

ePix100 (no.9) -old

Identification Details and Hardware Changelog

Firmware	CarrierID0	CarrierID1	DigitalCardID0	DigitalCardID1	AnalogCardID0	AnalogCardID1	Date
3925999620	0996432897	3590324234	1232100352	1154532875	2654088449	0033554455	April 2022

0xea020004 = 3925999620

Nominal Operating Voltages and Currents

Ch.	Line	V	I
200	AVDD	6.002	2.304
201	DVDD	5.998	0.828

Performance Measures

Experiment=detdaq18, Run=754 (May 13, 2021, after removal from MEC....needs repair)

Summary

For Pedestals, 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.

	Mean Pedestal Value (ADU)	Number of Ped NCP	Pedestal Graphs	Noise (ADU)	Number of Noise NCP	Noise Graphs
	4410 ± 361	14	Histogram/Pixel Map Pedestal NCP Map	3	4780	Histogram/Pixel Map Noise NCP Map

Thermal measurements (all thermometers)

Configuration Settings

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

- Version: ea020004
- DigitalCardID0: 1232100352
- DigitalCardID1: 1154532875
- AnalogCardID0: 506604801
- AnalogCardID1: 33554455
- CarrierID0: 996432897
- CarrierID1: 1442840586
- BaseClockFrequency: 1048576
- EvrRunCode (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: [Button]
- Calib Map: [Button]
- Save: [Button]
- Cancel: [Button]

History

Run

Experiment	Hutch	Shifts	Date Deployed

Testing

Where	Who	Why	When (mm /dd/yy)	Notes
TID	O'Grady	Timing tests	12/08/21	
TID	Doering	Test LCLS-II firmware	12/06/21	Dionisio couldn't write to pixel matrix