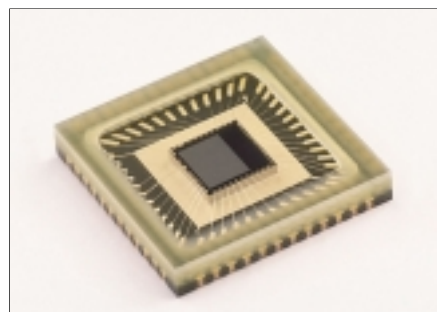


Description

The PB-0330 is a 1/4-inch CMOS active-pixel digital image sensor. It incorporates sophisticated camera functions on-chip, consumes little power, and is programmable through a simple two-wire serial interface. The sensor's image format is VGA (640H x 480V).

The sensor can be operated in its default mode or programmed by the user for frame size, exposure, gain setting, and other parameters. The default mode outputs a VGA-size image at 30 frames per second. An on-chip analog-to-digital converter (ADC) provides 10 bits per pixel. Frame- and line-valid signals are output on dedicated pins, along with a pixel clock which is synchronous with valid data.

48-Pin PLCC

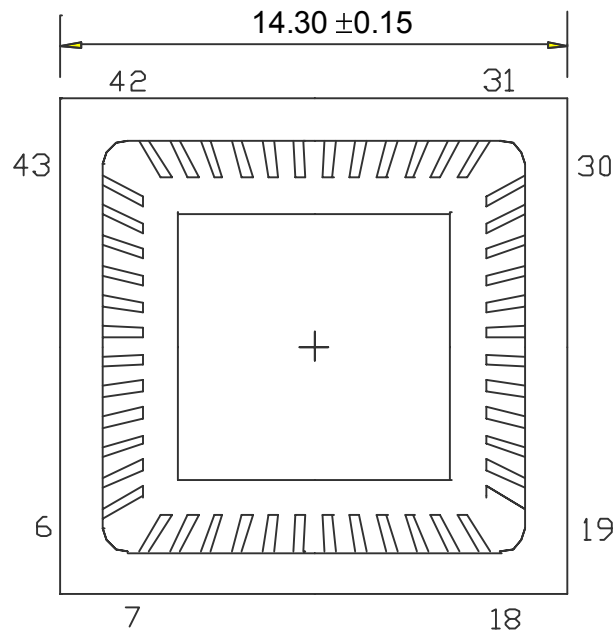


Features

| | |
|------------------------------------|--|
| Array Format | Active: 640H x 480V (307,200 pixels) |
| Pixel Size and Type | 5.6 μm x 5.6 μm active-pixel photodiode-type |
| Color Filter Array | R, G and B primary color filters |
| Optical Format | 1/4-inch |
| Supply Voltage | 3.3V \pm 0.3V |
| Frame Rate | 30 VGA frames/sec progressive scan; programmable |
| Data Rate | 12 MHz at 24 MHz master clock |
| Responsivity (green pixels) | 1.8 V/lux-sec with source illumination @ 550nm |
| SNR _{max} ; Dynamic Range | 45 dB; 60 dB |
| Shutter | Electronic rolling snap (ERS) |
| Programmable Controls | Window size, gain, frame rate, ADC reference |
| ADC | On-chip 10-bit serial |
| Power | <100 mW at maximum data rate |
| Package | 48-pin PLCC |

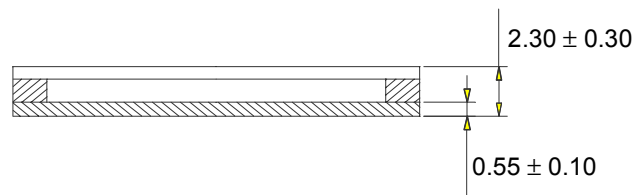
48-Pin PLCC Package Dimension

TOP VIEW



UNIT: mm

SIDE VIEW



BOTTOM VIEW

