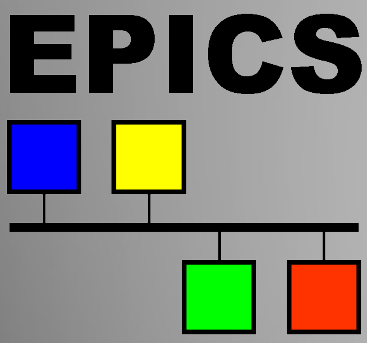
CAENels
Gear For Science



BEST EPICS IOC

1.0-34

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Thursday 6th November, 2025

1 IOC RECORDS

1.1 $(P):TetrAMM0:Ch1

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	TetrAMM Input Channel 1
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Waveform
DESC	TetrAMM Input Channel 1
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Waveform
DESC	TetrAMM Input Channel 2
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Waveform
DESC	TetrAMM Input Channel 2
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

Long description:
Waveform from input channel of TetrAmm picoammeter unit, BPM1. Default sampling fre-

quency is 1kHz (decimation from 100kHz).

1.5 $(P):TetrAMM0:Ch3

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	TetrAMM Input Channel 3
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Waveform
DESC	TetrAMM Input Channel 3
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Waveform
DESC	TetrAMM Input Channel 4
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Waveform
DESC	TetrAMM Input Channel 4
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Bo
DESC	TetrAMM Range

Long description:
Change TetrAMM range, BPM0.

1.10 $(P):TetrAMM1:Range

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	TetrAMM Range

Long description:
Change TetrAMM range, BPM1.

1.11 $(P):BPM0:PosX

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	Position X
FTVL	DOUBLE
EGU	um
NELM	1024
SCAN	1 second

Long description:
X position, BPM0.

1.12 $(P):BPM1:PosX

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	Position X
FTVL	DOUBLE
EGU	um
NELM	1024
SCAN	1 second

Long description:
X position, BPM1.

1.13 $(P):BPM0:PosY

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	Position Y
FTVL	DOUBLE
EGU	um
NELM	1024
SCAN	1 second

Long description:
Y position, BPM0.

1.14 $(P):BPM1:PosY

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	Position Y
FTVL	DOUBLE
EGU	um
NELM	1024
SCAN	1 second

Long description:
Y position, BPM1.

1.15 $(P):BPM0:Int

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	Intensity
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

Long description:
Intensity, BPM0, waveform.

1.16 $(P):BPM1:Int

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	Intensity
FTVL	DOUBLE
EGU	Amper
NELM	1024
SCAN	1 second

Long description:
Intensity, BPM1.

1.17 $(P):BPM0:PosX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Scalar PosX
EGU	um
SCAN	1 second

Long description:
PosX, BPM0, scalar.

1.18 $(P):BPM0:PosY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Scalar PosY
EGU	um
SCAN	1 second

Long description:
PosY, BPM0, scalar.

1.19 $(P):BPM0:Int_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Scalar Intensity
EGU	Amper
SCAN	1 second

Long description:
Intensity, BPM0, scalar.

1.20 $(P):BPM1:PosX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Scalar PosX
EGU	um
SCAN	1 second

Long description:
PosX, BPM1, scalar.

1.21 $(P):BPM1:PosY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Scalar PosY
EGU	um
SCAN	1 second

Long description:
PosY, BPM1, scalar.

1.22 $(P):BPM1:Int_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Scalar Intensity
EGU	Amper
SCAN	1 second

Long description:
Intensity, BPM1, scalar.

1.23 $(P):BPM0:PosX_stdev_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev PosX (full bandwidth)
EGU	um/sqrt(Hz)
SCAN	1 second

Long description:
stdev(PosX), BPM0, scalar.

1.24 $(P):BPM0:PosY_stdev_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev PosY (full bandwidth)
EGU	um/sqrt(Hz)
SCAN	1 second

Long description:
stdev(PosY), BPM0, scalar.

1.25 $(P):BPM0:Int_stdev_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev Int (full bandwidth)
EGU	Amper/sqrt(Hz)
SCAN	1 second

Long description:
stdev(Int), BPM0, scalar.

1.26 $(P):BPM1:PosX_stdev_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev PosX (full bandwidth)
EGU	um/sqrt(Hz)
SCAN	1 second

Long description:
stdev(PosX), BPM1, scalar.

1.27 $(P):BPM1:PosY_stdev_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev PosY (full bandwidth)
EGU	um/sqrt(Hz)
SCAN	1 second

Long description:
stdev(PosY), BPM1, scalar.

1.28 $(P):BPM1:Int_stdev_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev Int (full bandwidth)
EGU	Amper/sqrt(Hz)
SCAN	1 second

Long description:
stdev(Int), BPM1, scalar.

1.29 $(P):BPM0:PosX_stdev_filt_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev PosX (100 Hz bandwidth)
EGU	um/sqrt(Hz)
SCAN	1 second

Long description:
stdev(PosX), BPM0, scalar.

1.30 $(P):BPM0:PosY_stdev_filt_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev PosY (100 Hz bandwidth)
EGU	um/sqrt(Hz)
SCAN	1 second

Long description:
stdev(PosY), BPM0, scalar.

1.31 $(P):BPM0:Int_stdev_filt_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev Int (100 Hz bandwidth)
EGU	Amper/sqrt(Hz)
SCAN	1 second

Long description:
stdev(Int), BPM0, scalar.

1.32 $(P):BPM1:PosX_stdev_filt_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev PosX (100 Hz bandwidth)
EGU	um/sqrt(Hz)
SCAN	1 second

Long description:
stdev(PosX), BPM1, scalar.

1.33 $(P):BPM1:PosY_stdev_filt_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev PosY (100 Hz bandwidth)
EGU	um/sqrt(Hz)
SCAN	1 second

Long description:
stdev(PosY), BPM1, scalar.

1.34 $(P):BPM1:Int_stdev_filt_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get Stdev Int (100 Hz bandwidth)
EGU	Amper/sqrt(Hz)
SCAN	1 second

Long description:
stdev(Int), BPM1, scalar.

1.35 $(P):BPM0:ScaleX

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	Set BPM0 position X
EGU	um/1

Long description:
X position scaling parameter, BPM0.

1.36 $(P):BPM0:ScaleX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get BPM0 position X
EGU	um/1
SCAN	1 second

Long description:
X position scaling parameter, BPM0, readback value.

1.37 $(P):BPM1:ScaleX

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	Set BPM1 position X
EGU	um/1

Long description:
X position scaling parameter, BPM1.

1.38 $(P):BPM1:ScaleX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get BPM1 position X
EGU	um/1
SCAN	1 second

Long description:
X position scaling parameter, BPM1, readback value.

1.39 $(P):BPM0:ScaleY

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	Set BPM0 position X
EGU	um/1

Long description:
Y position scaling parameter, BPM0.

1.40 $(P):BPM0:ScaleY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	Get BPM position Y
EGU	um/1
SCAN	1 second

Long description:

Y position scaling parameter, BPM0, readback value.

1.41 $(P):BPM1:ScaleY

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	Set BPM1 position Y
EGU	um/1

Long description:
Y position scaling parameter, BPM1.

1.42 $(P):BPM1:ScaleY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	BPM position Y
EGU	um/1
SCAN	1 second

Long description:
Y position scaling parameter, BPM1, readback value.

1.43 $(P):NumberTetrAMM

Record Type: mbbi

Fields:

Field	Value
DTYP	CAENels BEST Mbbi
ZRST	No TetrAMMs
ONST	1 TetrAMM
TWST	2 TetrAMMs
SCAN	1 second

Long description:
Number of TetrAMMs/EnBOXes connected on the SFP.

1.44 $(P):PID:Status

Record Type: mbbi

Fields:

Field	Value
DTYP	CAENels BEST Mbbi
DESC	PID status
ZRST	Stopped
ONST	Stopped by ROC
TWST	Paused
THST	Running
SCAN	1 second

Long description:
Status of PID controller.

1.45 $(P):PID:Enable

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	PID Enable
ZNAM	OFF
ONAM	ON

Long description:
Enable/disable PID controller.

1.46 $(P):PID:Reset

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	PID Reset
VAL	0
ONAM	ON
ZNAM	OFF
HIGH	1

Long description:
Reset of PID controller.

1.47 $(P):PID:SetpointX

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID Setpoint X
EGU	um

Long description:
Beam Setpoint on X position.

1.48 $(P):PID:SetpointY

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID Setpoint Y
EGU	um

Long description:
Beam Setpoint on Y position.

1.49 $(P):PID:SetpointI0

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID Setpoint I0
EGU	Amper

Long description:
Beam Setpoint on intensity.

1.50 $(P):PID:SetpointX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID Setpoint X
EGU	um
SCAN	1 second

Long description:
Beam Setpoint on X position, readback value.

1.51 $(P):PID:SetpointY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID Setpoint Y
EGU	um
SCAN	1 second

Long description:
Beam Setpoint on Y position, readback value.

1.52 $(P):PID:SetpointI0_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID Setpoint I0
EGU	um
SCAN	1 second

Long description:
Beam Setpoint on intensity, readback value.

1.53 $(P):PID:OffsetX

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID Offset X
EGU	V

Long description:
Beam Offset on X position.

1.54 $(P):PID:OffsetX_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Offset X Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
Beam Offset on X position, readback value.

1.55 $(P):PID:OffsetY

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID Offset Y
EGU	V

Long description:
Beam Offset on Y position.

1.56 $(P):PID:OffsetY_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Offset Y Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
Beam Offset on Y position, readback value.

1.57 $(P):PID:OffsetI0

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID Offset I0
EGU	V

Long description:
Beam Offset on instensity.

1.58 $(P):PID:OffsetI0_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Offset I0 Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
Beam Offset on instensity, readback value.

1.59 $(P):PreDAC0:OutMux

Record Type: mbbo

Fields:

Field	Value
DTYP	CAENels BEST Mbbo
DESC	Out mux (1=SW, 0=HW)
ONST	HW via FPGA
ZRST	SW via PCIe

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
DTYP	CAENels BEST Mbbi
DESC	Out mux (1=SW, 0=HW)
ONST	HW via FPGA
ZRST	SW via PCIe
SCAN	1 second

Long description:
Set Output multiplexer, readback value

1.61 $(P):PreDAC0:OutCh1

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PreDAC Out Channels (manual)
EGU	V

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
DTYP	CAENels BEST Ao
DESC	PreDAC Out Channels (manual)
EGU	V

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
DTYP	CAENels BEST Ao
DESC	PreDAC Out Channels (manual)
EGU	V

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
DTYP	CAENels BEST Ao
DESC	PreDAC Out Channels (manual)
EGU	V

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
DTYP	CAENels BEST Stringout
DESC	User and Password, separated by colon

Long description:
Login command. Change user (cruise, user, admin).

1.66 $(P):Login:Level

Record Type: mbbi

Fields:

Field	Value
DTYP	CAENels BEST Mbbi
DESC	Current access level
ZRST	Cruise
ONST	User
TWST	Admin
SCAN	1 second

Long description:
Current login level.

1.67 $(P):PreDAC0:Ch1

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	PreDAC0 Output Channel 1
FTVL	DOUBLE
EGU	Volt
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Ai
DESC	Get Scalar PreDAC0 Out Ch1
EGU	Volt
SCAN	1 second

Long description:
PreDAC output data, CH1, scalar.

1.69 $(P):PreDAC0:Ch2

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	PreDAC0 Output Channel 2
FTVL	DOUBLE
EGU	Volt
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Ai
DESC	Get Scalar PreDAC0 Out Ch2
EGU	Volt
SCAN	1 second

Long description:
PreDAC output data, CH2, scalar.

1.71 $(P):PreDAC0:Ch3

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	PreDAC0 Output Channel 3
FTVL	DOUBLE
EGU	Volt
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Ai
DESC	Get Scalar PreDAC0 Out Ch3
EGU	Volt
SCAN	1 second

Long description:
PreDAC output data, CH3, scalar.

1.73 $(P):PreDAC0:Ch4

Record Type: waveform

Fields:

Field	Value
DTYP	CAENels BEST Waveform
DESC	PreDAC0 Output Channel 4
FTVL	DOUBLE
EGU	Volt
NELM	1024
SCAN	1 second

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
DTYP	CAENels BEST Ai
DESC	Get Scalar PreDAC0 Out Ch4
EGU	Volt
SCAN	1 second

Long description:
PreDAC output data, CH4, scalar.

1.75 $(P):PID:KpX

Record Type: ao

Fields:

Field	Value
DESC	PID Kp X
DTYP	CAENels BEST Ao

Long description:
Set PID Kp on X position.

1.76 $(P):PID:KiX

Record Type: ao

Fields:

Field	Value
DESC	PID Ki X
DTYP	CAENels BEST Ao

Long description:
Set PID Ki on X position.

1.77 $(P):PID:KdX

Record Type: ao

Fields:

Field	Value
DESC	PID Kd X
DTYP	CAENels BEST Ao

Long description:
Set PID Kd on X position.

1.78 $(P):PID:eminX

Record Type: ao

Fields:

Field	Value
DESC	PID emin X
DTYP	CAENels BEST Ao

Long description:
Set PID emin on X position.

1.79 $(P):PID:ImaxX

Record Type: ao

Fields:

Field	Value
DESC	PID Imax X
DTYP	CAENels BEST Ao

Long description:
Set PID Imax on X position.

1.80 $(P):PID:OminX

Record Type: ao

Fields:

Field	Value
DESC	PID Omin X
DTYP	CAENels BEST Ao

Long description:
Set PID Omin on X position.

1.81 $(P):PID:OmaxX

Record Type: ao

Fields:

Field	Value
DESC	PID Omax X
DTYP	CAENels BEST Ao

Long description:
Set PID Omax on X position.

1.82 $(P):PID:OgainX

Record Type: ao

Fields:

Field	Value
DESC	PID Ogai X
DTYP	CAENels BEST Ao

Long description:
Set PID Kp Ogain X position.

1.83 $(P):PID:KpY

Record Type: ao

Fields:

Field	Value
DESC	PID Kp Y
DTYP	CAENels BEST Ao

Long description:
Set PID Kp on Y position.

1.84 $(P):PID:KiY

Record Type: ao

Fields:

Field	Value
DESC	PID Ki Y
DTYP	CAENels BEST Ao

Long description:
Set PID Ki on Y position.

1.85 $(P):PID:KdY

Record Type: ao

Fields:

Field	Value
DESC	PID Kd Y
DTYP	CAENels BEST Ao

Long description:
Set PID Kd on Y position.

1.86 $(P):PID:eminY

Record Type: ao

Fields:

Field	Value
DESC	PID emin Y
DTYP	CAENels BEST Ao

Long description:
Set PID emin on Y position.

1.87 $(P):PID:ImaxY

Record Type: ao

Fields:

Field	Value
DESC	PID Imax Y
DTYP	CAENels BEST Ao

Long description:
Set PID Imax on Y position.

1.88 $(P):PID:OminY

Record Type: ao

Fields:

Field	Value
DESC	PID Omin Y
DTYP	CAENels BEST Ao

Long description:
Set PID Omin on Y position.

1.89 $(P):PID:OmaxY

Record Type: ao

Fields:

Field	Value
DESC	PID Omax Y
DTYP	CAENels BEST Ao

Long description:
Set PID Omax on Y position.

1.90 $(P):PID:OgainY

Record Type: ao

Fields:

Field	Value
DESC	PID Ogai Y
DTYP	CAENels BEST Ao

Long description:
Set PID Ogain on Y position.

1.91 $(P):PID:KpI0

Record Type: ao

Fields:

Field	Value
DESC	PID Kp I0
DTYP	CAENels BEST Ao

Long description:
Set PID Kp on Intensity.

1.92 $(P):PID:KiI0

Record Type: ao

Fields:

Field	Value
DESC	PID Ki I0
DTYP	CAENels BEST Ao

Long description:
Set PID Ki on Intensity.

1.93 $(P):PID:KdI0

Record Type: ao

Fields:

Field	Value
DESC	PID Kd I0
DTYP	CAENels BEST Ao

Long description:
Set PID Kd on Intensity.

1.94 $(P):PID:eminI0

Record Type: ao

Fields:

Field	Value
DESC	PID emin I0
DTYP	CAENels BEST Ao

Long description:
Set PID emin on Intensity.

1.95 $(P):PID:ImaxI0

Record Type: ao

Fields:

Field	Value
DESC	PID Imax I0
DTYP	CAENels BEST Ao

Long description:
Set PID Imax on Intensity.

1.96 $(P):PID:OminI0

Record Type: ao

Fields:

Field	Value
DESC	PID Omin I0
DTYP	CAENels BEST Ao

Long description:
Set PID Omin on Intensity.

1.97 $(P):PID:OmaxI0

Record Type: ao

Fields:

Field	Value
DESC	PID Omax I0
DTYP	CAENels BEST Ao

Long description:
Set PID Omax on Intensity.

1.98 $(P):PID:OgainI0

Record Type: ao

Fields:

Field	Value
DESC	PID Ogain I0
DTYP	CAENels BEST Ao

Long description:
Set PID Ogain on Intensity.

1.99 $(P):PID:KpX_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Kp X Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Kp on X position, readback value.

1.100 $(P):PID:KiX_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Ki X Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:

PID Ki on X position, readback value.

1.101 $(P):PID:KdX_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Kd X Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:

PID Kd on X position, readback value.

1.102 $(P):PID:eminX_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID emin X Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:

PID emin on X position, readback value.

1.103 $(P):PID:ImaxX_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Imax X Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Imax on X position, readback value.

1.104 $(P):PID:OminX_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Omin X Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Omin on X position, readback value.

1.105 $(P):PID:OmaxX_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Omax X Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Omax on X position, readback value.

1.106 $(P):PID:OgainX_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Ogain X Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Ogain on X position, readback value.

1.107 $(P):PID:KpY_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Kp Y Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Kp on Y position, readback value.

1.108 $(P):PID:KiY_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Ki Y Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Ki on Y position, readback value.

1.109 $(P):PID:KdY_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Kd Y Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Kd on Y position, readback value.

1.110 $(P):PID:eminY_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID emin Y Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID emin on Y position, readback value.

1.111 $(P):PID:ImaxY_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Imax Y Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Imax on Y position, readback value.

1.112 $(P):PID:OminY_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Omin Y Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Omin on Y position, readback value.

1.113 $(P):PID:OmaxY_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Omax Y Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Omax on Y position, readback value.

1.114 $(P):PID:OgainY_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Ogain Y Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Ogain on Y position, readback value.

1.115 $(P):PID:KpI0_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Kp I0 Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Kp on Intensity, readback value.

1.116 $(P):PID:KiI0_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Ki I0 Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Ki on Intensity, readback value.

1.117 $(P):PID:KdI0_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Kd I0 Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Kd on Intensity, readback value.

1.118 $(P):PID:eminI0_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID emin I0 Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID emin on Intensity, readback value.

1.119 $(P):PID:ImaxI0_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Imax I0 Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Imax on Intensity, readback value.

1.120 $(P):PID:OminI0_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Omin I0 Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Omin on Intensity, readback value.

1.121 $(P):PID:OmaxI0_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Omax I0 Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Omax on Intensity, readback value.

1.122 $(P):PID:OgainI0_RBV

Record Type: ai

Fields:

Field	Value
DESC	PID Ogain I0 Readback
DTYP	CAENels BEST Ai
SCAN	1 second

Long description:
PID Ogain on Intensity, readback value.

1.123 $(P):BPM0:Orient

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	BPM Orientation
ZNAM	45deg
ONAM	90deg

Long description:
Set BPM orient, BPM0.

1.124 $(P):BPM1:Orient

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	BPM Orientation
ZNAM	45deg
ONAM	90deg

Long description:
Set BPM orient, BPM1.

1.125 $(P):BPM0:Orient_RBV

Record Type: mbbi

Fields:

Field	Value
DTYP	CAENels BEST Mbbi
DESC	BPM Orientation
ONST	90deg
SCAN	1 second

Long description:
BPM orient, BPM0, readback value.

1.126 $(P):BPM1:Orient_RBV

Record Type: mbbi

Fields:

Field	Value
DTYP	CAENels BEST Mbbi
DESC	BPM Orientation
ONST	90deg
SCAN	1 second

Long description:
BPM orient, BPM1, readback value.

1.127 $(P):PID:INconfig

Record Type: mbbo

Fields:

Field	Value
DTYP	CAENels BEST Mbbo
DESC	PID Configuration
ZRST	X
ONST	X & Y
TWST	X & I0
THST	Y
FRST	Y & I0
FVST	X & Y & I0
SXST	I0

Long description:
Set PID input configuration. Selects which PID controller to activate.

1.128 $(P):PID:INconfig_RBV

Record Type: mbbi

Fields:

Field	Value
DTYP	CAENels BEST Mbbi
DESC	PID Configuration
SCAN	1 second
ZRST	X
ONST	X & Y
TWST	X & I0
THST	Y
FRST	Y & I0
FVST	X & Y & I0
SXST	I0

Long description:
PID input configuration, readback value.

1.129 $(P):PID:OUTconfig

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID out confselect

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
DTYP	CAENels BEST Ai
DESC	PID out conf
SCAN	1 second

Long description:
PID output configuration, readback value.

1.131 $(P):BPM:Selector

Record Type: mbbo

Fields:

Field	Value
DTYP	CAENels BEST Mbbo
DESC	BPM Selector Configuration
ZRST	0 0 0
ONST	0 0 1
TWST	0 1 0
THST	0 1 1
FRST	1 0 0
FVST	1 0 1
SXST	1 1 0
SVST	1 1 1

Long description:
Set BPM selector. 0: BPM0, 1: BPM1. example: ”0 1 0” means X: BPM0, Y: BPM1, I0: BPM0.

1.132 $(P):BPM:Selector_RBV

Record Type: mbbi

Fields:

Field	Value
DTYP	CAENels BEST Mbbi
DESC	PID Configuration
SCAN	1 second
ZRST	0 0 0
ONST	0 0 1
TWST	0 1 0
THST	0 1 1
FRST	1 0 0
FVST	1 0 1
SXST	1 1 0
SVST	1 1 1

Long description:
BPM selector, readback value.

1.133 $(P):BPM0:Crossbar

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	BPM Crossbar

Long description:
Set BPM Crossbar, BPM0.

1.134 $(P):BPM0:Crossbar_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	BPM Crossbar
SCAN	1 second

Long description:
BPM0 Crossbar readback value.

1.135 $(P):BPM1:Crossbar

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	BPM Crossbar

Long description:
Set BPM Crossbar, BPM1.

1.136 $(P):BPM1:Crossbar_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	BPM Crossbar
SCAN	1 second

Long description:
BPM1 Crossbar readback value.

1.137 $(P):BPM0:ENArocX

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	PID ENA ROC, BPM0, X pos
ZNAM	Disabled
ONAM	Enabled

Long description:
Enable ROC X on BPM0.

1.138 $(P):BPM0:ENArocY

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	PID ENA ROC, BPM0, Y pos
ZNAM	Disabled
ONAM	Enabled

Long description:
Enable ROC Y on BPM0.

1.139 $(P):BPM0:ENAbeamOff

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	PID ENA ROC, BPM0, I0
ZNAM	Disabled
ONAM	Enabled

Long description:
Enable Beam Off Threshold on BPM0.

1.140 $(P):BPM1:ENArocX

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	PID ENA ROC, BPM1, X pos
ZNAM	Disabled
ONAM	Enabled

Long description:
Enable ROC X on BPM1.

1.141 $(P):BPM1:ENArocY

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	PID ENA ROC, BPM1, Y pos
ZNAM	Disabled
ONAM	Enabled

Long description:
Enable ROC Y on BPM1.

1.142 $(P):BPM1:ENAbeamOff

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	PID ENA ROC, BPM1, I0
ZNAM	Disabled
ONAM	Enabled

Long description:
Enable Beam Off Threshold on BPM1.

1.143 $(P):BPM0:ENArocX_RBV

Record Type: bi

Fields:

Field	Value
DTYP	CAENels BEST Bi
DESC	PID ENA ROC RBV, BPM0, X pos
ZNAM	Disabled
ONAM	Enabled
SCAN	1 second

Long description:
Enable ROC X on BPM0, readback value.

1.144 $(P):BPM0:ENArocY_RBV

Record Type: bi

Fields:

Field	Value
DTYP	CAENels BEST Bi
DESC	PID ENA ROC RBV, BPM0, Y pos
ZNAM	Disabled
ONAM	Enabled
SCAN	1 second

Long description:
Enable ROC Y on BPM0, readback value.

1.145 $(P):BPM0:ENAbeamOff_RBV

Record Type: bi

Fields:

Field	Value
DTYP	CAENels BEST Bi
DESC	PID ENA ROC RBV, BPM0, I0
ZNAM	Disabled
ONAM	Enabled
SCAN	1 second

Long description:
Enable Beam Off Threshold on BPM0, readback value.

1.146 $(P):BPM1:ENArocX_RBV

Record Type: bi

Fields:

Field	Value
DTYP	CAENels BEST Bi
DESC	PID ENA ROC RBV, BPM1, X pos
ZNAM	Disabled
ONAM	Enabled
SCAN	1 second

Long description:
Enable ROC X on BPM1, readback value.

1.147 $(P):BPM1:ENArocY_RBV

Record Type: bi

Fields:

Field	Value
DTYP	CAENels BEST Bi
DESC	PID ENA ROC RBV, BPM1, Y pos
ZNAM	Disabled
ONAM	Enabled
SCAN	1 second

Long description:
Enable ROC Y on BPM1, readback value.

1.148 $(P):BPM1:ENAbeamOff_RBV

Record Type: bi

Fields:

Field	Value
DTYP	CAENels BEST Bi
DESC	PID ENA ROC RBV, BPM1, I0
ZNAM	Disabled
ONAM	Enabled
SCAN	1 second

Long description:
Enable Beam Off Threshold on BPM1, readback value.

1.149 $(P):BPM0:RocX

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID ROCX limits
EGU	um

Long description:
Set ROC on X position, BPM0.

1.150 $(P):BPM1:RocX

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID ROCX limits
EGU	um

Long description:
Set ROC on X position, BPM1.

1.151 $(P):BPM0:RocY

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID ROCY limits
EGU	um

Long description:
Set ROC on Y position, BPM0.

1.152 $(P):BPM1:RocY

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID ROCY limits
EGU	um

Long description:
Set ROC on Y position, BPM1.

1.153 $(P):BPM0:BeamOffTh

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID ROC limits
EGU	Amper

Long description:
Set Beam Off Threshold, BPM0.

1.154 $(P):BPM1:BeamOffTh

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID ROC limits
EGU	Amper

Long description:
Set Beam Off Threshold, BPM1.

1.155 $(P):BPM0:RocX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID ROCX limits
EGU	um
SCAN	1 second

Long description:
ROC on X position, BPM0, readback value.

1.156 $(P):BPM1:RocX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID ROCX limits
EGU	um
SCAN	1 second

Long description:
ROC on X position, BPM1, readback value.

1.157 $(P):BPM0:RocY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID ROCY limits
EGU	um
SCAN	1 second

Long description:
ROC on Y position, BPM0, readback value.

1.158 $(P):BPM1:RocY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID ROCY limits
EGU	um
SCAN	1 second

Long description:
ROC on Y position, BPM1, readback value.

1.159 $(P):BPM0:BeamOffTh_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID ROC limits
EGU	Amper
SCAN	1 second

Long description:
Beam Off Threshold, BPM0, readback value.

1.160 $(P):BPM1:BeamOffTh_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID ROC limits
EGU	Amper
SCAN	1 second

Long description:
Beam Off Threshold, BPM1, readback value.

1.161 $(P):BPM0:OffsetX

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	BPM0 offset X
EGU	um

Long description:

Set BPM0 Offset on X position.

1.162 $(P):BPM0:OffsetX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	BPM0 offset X RBV
SCAN	1 second
EGU	um

Long description:
BPM0 Offset on X position, readback value.

1.163 $(P):BPM1:OffsetX

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	BPM1 offset X
EGU	um

Long description:
Set BPM1 Offset on X position.

1.164 $(P):BPM1:OffsetX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	BPM1 offset X RBV
SCAN	1 second
EGU	um

Long description:
BPM1 Offset on X position, readback value.

1.165 $(P):BPM0:OffsetY

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	BPM0 offset Y

Long description:
Set BPM0 Offset on Y position.

1.166 $(P):BPM0:OffsetY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	BPM0 offset Y RBV
SCAN	1 second

Long description:
BPM0 Offset on Y position, readback value.

1.167 $(P):BPM1:OffsetY

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	BPM1 offset Y

Long description:
Set BPM1 Offset on Y position.

1.168 $(P):BPM1:OffsetY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	BPM1 offset Y RBV
SCAN	1 second
EGU	um

Long description:
BPM1 Offset on Y position, readback value.

1.169 $(P):PID:FreqX

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PIDX Update Frequency

Long description:
Change PID Update Frequency on X position.

1.170 $(P):PID:FreqX_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID X Update Frequency RBV
SCAN	1 second
EGU	Hz

Long description:
PID Update Frequency on X position, readback value.

1.171 $(P):PID:FreqY

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID Y Update Frequency

Long description:
Change PID Update Frequency on Y position.

1.172 $(P):PID:FreqY_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID Y Update Frequency RBV
SCAN	1 second
EGU	Hz

Long description:
PID Update Frequency on Y position, readback value.

1.173 $(P):PID:FreqI0

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	PID I0 Update Frequency

Long description:
Change PID Update Frequency on Intensity

1.174 $(P):PID:FreqI0_RBV

Record Type: ai

Fields:

Field	Value
DTYP	CAENels BEST Ai
DESC	PID I0 Update Frequency RBV
SCAN	1 second
EGU	Hz

Long description:
PID Update Frequency on Intensity, readback value.

1.175 $(P):BEST:Init

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	Best Init from Config
ZNAM	Success
ONAM	Failure

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
DTYP	CAENels BEST Ao
DESC	TetrAMM HV voltage

Long description:

Set TetrAMM HV voltage, BPM0.

1.177 $(P):TetrAMM1:HVvoltage

Record Type: ao

Fields:

Field	Value
DTYP	CAENels BEST Ao
DESC	TetrAMM HV voltage

Long description:
Set TetrAMM HV voltage, BPM1.

1.178 $(P):TetrAMM0:HVenable

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	TetrAMM HV enable
ZNAM	Disabled
ONAM	Enabled

Long description:
Enable TetrAMM HV module, BPM0.

1.179 $(P):TetrAMM1:HVenable

Record Type: bo

Fields:

Field	Value
DTYP	CAENels BEST Bo
DESC	TetrAMM HV enable
ZNAM	Disabled
ONAM	Enabled

Long description:
Enable TetrAMM HV module, BPM1.

1.180 $(P):BEST:SFPA_RBV

Record Type: bi

Fields:

Field	Value
DTYP	CAENels BEST Bi
DESC	TetrAMM on SFP A
ZNAM	No TetrAMM
ONAM	TetrAMM
SCAN	1 second

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

1.181 $(P):BEST:SFPB_RBV

Record Type: bi

Fields:

Field	Value
DTYP	CAENels BEST Bi
DESC	TetrAMM on SFP B
ZNAM	No TetrAMM
ONAM	TetrAMM
SCAN	1 second

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