

ePix100 (no.7) - old

Identification Details and Hardware Changelog

Firmware	CarrierID0	CarrierID1	DigitalCardID0	DigitalCardID1	AnalogCardID0	AnalogCardID1	Date
3925999620	0999521281	2533359626	1794137088	1745668107	2398940417	2046820376	July 2021

0xea020004 = 3925999620

Nominal Operating Voltages and Currents

Ch.	Line	V	I

Performance Measures

Experiment=detdaq18, Run=831 (Jun 28, 2021)

Mean Pedestal Value (ADU)	Number of Ped NCP	Pedestal Graphs	Noise (ADU)	Number of Noise NCP	Noise Graphs
4658 ± 245	2619	Histogram/Pixel Map Pedestal NCP Map	3	487	Histogram/Pixel Map Noise NCP Map

Configuration Settings

The screenshot shows the EPIX100a Configuration window with the following settings:

- Version: ea020004
- DigitalCardID0: 1794137088
- DigitalCardID1: 1745668107
- AnalogCardID0: 251456769
- AnalogCardID1: 2046820376
- CarrierID0: 999521281
- CarrierID1: 385875978
- BaseClockFrequency: 1048576
- EvrRunCode (0->255): 40
- EvrDagCode (0->255): 40
- EvrRunTrigDelay (0->2147483647): 0
- NumberOfAsicsPerRow (2->2): 2
- NumberOfAsicsPerColumn (2->2): 2
- NumberOfRowsPerAsic (352->352): 352
- NumberOfReadableRowsPerAsic (0->352): 352
- NumberOfPixelsPerAsicRow (384->384): 384
- CalibrationRowCountPerAsic (2->2): 2
- EnvironmentalRowCountPerAsic (1->1): 1
- ASICs: 0
- Pixel Map: ☐
- Calib Map: ☐
- EpixRunTrigDelay (0->2147483647): 45000
- DacSetting (0x0->0xffff): 9c40
- asicGR (0->1): 1
- asicGRControl (0->1): 1
- asicAcq (0->1): 0
- asicAcqControl (0->1): 0
- asicR0 (0->1): 1
- asicR0Control (0->1): 0
- asicPpmat (0->1): 1
- asicPpmatControl (0->1): 1
- asicPpbe (0->1): 0
- asicPpbeControl (0->1): 0
- asicR0Clk (0->1): 0
- asicR0ClkControl (0->1): 0
- adcStreamMode (0->1): 0
- testPatternEnable (0->1): 0
- SyncMode (0->3): 0
- R0Mode (0->1): 1
- AcqToAcqR0Delay (0->2147483647): 3000
- AcqR0ToAcqAcq (0->2147483647): 20000
- AcqAcqWidth (0->2147483647): 20000
- AcqAcqToPpmatL (0->2147483647): 200
- AcqPpmatToReadout (0->2147483647): 11200
- AcqR0ClkHalfT (0->2147483647): 10
- AcqReadsPerPixel (1->3): 1
- AcqClkHalfT (1->400): 1
- AcqR0Width (0->2147483647): 30
- AdcPipelineDelay0 (0->2147483647): 29
- AdcPipelineDelay1 (0->2147483647): 28
- AdcPipelineDelay2 (0->2147483647): 29
- AdcPipelineDelay3 (0->2147483647): 27
- AsicMask (0x0->0xf): f
- EnableAutomaticRunTrigger (0->1): 0
- NumClockTicksPerRunTrigger: 833333
- ScopeEnable (0->1): 0
- ScopeTrigEdge (0->1): 1
- ScopeTrigCh (0->15): 6
- ScopeArmMode (0->3): 2
- ScopeAdcThresh (0x0->0xffff): 0
- ScopeHoldoff (0->8191): 0
- ScopeOffset (0->8191): 15
- ScopeTraceLength (0->8191): 4096
- ScopeSkipSamples (0->8191): 0
- ScopeInputA (0->31): 0
- ScopeInputB (0->31): 4

Experiment=detdaq18, Run=265 (Sep 3, 2020)

Mean Pedestal Value (ADU)	Number of Ped NCP	Pedestal Graphs	Noise (ADU)	Number of Noise NCP	Noise Graphs
4577 ± 204	20	Histogram/Pixel Map Pedestal NCP Map	23	3496	Histogram/Pixel Map Noise NCP Map

Configuration Settings

Version

ea020004

DigitalCardId0

1794137088

DigitalCardId1

1745668107

AnalogCardId0

251456769

AnalogCardId1

2046820376

CarrierId0

998779393

CarrierId1

117440522

BaseClockFrequency

1048576

EvrRunCode (0->255)

40

EvrDagCode (0->255)

40

EvrRunTrigDelay (0->2147483647)

0

NumberOfAsicsPerRow (2->2)

2

NumberOfAsicsPerColumn (2->2)

2

NumberOfRowsPerAsic (352->352)

352

NumberOfReadableRowsPerAsic (0->352)

352

NumberOfPixelsPerAsicRow (384->384)

384

CalibrationRowCountPerASIC (2->2)

2

EnvironmentalRowCountPerASIC (1->1)

1

ASICs

0

Pixel Map

Calib Map

EpixRunTrigDelay (0->2147483647)

45000

DacSetting (0x0->0xffff)

9c40

asicGR (0->1)

1

asicGRControl (0->1)

1

asicAcq (0->1)

0

asicAcqControl (0->1)

0

asicR0 (0->1)

1

asicR0Control (0->1)

0

asicPpmat (0->1)

1

asicPpmatControl (0->1)

1

asicPpbe (0->1)

0

asicPpbeControl (0->1)

0

asicRoClik (0->1)

0

asicRoClikControl (0->1)

0

adcStreamMode (0->1)

0

testPatternEnable (0->1)

0

SyncMode (0->3)

0

R0Mode (0->1)

1

AcqToAsicR0Delay (0->2147483647)

3000

AsicR0ToAsicAcq (0->2147483647)

20000

AsicAcqToPPmatL (0->2147483647)

200

AsicPPmatToReadout (0->2147483647)

11200

AsicR0Width (0->2147483647)

30

AdcPipelineDelay0 (0->2147483647)

29

AdcPipelineDelay1 (0->2147483647)

28

AdcPipelineDelay2 (0->2147483647)

29

AdcPipelineDelay3 (0->2147483647)

27

AsicMask (0x0->0xf)

f

EnableAutomaticRunTrigger (0->1)

0

NumbClockTicksPerRunTrigger

833333

ScopeEnable (0->1)

0

ScopeTrigEdge (0->1)

1

ScopeTrigCh (0->15)

6

ScopeArmMode (0->3)

2

ScopeAdcThresh (0x0->0xffff)

0

ScopeHoldoff (0->8191)

0

ScopeOffset (0->8191)

15

ScopeTraceLength (0->8191)

4096

ScopeSkipSamples (0->8191)

0

ScopeInputA (0->31)

0

ScopeInputB (0->31)

4

Save

Cancel

Thermal measurements (all thermometers)

Experiment History

Experiment	Hutch	Shifts	Date Deployed