

New structure of digital pixel evaluation

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The contrast of two schemes

Average Power	TaichuPix1 /FE-I3 like	FE-I3 upgrade	TaichuPix1 /ALPIDE like	ALPIDE upgrade
Initialization	87uA	51.52uA	374uA	23.23uA
Static	81.2uA (Max)	30nA	155uA (Max)	1.86uA
Each hit	55uA	500uA	21uA	32.09uA
Total average	1.36uA	5.18uA	2.2uA	3.52uA
Average Power density (Average)	3.04mW/cm ²	11.58mW/cm ²	4.93mW/cm ²	7.89mW/cm ²
Hit power density	123mW/cm ²	1120mW/cm ²	49mW/cm ²	71.88mW/cm ²

Thanks for your attention.