



# GC2035

## product brief



The GC2035 features 1600V x 1200H resolution with 1/5-inch optical format, and 4-transistor pixel structure for high image quality and low noise variations. It delivers superior image quality by powerful on-chip design of a 10-bit ADC, and embedded image signal processor.

The full scale integration of high-performance and low-power functions makes the GC2035 best fit the design, reduce implementation process, and extend the battery life of cell phones, PDAs, and a wide variety of mobile applications.

The on-chip ISP provides a very smooth AE (Auto

Exposure) and accurate AWB(Auto White Balance) control. It provides various data formats, such as Bayer RGB, RGB565,YCbCr 4:2:2. It has a commonly used two-wire serial interface for host to control the operation of the whole sensor.

The product is capable of operating at up to 15 frames per second at 24MHZ clock in UXGA mode, with complete user control over image quality and data formatting.

## Application

- Cellular Phone Cameras
- Notebook and desktop PC cameras
- PDAs
- Toys
- Digital still cameras and camcorders
- Video telephony and conferencing equipment

## Product features

- Standard optical format of 1/5 inch
- Various output formats: YCbCr4:2:2, RGB565, Raw Bayer
- DVP & MIPI(1 lane / 2 lane) interface
- Support adjusting Voltage of IO
- Windowing support
- Horizontal /Vertical mirror
- Image processing module
- Package: CSP/ non-diced wafer

## Product specifications

- Optical Format: 1/5 inch
- Pixel Size: 1.75um x 1.75um
- Active pixel array: 1616 x 1232
- ADC resolution: 10 bit ADC
- Max Frame rate: 15fps@24Mhz,UXGA
- Power Supply: AVDD28 2.7~3.0V
- DVDD18 1.7~1.9V
- IOVDD 1.7~3.0V
- Power Consumption: 180mW(active)
- <100uA (standby)
- SNR: 37.5dB
- Dark Current: <1e-/s @25°C
- Sensitivity: 5000 e-/ (lux • s)
- Operating temperature: -20~70°C
- Stable Image temperature: 0~50°C
- Optimal lens chief ray angle(CRA) : 25°(non-linear)
- Package type: CSP/non-diced wafer

## Functional block diagram

