

detdaq18, run 222 (Aug 6, 2020)

Performance Measures

Pedestal Summary

Method: Dark environment, nominal operation, collect 1000 frames @120Hz. Generate per-pixel mean and standard deviation over 1000 frames. Pixels more than 3 sigma out of detector-wide mean are flagged bad. Files archived as xxxx.

Map of pedestal non-conforming pixels for all gain modes [here](#).

Gain Mode	Mean Pedestal Value (ADU)	Number of NCP	Pixels Map, Histogram
FH	3268 ± 231	4829	Graphs
FM	3205 ± 225	4777	Graphs
FL	3175 ± 221	4758	Graphs
AHL	3271 ± 229	4842	Graphs
AML	3207 ± 224	4797	Graphs

Noise Summary

Map of noise non-conforming pixels for all gain modes [here](#).

Gain Mode	Variation (ADU)	Number of NCP	Pixels Map, Histogram
FH	6	419276	Graphs
FM	3	393224	Graphs
FL	2	402881	Graphs
AHL	7	133023	Graphs
AML	3	383411	Graphs

Gain and uniformity (photon source)

Map of gain non-conforming pixels for all gain modes [here](#).

Gain Mode	Number of NCP
FH	1
FM	1
FL	6017
AHL	157
AML	71

Configuration Settings:

configdb_readxtc

Global

System

Acq+Rdo

Scope

ADC

ASICs

ASIC Mask

Maps

EVR Run EventCode

40

EVR Run Delay [119MHz]

0

Quad3

7

6

15

14

4

5

12

13

3

2

11

10

0

1

8

9

Quad0

0

3

4

7

1

2

5

6

8

11

12

15

9

10

13

14

Quad2

11

10

1

0

15

14

11

8

9

5

4

1

7

6

3

0

Quad1

9

8

1

0

10

11

2

3

13

12

5

4

14

15

6

7

High

Medium

Low

Auto HL

Auto ML

Set Gain for All

Save

Cancel

configdb_readxtc

Global

System

Acq+Rdo

Scope

ADC

ASICs

ASIC Mask

Maps

Quad0

A0

A1

A2

A3

A4

A5

A6

A7

A8

A9

A10

A11

A12

A13

A14

A15

CompTH_DAC

22

DM1en

0

Vidl_b

1

RowStart

0

CompEn_lowB

0

DM2en

0

S2D_tcomp

0

RowStop

b1

CompEn_midB

1

emph_bd

0

Filter_DAC

11

ColumnStart

0

CompEn_topB

1

emph_bc

0

testLVDtx

0

ColumnStop

2f

PulserSync

1

VREF_DAC

13

tc

0

chipID

0

pixelDummy

5a

Vreflow

3

S2D

3

S2D1_GR

3

Pulser

3ff

TPS_tcomp

1

S2D_DAC_Bias

3

S2D2_GR

3

Pbit

0

TPS_MUX

0

TPS_tcDAC

0

S2D3_GR

3

atest

0

RO_Monost

3

TPS_DAC

10

trbit

1

test

0

TPS_GR

3

testBE

0

S2D0_tcDAC

1

Sab_test

0

S2D0_GR

3

is_en

0

S2D0_DAC

14

Hrtest

0

PP_OCB_S2D

1

DelEXEC

0

S2D1_tcDAC

1

PulserR

0

OCB

3

DelCCKreg

0

S2D1_DAC

12

DM1

1

Monost

3

RO_rst_en

1

S2D2_tcDAC

1

DM2

0

fastPP_en

0

SLVDSbit

1

S2D2_DAC

12

Pulser_daq

3

Preamp

4

FELmode

1

S2D3_tcDAC

1

MonostPulser

0

Pixel_CB

4

CompEnOn

0

S2D3_DAC

12

Copy ASICs

Copy From

Copy To

None

All

COPY

A0

A1

A2

A3

A4

A5

A6

A7

A8

A9

A10

A11

A12

A13

A14

A15

A0

A1

A2

A3

A4

A5

A6

A7

A8

A9

A10

A11

A12

A13

A14

A15

Q0

Q1

Q2

Q3

Q0

Q1

Q2

Q3

Save

Cancel

Linearity (signal injection)

Thermal measurements (all thermometers)

Experiment History

Experiment	Hutch	Shifts	Date Deployed
Commissioning			