

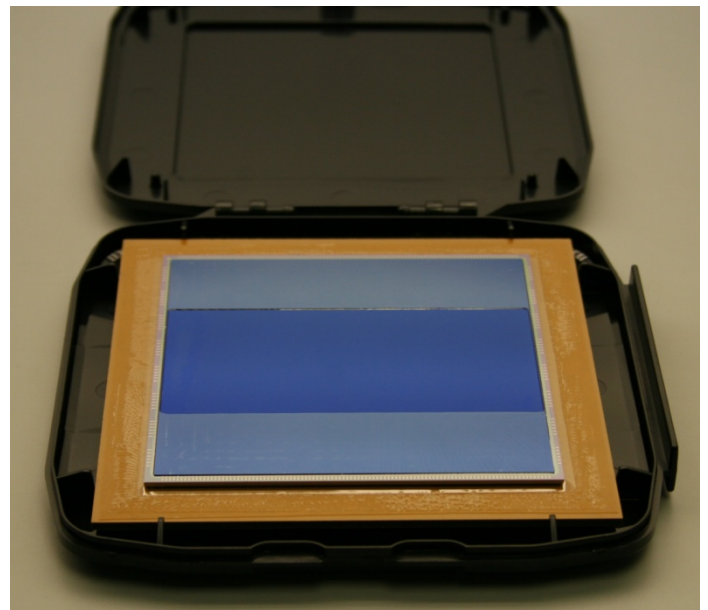
CCD1600-FT

10k x 10k Split Frame Transfer CCD Image Sensor

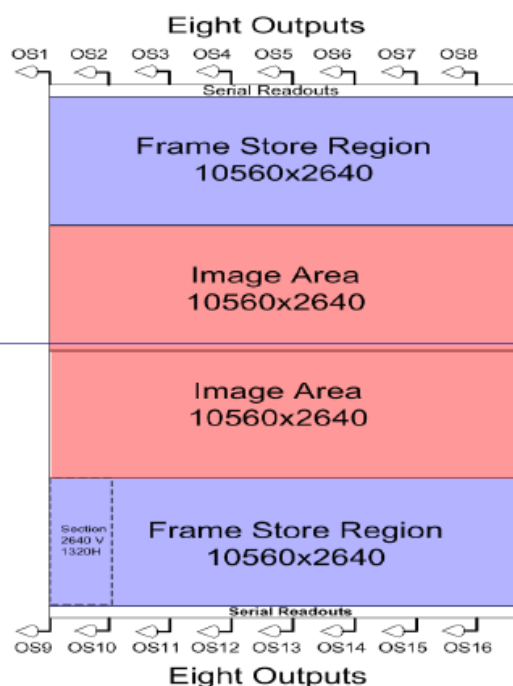
Preliminary Short Form Datasheet v0.1 dtd. 25. June 2012

Basic Data:

- Photosensitive Image area 95 mm x 47.5 mm; pixel size 9 μm x 9 μm
- 16 dual stage high speed outputs
- Read out noise 7.0 - 9.0 e^- @ 1.0 MHz datarate, 5.0 e^- @ 100 kHz datarate
- Max datarate 10 MHz; max frame rate: 1 - 2 Hz
- Full well capacity > 80.000 electrons
- non-Multi-Phase-Pinning (MPP); MPP upon request



Architecture



Description

The CCD1600-FT in split frame transfer (FT) architecture is a modification of the standard 10k x 10k – CCD1600A in a split full frame (FF) structure. The image area of the split FT-device is split into 2 halves. The upper half of the photosensitive area is read out to the top frame store register, whereas the lower half is read out to the bottom frame store register.

Additional metal strapping achieves a vertical transfer clock of 100KHz.

Otherwise, the Frame Transfer (FT)-device has very similar parameters as the Full Frame (FF) standard device.

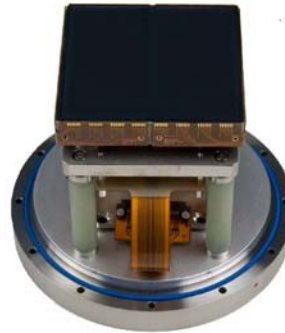
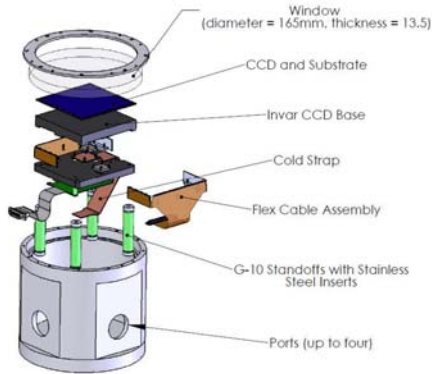
Package Options

The CCD1600-FT can be delivered in various package options including our Low Noise (LN)-package.

Custom Dewar Housing

- 180mm diameter stainless steel dewar

- TE Cooling for operation at -80C°



Low Noise Package



Further CCD1600-FT design options

(upon request):

- Low noise (LN) version
- Multi-Phase Pinning (MPP) version
- Deep depletion (DD) version
- High Speed (HS) Version

Standard Package



Large Focal Plane Package

