

GC5005 product brief



1/5" 5Mega CMOS Image Sensor

GC5005 is a 1/5"-inch format CMOS digital image sensor, with an active pixel of 2592H x 1944V. It incorporates sophisticated on-die camera functions such as windowing, mirror, row binning and skip modes. It is programmable through a simple two-wire serial interface and has very low power consumption. It provides RAW10 and RAW8 data formats with MIPI interface.

The full scale integration of high-performance and low-power functions make the GC5005 fit the design, reduce implementation process, and extend the battery life of cell phones, PDAs, and a wide variety of mobile applications.

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

Product features

- Standard optical format of 1/5 inch
- Various output formats: Raw Bayer
- Interface support: MIPI(1_lane/2_lane)
- Rolling shutter
- PLL support
- Windowing support
- Horizontal /Vertical mirror module
- OTP size: 2K Bit

Product specifications

- Optical Format: 1/5 inch
- Pixel Size: 1.12um x 1.12um TSI
- Active pixel array: 2608 x 1960
- ADC resolution: 10 bit ADC
- Max Frame rate: 30fps@full size
- Power Supply:
 - AVDD: 2.7 ~ 3.0V
 - DVDD: 1.2V
 - IOVDD: 1.7~3.0V
- Power Consumption: TBD
- SNR10 : TBD
- Dark Current: TBD
- Sensitivity: TBD
- Operating temperature: -20~70°C
- Stable Image temperature: 0~50°C
- Optimal lens chief ray angle(CRA) : 31 (non-linear)
- Package type: CSP/wafer/COB

Functional block diagram

