## **CSPAD Specifications**

The CSPAD 140K, 560K, and 2.3M are used for both soft and hard X-ray applications. In instances where the detector needs to cover a large cross sectional area, the CSPAD 2.3M, with its large active sensor area, maybe extremely useful. For further expansion of the active area beyond that provided by the 2.3M, multiple CSPADs can be install and read in-sync to cover a large cross section that cannot be covered by a single detector.

	CSPAD 140K	CSPAD 560K	CSPAD 2.3M
# of Pixels (per module)	194 x 370		
# of modules	2	8	32
Pixel Size	110 um		
Active Area Dimensions	21.34 x 40.7 mm <sup>2</sup> (per module)		
# of ASICS per module	2		
# of rows read per ASIC	194		
# of pixels read per row	185		
Operating Temperature Range	5C to 30C		
Operating Pressure Range	Air or Vacuum		
Cooling	Water Cooled		
Frame Rate	120 Hz		
Form Factors	Front- or Side-facing	Front-facing	Front-facing
Max Signal (8keV photons)	350		
High Gain			
Max Signal (8keV photons)	2700		
Low Gain			



Side-facing CSPAD 140K. Two modules of 194 x 370 pixels



CSPAD 560K. Eight Modules of 194 x 370 pixels.



CSPAD 2.3M. 32 Modules of 194 x 370 pixels.

## **Analysis Tools:**

- Offline analysis software:
  - o ssh to pslogin.slac.stanford.edu
  - o ssh to psana.slac.stanford.edu
  - o /reg/g/pcds/dist/pds/ami-current/build/ami/bin/x86\_64-linux-opt/offline\_ami

## **Contact:**

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