

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	±6V	Medical Imaging
Count rate handling	500 kcps	Current	15mA@6V, 10mA@-6V	High Resolution soft X-ray spectroscopy
System baseline noise	< 100 μ V	Output load	50 Ω	2D position sensing
Reset method	Pulsed and self reset			
Signal risetime	< 100 ns			

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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🌐 <https://www.ursc.gov.in/industry/index.jsp>