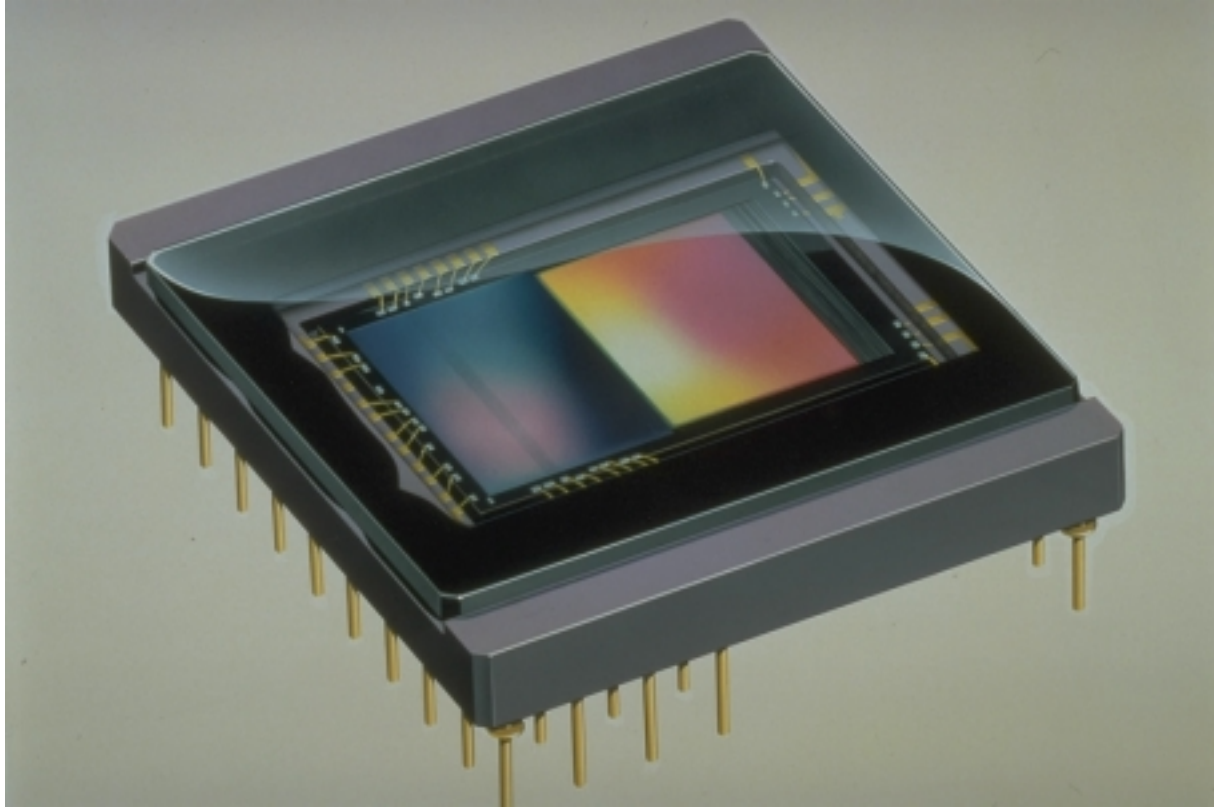


FT17N / FT17P 2/3 inch dual aspect ratio image sensor

Sensor image



Description

The FT17N is a NTSC/EIA-compatible image sensor which is provided with a 12-phase vertical transport clock structure in the image section.

The FT17P image sensor is a PAL/CCIR version of Philips Semiconductors' dual aspect ratio image sensor, which is provided with a 12-phase vertical transport clock structure in the image section.

By selecting the appropriate phase type of the vertical image clock pulses it is possible to put the image sensor in the required aspect ratio mode. In the 4:3 aspect ratio mode a virtual 4-phase mode is applied and in the 16:9 mode a virtual 3-phase mode is applied.

Offering the advantage of optimizing the performance of a switchable camera in both 4:3 and 16:9 aspect ratio modes, the frame transfer technology supports the same number of active lines and active pixels in both modes. The image diagonals of these formats are within the tolerances of the required optical devices, making it possible to use the same camera lenses for both aspect ratio modes. Now the camera manufacturer can construct a switchable camera in which the selected aspect ratio mode is purely determined by the electronic circuitry's.

Features

- NTSC/EIA-compliant image sensor (FT17N)
- PAL-compliant image sensor (FT17P)
- Effective number of elements: 1000 horizontal x 594 vertical for both aspect ratios
- Dark reference:
 - Per field: 4 lines for black clamping
 - Per line: 22 pixels at the leftside and rightside of each line
- Handles 10,000 times overexposure without blooming
- No reflective bonding wires in the vicinity of the image section
- High sensitivity, high dynamic range, low noise
- Free from lag, burn-in, geometrical distortion and microphonics
- Regular or reversal horizontal scan output function (Mirror vision)
- Common optical center when switched from 4:3 to 16:9
- Simple and low-cost dual aspect ratio mode applications

Applications

- Surveillance and observation cameras. The switchable aspect ratio can be advantageous for different viewing fields
- Upgrade for 2/3 inch camera tubes

Datasheet

Contact us for more information.