



GC2235 product brief



1/5" UXGA CMOS Image Sensor

GC2235 is a high quality 2Mega CMOS image sensor, for mobile phone camera applications and digital camera products. GC2235 incorporates a 1616V x 1232H pixel array, on-chip 10-bit ADC, and image signal processor.

The full scale integration of high-performance and low-power functions makes the GC2235 best fit the design, reduce

implementation process, and extend the battery life of cell phones, PDAs, and a wide variety of mobile applications.

It provides RAW10 and RAW8 data formats with MIPI interface. It has a commonly used two-wire serial interface for host to control the operation of the whole sensor.

Application

- Cellular Phone Cameras
- Notebook and desktop PC cameras
- PDAs
- Toys
- Digital still cameras and camcorders
- Video telephony and conferencing equipment
- Security systems
- Industrial and environmental systems
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Product Features

- BSI process
- Output formats: Raw Bayer 10bit/8bit
- Support for image sizes: UXGA and 720P
- Interface support:
 - DVP parallel
 - MIPI(1_lane/2_lane)
- PLL support
- Windowing support
- Horizontal /Vertical mirror

Product Specifications

- Optical Format: 1/5 inch
- Pixel Size: 1.75um x 1.75um(BSI)
- Active pixel array: 1616x1232
- ADC resolution: 10 bit ADC
- Max Frame rate: full resolution@30fps
- Power Supply:
 - AVDD28: 2.7~3.0V
 - DVDD18: 1.7~1.9V
 - IOVDD: 1.7~3.0V
- Power Consumption:
 - Active: 140mW
 - Standby: < 100uA
- SNR: 37.4 dB
- Dark Current: 60 e-/sec@60°C
- Sensitivity: 6700 e-/lux-sec
- Dynamic Range: 61.7 dB
- Operating temperature: -20~70°C
- Stable Image temperature: 0~50°C
- Optimal lens chief ray angle (CRA): 25°(non-linear)
- Package type: CSP/wafer

Functional block diagram

