

ePix100 (no.5)

Identification Details and Hardware Changelog

Firmware	CarrierID0	CarrierID1	DigitalCardID0	DigitalCardID1	AnalogCardID0	AnalogCardID1	Date
3925999620	0997249025	0570425354	0629691392	0337412451	2397900801	4076863512	July 2021

0xea020004 = 3925999620

Nominal Operating Voltages and Currents

Ch.	Line	V	I

Performance Measures

Experiment=detdaq19, Run= 13 (Jul 6, 2021)

Mean Pedestal Value (ADU)	Number of Ped NCP	Pedestal Graphs	Noise (ADU)	Number of Noise NCP	Noise Graphs
4579 ± 172	32	Histogram/Pixel Map Pedestal NCP Map	3	5697	Histogram/Pixel Map Noise NCP Map

Configuration Settings

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

- Version: ea020004
- DigitalCardID0: 629691392
- DigitalCardID1: 337412451
- AnalogCardID0: 250417153
- AnalogCardID1: 1929379864
- CarrierID0: 997249025
- CarrierID1: 570425354
- BaseClockFrequency: 1048576
- EvrRunCode (0->255): 40
- EvrDaqCode (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: [selected]
- Calib Map: [selected]
- EpixRunTrigDelay (0->2147483647): 45000
- DacSetting (0x0->0xffff): 9c40
- asicGR (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
- asicR0Click (0->1): 0
- asicR0ClickControl (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
- AsicAcqWidth (0->2147483647): 20000
- AsicAcqToPPmatL (0->2147483647): 200
- AsicPPmatToReadout (0->2147483647): 11200
- AsicR0ClickHalfT (0->2147483647): 10
- AdcReadsPerPixel (1->3): 1
- AdcClickHalfT (1->400): 1
- 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
- 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

Thermal measurements (all thermometers)

Experiment History

Experiment	Hutch	Shifts	Date Deployed