 \$(P):PID:OgainY

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set PID Ogain on Y position.

## 1.91 \$(P):PID:KpI0

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set PID Kp on Intensity.

## 1.92 \$(P):PID:KiI0

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set PID Ki on Intensity.

### 1.93 \$(P):PID:KdI0

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set PID Kd on Intensity.

### 1.94 \$(P):PID:eminI0

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set PID emin on Intensity.

### 1.95 \$(P):PID:ImaxI0

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set PID Imax on Intensity.

## 1.96 \$(P):PID:OminI0

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Omin on Intensity.

## 1.97 \$(P):PID:OmaxI0

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Omax on Intensity.

## 1.98 \$(P):PID:OgainI0

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID Ogain on Intensity.

## 1.99 \$(P):PID:KpX\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PID Kp on X position, readback value.

## 1.100 \$(P):PID:KiX\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PID Ki on X position, readback value.

## 1.101 \$(P):PID:KdX\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PID Kd on X position, readback value.

## 1.102 \$(P):PID:eminX\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PID emin on X position, readback value.

## 1.103 \$(P):PID:ImaxX\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PID Imax on X position, readback value.

## 1.104 \$(P):PID:OminX\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

PID Omin on X position, readback value.

### 1.105 \$(P):PID:OmaxX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Omax on X position, readback value.

### 1.106 \$(P):PID:OgainX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Ogain on X position, readback value.

### 1.107 \$(P):PID:KpY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Kp on Y position, readback value.

## 1.108 \$(P):PID:KiY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Ki on Y position, readback value.

## 1.109 \$(P):PID:KdY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Kd on Y position, readback value.

## 1.110 \$(P):PID:eminY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID emin on Y position, readback value.

### 1.111 \$(P):PID:ImaxY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Imax on Y position, readback value.

### 1.112 \$(P):PID:OminY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Omin on Y position, readback value.

### 1.113 \$(P):PID:OmaxY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Omax on Y position, readback value.

### 1.114 \$(P):PID:OgainY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Ogain on Y position, readback value.

### 1.115 \$(P):PID:KpI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Kp on Intensity, readback value.

### 1.116 \$(P):PID:KiI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Ki on Intensity, readback value.

### 1.117 \$(P):PID:KdI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Kd on Intensity, readback value.

### 1.118 \$(P):PID:eminI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID emin on Intensity, readback value.

### 1.119 \$(P):PID:ImaxI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Imax on Intensity, readback value.

## 1.120 \$(P):PID:OminI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Omin on Intensity, readback value.

## 1.121 \$(P):PID:OmaxI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Omax on Intensity, readback value.

## 1.122 \$(P):PID:OgainI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Ogain on Intensity, readback value.

### 1.123 \$(P):BPM0:Orient

**Record Type:** bo

**Fields:**

Field	Value
-------	-------

**Long description:**

Set BPM orient, BPM0.

### 1.124 \$(P):BPM1:Orient

**Record Type:** bo

**Fields:**

Field	Value
-------	-------

**Long description:**

Set BPM orient, BPM1.

### 1.125 \$(P):BPM0:Orient\_RBV

**Record Type:** mbbi

**Fields:**

Field	Value
-------	-------

**Long description:**

BPM orient, BPM0, readback value.

## 1.126 \$(P):BPM1:Orient\_RBV

**Record Type:** mbbi

**Fields:**

Field	Value
-------	-------

**Long description:**

BPM orient, BPM1, readback value.

## 1.127 \$(P):PID:INconfig

**Record Type:** mbbo

**Fields:**

Field	Value
-------	-------

**Long description:**

Set PID input configuration. Selects which PID controller to activate.

## 1.128 \$(P):PID:INconfig\_RBV

**Record Type:** mbbi

**Fields:**

Field	Value
-------	-------

**Long description:**

PID input configuration, readback value.

## 1.129 \$(P):PID:OUTconfig

**Record Type:** ao

**Fields:**

Field	Value

**Long description:**

Set PID output configuration. Configure which PID os connected to which PreDAC output channel.

## 1.130 \$(P):PID:OUTconfig\_RBV

**Record Type:** ai

**Fields:**

Field	Value

**Long description:**

PID output configuration, readback value.

## 1.131 \$(P):BPM:Selector

**Record Type:** mbbo

**Fields:**

Field	Value

**Long description:**

Set BPM selector. 0: BPM0, 1: BPM1. example: "0 1 0" means X: BPM0, Y: BPM1, IO: BPM0.

### 1.132 \$(P):BPM:Selector\_RBV

Record Type: mbbi

Fields:

Field	Value
-------	-------

Long description:

BPM selector, readback value.

### 1.133 \$(P):BPM0:Crossbar

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set BPM Crossbar, BPM0.

### 1.134 \$(P):BPM0:Crossbar\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

BPM0 Crossbar readback value.

### 1.135 \$(P):BPM1:Crossbar

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set BPM Crossbar, BPM1.

### 1.136 \$(P):BPM1:Crossbar\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

BPM1 Crossbar readback value.

### 1.137 \$(P):BPM0:ENArOcX

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Enable ROC X on BPM0.

### 1.138 \$(P):BPM0:ENArOcY

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Enable ROC Y on BPM0.

### 1.139 \$(P):BPM0:ENAbeamOff

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Enable Beam Off Threshold on BPM0.

### 1.140 \$(P):BPM1:ENArOcX

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Enable ROC X on BPM1.

### 1.141 \$(P):BPM1:ENArOcY

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Enable ROC Y on BPM1.

### 1.142 \$(P):BPM1:ENAbeamOff

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Enable Beam Off Threshold on BPM1.

### 1.143 \$(P):BPM0:ENArOcX\_RBv

Record Type: bi

Fields:

Field	Value
-------	-------

Long description:

Enable ROC X on BPM0, readback value.

### 1.144 \$(P):BPM0:ENArOcY\_RBV

Record Type: bi

Fields:

Field	Value
-------	-------

Long description:

Enable ROC Y on BPM0, readback value.

### 1.145 \$(P):BPM0:ENAbeamOff\_RBV

Record Type: bi

Fields:

Field	Value
-------	-------

Long description:

Enable Beam Off Threshold on BPM0, readback value.

### 1.146 \$(P):BPM1:ENArOcX\_RBV

Record Type: bi

Fields:

Field	Value
-------	-------

Long description:

Enable ROC X on BPM1, readback value.

### 1.147 \$(P):BPM1:ENArOcY\_RBV

Record Type: bi

Fields:

Field	Value
-------	-------

Long description:

Enable ROC Y on BPM1, readback value.

### 1.148 \$(P):BPM1:ENAbeamOff\_RBV

Record Type: bi

Fields:

Field	Value
-------	-------

Long description:

Enable Beam Off Threshold on BPM1, readback value.

### 1.149 \$(P):BPM0:RocX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set ROC on X position, BPM0.

## 1.150 \$(P):BPM1:RocX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set ROC on X position, BPM1.

## 1.151 \$(P):BPM0:RocY

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set ROC on Y position, BPM0.

## 1.152 \$(P):BPM1:RocY

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set ROC on Y position, BPM1.

### 1.153 \$(P):BPM0:BeamOffTh

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set Beam Off Threshold, BPM0.

### 1.154 \$(P):BPM1:BeamOffTh

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set Beam Off Threshold, BPM1.

### 1.155 \$(P):BPM0:RocX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

ROC on X position, BPM0, readback value.

### 1.156 \$(P):BPM1:RocX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

ROC on X position, BPM1, readback value.

### 1.157 \$(P):BPM0:RocY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

ROC on Y position, BPM0, readback value.

### 1.158 \$(P):BPM1:RocY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

ROC on Y position, BPM1, readback value.

### 1.159 \$(P):BPM0:BeamOffTh\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

Beam Off Threshold, BPM0, readback value.

### 1.160 \$(P):BPM1:BeamOffTh\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

Beam Off Threshold, BPM1, readback value.

### 1.161 \$(P):BPM0:OffsetX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set BPM0 Offset on X position.

## 1.162 \$(P):BPM0:OffsetX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

BPM0 Offset on X position, readback value.

## 1.163 \$(P):BPM1:OffsetX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set BPM1 Offset on X position.

## 1.164 \$(P):BPM1:OffsetX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

BPM1 Offset on X position, readback value.

## 1.165 \$(P):BPM0:OffsetY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set BPM0 Offset on Y position.

## 1.166 \$(P):BPM0:OffsetY\_RBV

**Record Type:** ai

**Fields:**

Field	Value
-------	-------

**Long description:**

BPM0 Offset on Y position, readback value.

## 1.167 \$(P):BPM1:OffsetY

**Record Type:** ao

**Fields:**

Field	Value
-------	-------

**Long description:**

Set BPM1 Offset on Y position.

## 1.168 \$(P):BPM1:OffsetY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

BPM1 Offset on Y position, readback value.

## 1.169 \$(P):PID:FreqX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Change PID Update Frequency on X position.

## 1.170 \$(P):PID:FreqX\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Update Frequency on X position, readback value.

### 1.171 \$(P):PID:FreqY

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Change PID Update Frequency on Y position.

### 1.172 \$(P):PID:FreqY\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Update Frequency on Y position, readback value.

### 1.173 \$(P):PID:FreqI0

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Change PID Update Frequency on Intensity

## 1.174 \$(P):PID:FreqI0\_RBV

Record Type: ai

Fields:

Field	Value
-------	-------

Long description:

PID Update Frequency on Intensity, readback value.

## 1.175 \$(P):BEST:Init

Record Type: bo

Fields:

Field	Value
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Long description:

BEST initialization procedure. This command read the BEST configuration file and programs the FPGA with the last saved configuration.

## 1.176 \$(P):TetrAMM0:HVvoltage

Record Type: ao

Fields:

Field	Value
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Long description:

Set TetrAMM HV voltage, BPM0.

## 1.177 \$(P):TetrAMM1:HVvoltage

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set TetrAMM HV voltage, BPM1.

## 1.178 \$(P):TetrAMM0:HVenable

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Enable TetrAMM HV module, BPM0.

## 1.179 \$(P):TetrAMM1:HVenable

Record Type: bo

Fields:

Field	Value
-------	-------

Long description:

Enable TetrAMM HV module, BPM1.

## 1.180 \$(P):BEST:SFPA\_RBV

**Record Type:** bi

**Fields:**

Field	Value
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**Long description:**

Check if a device (TetrAMM/EnBOX) is connected on SFPA.

## 1.181 \$(P):BEST:SFPB\_RBV

**Record Type:** bi

**Fields:**

Field	Value
-------	-------

**Long description:**

Check if a device (TetrAMM/EnBOX) is connected on SFPB.

## 1.182 \$(P):PID:Target\_Reached\_PosX

**Record Type:** calcout

**Fields:**

Field	Value
-------	-------

**Long description:**

Check if a target is set/reached within configurable target error on position X.

### 1.183 \$(P):PID:Target\_Error\_PosX

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set an allowed target error on position X.

### 1.184 \$(P):PID:Target\_Reached\_PosY

Record Type: calcout

Fields:

Field	Value
-------	-------

Long description:

Check if a target is set/reached within configurable target error on position Y.

### 1.185 \$(P):PID:Target\_Error\_PosY

Record Type: ao

Fields:

Field	Value
-------	-------

Long description:

Set an allowed target error on position Y.