

LZ34B10

1/4-type Color CMOS Image Sensor with 350 k Pixels

DESCRIPTION

The LZ34B10 is a 1/4-type (4.5 mm) solid-state image sensor that consists of PN photo-diodes and color CMOS (Complementary Metal Oxide Semiconductor) devices. The sensor further includes a timing generator (TG), a correlated double sampling (CDS) circuit, an auto gain control (AGC) circuit and an analog-to-digital converter (ADC) circuit. With approximately 350 000 pixels (703 horizontal x 499 vertical), the sensor provides a stable digital color image with extremely low power consumption.

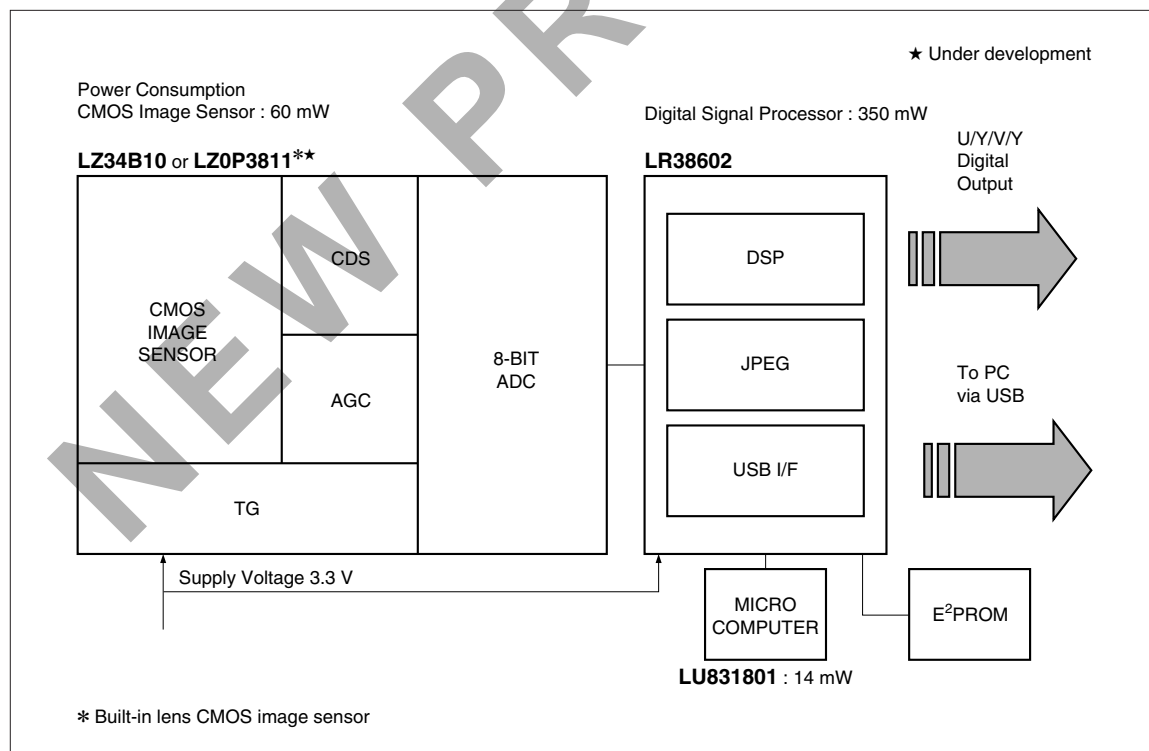
FEATURES

- Progressive scan
- Square pixel
- Compatible with VGA standard
- Number of effective pixels : 655 (H) x 493 (V)

- Number of optical black pixels
 - Horizontal : 24 front and 24 rear
 - Vertical : 3 front and 3 rear
- Pixel pitch : 5.6 μm (H) x 5.6 μm (V)
- R, G, and B primary color mosaic filters
- Image inversion function (horizontally and/or vertically)
- Power save mode
- Monitoring mode : 60 fields/s
- Analog output and 8-bit digital output
- Variable gain control
- Variable electronic shutter (1/30 to 1/15 750 s)
- Single +3.3 V power supply
- Package : 36-pin WLCC* (WLCC036-N-R625)

* Window Leadless Chip Carrier

BLOCK DIAGRAM



(Unit : mm)

Rotation error of die : $\theta = 1.0^\circ \text{MAX.}$
 (※ 1 : Effective imaging area)
 (※ 2 : Lid's size)

