

Single Pixel Discrete Low Noise CSPA For Silicon Drift Detector

U R Rao Satellite Centre (URSC) of Indian Space Research Organization (ISRO) has developed a Single Pixel Discrete Low Noise CSPA For Silicon Drift Detector.



Salient Features

- ✦ Ultra low noise performance for SDD.
- ✦ High charge gain (30V/pC) with intrinsic parasitic capacitance of SDD.
- ✦ High count rate handling capability (500 kcps).
- ✦ Discrete component based CSPA module.
- ✦ Applications in medical imaging, high resolution X-ray spectroscopy and so.

Major Specifications

Parameter	Specifications	Power & Load	Applications
Charge gain	30 V/pC	Supply voltages	Medical Imaging
Count rate handling	500 kcps	Current	
System baseline noise	< 100 μ V	15mA@6V, 10mA@-6V	High Resolution soft X-ray spectroscopy
Reset method	Pulsed and self reset	Output load	2D position sensing
Signal risetime	< 100 ns	50 Ω	

Technology Transfer

URSC/ISRO offers to transfer this technology of Single Pixel Discrete Low Noise CSPA for Silicon Drift Detector by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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