



PF32-MLA Camera Specifications

Sensor Dimensions		32x32 pixels	Time Correlated Mode	
Array Size	1.6 x 1.6mm	6.95µm	Temporal bin	55ps
SPAD active area (diameter)	50µm		Temporal range	55ps - 57ns
Pixel pitch			TDC resolution	10 bit
			Maximum laser sync frequency	100MHz
Optical fill factor of array	1.5%		Laser sync input amplitude	NIM / 1.2V / 3.3V
Effective fill factor with MLA*	>12% (mean)		Laser sync output amplitude	3.3V
Optical/Electrical Performance			Readout & Control	
Photodetection efficiency	Peak 28% at 500nm		Raw data streaming rate to PC	
Dark count rate	<100cps for more than 80% of pixels		PF32-500k:	150kfps (16-bit) 225kfps (8-bit)
Afterpulsing	<0.02%		Inter-frame dead time	<50ns
Optical/Electrical crosstalk	None		X/Y scanner sync input signals	Pixel, line and frame clock
Timing jitter	~200ps FWHM		Exposure sync signals	Blanking (3.3V / 5V input) Shutter (3.3V output)
Photon Counting Mode				
Photon counting	7 bit in-pixel 16 bit in firmware			
Maximum count rate per pixel	50MHz			

*MLA = microlens array

