1. Parameter:

- 1.4 μm x 1.4 μm pixel with OmniBSI technology for high performance (high sensitivity, low crosstalk, low noise, improved quantum efficiency)
- optical size of 1/4"
- automatic image control functions: automatic exposure control (AEC), automatic white balance (AWB), automatic band filter (ABF), automatic 50/60 Hz luminance detection, and automatic black level calibration (ABL)
- programmable controls for frame rate, AEC/AGC
- 16-zone position/weight control, mirror flip, cropping, windowing, and panning
- image quality controls: color saturation, hue, gamma, sharpness (edge enhancement), lens correction, defective pixel canceling, and noise canceling
- support for output formats: RAW RGB, RGBG05/55/9444, YCRG056, YVUV222420, YCbCr422, and compression
- support for video or snapshot operations
- support for LED and flash strobe mode
- support for internal and external frame synchronization for frame exposure mode

➤ Specification.

- Total Height: 21.8 ± 0.3 mm
- Image Density: 2592*1944

➤ SoC Spec.

- active array size: 2592 x 1944
- power supply:
  - core: 1.5V ± 5% (with embedded 1.5V regulator)
  - analog: 2.6 ~ 3.0V (2.8V typical)
  - I/O: 1.8V / 2.8V
- power requirements:
  - active: TBD
  - standby: TBD
- temperature range:
  - operating: -30°C to 70°C (see table 8-1)
  - stable image: 0°C to 50°C (see table 8-1)
- output formats: 8-/10-bit RGB RAW output
- lens size: 1/4"
- lens chief ray angle: 24° (see figure 10-2)
- input clock frequency: 6~27 MHz
- S/N ratio: TBD
- dynamic range: TBD

- maximum image transfer rate:
  - QSXGA (2592x1944): 15 fps
  - 1080p: 30 fps
  - 1280x960: 45 fps
  - 720p: 60 fps
  - VGA (640x480): 90 fps
  - QVGA (320x240): 120 fps
- sensitivity: TBD
- shutter: rolling shutter / frame exposure
- maximum exposure interval: 1964 x t_{ROW}
- pixel size: 1.4 μm x 1.4 μm
- well capacity: TBD
- dark current: TBD
- fixed pattern noise (FPN): TBD
- image area: 3673.6 μm x 2738.4 μm
- package dimensions: 5985 μm x 5835 μm