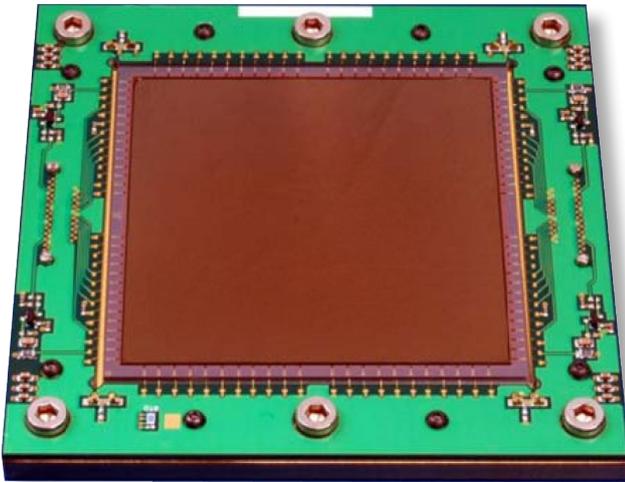


CCD_FF4K

Preliminary Short Form Datasheet

Simple Package



General Description:

4k x 4k Si-CCD

Split Full Frame Architecture

Pixel Size 10 μm

Back illuminated

4 or 16 outputs

QE > 90 % broadband

Depletion depth 75 - 150 μm ,
Capable of overdepletion

Read out rate 0.5 Hz

Anticipated gain: 3-5 $\mu\text{V}/\text{e}^-$

Read Out Noise < 5 e^- @ 500 kHz per output

Dark Current (target) < 2 $\text{e}^-/\text{pix}/\text{s}$

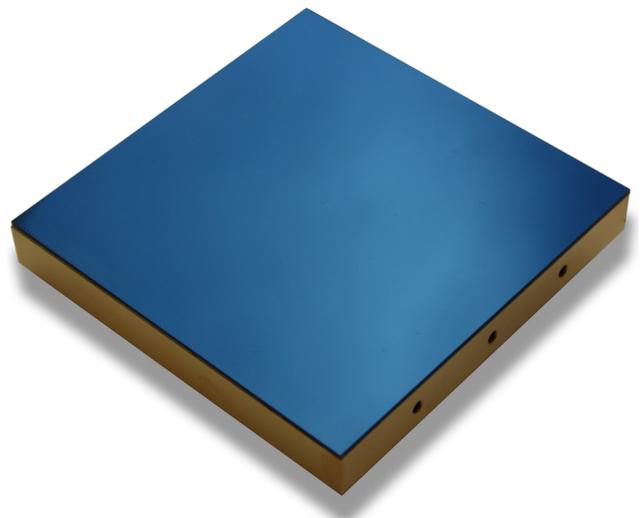
Full Well Capacity (target) > 90k e^-

Special Feature

Highest object-fidelity and image contrast by

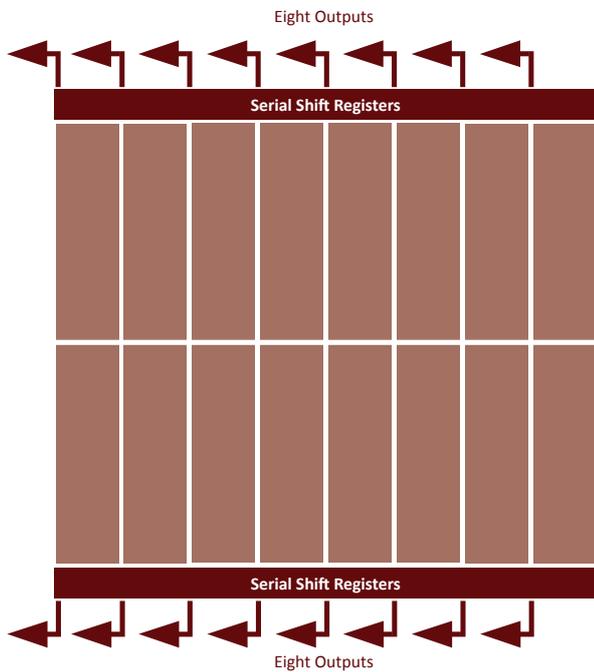
- Pixel-precise e^- - concentration
- Advanced backthinning technology
- Deep depletion layer with highest red quantum efficiency
- Best Si-surface quality and flatness of 5 μm p-v
- Superiour sensor package technology + materials

Custom Package Example

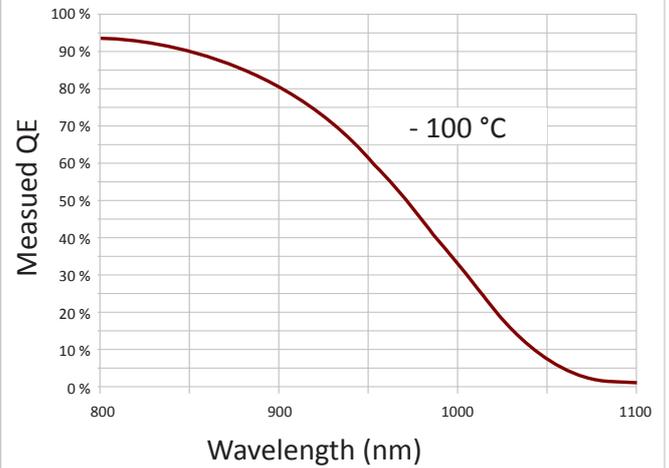


2-side and 4-side buttable packages

Architecture: Split-Full Frame

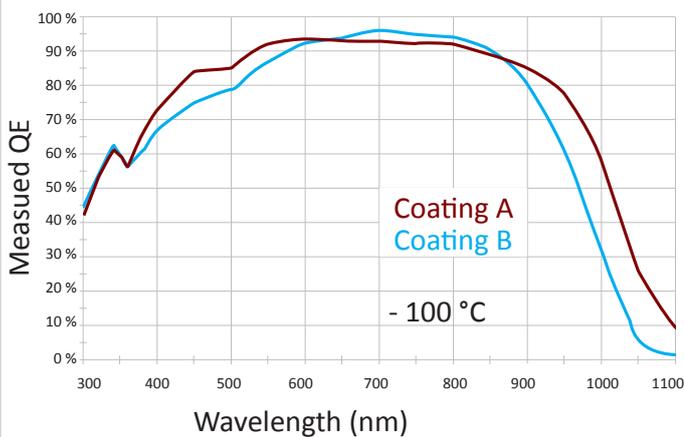


Red Quantum Efficiency

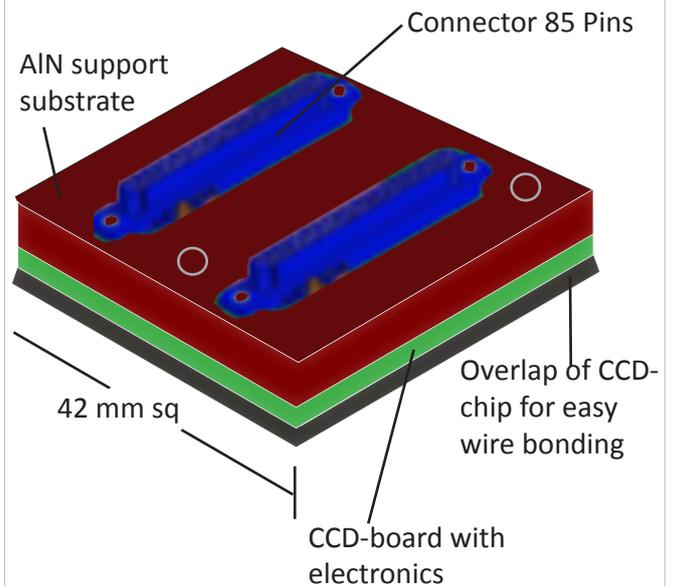


Highest Quantum Efficiency

CCD_FF4K / Quantum Efficiency Example Curves



Custom Package Example



Package example with aluminum-nitride;
Usually customized packages!