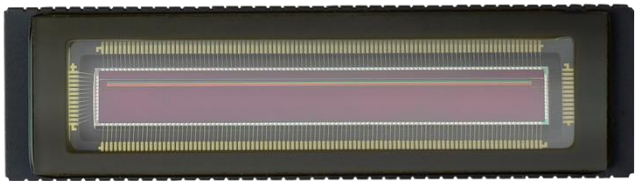
2100 X 8 / 6300 X 4 Linear CMOS Image Sensor - GL0204



Applications:

- **Color Sorting**
- **Printing Inspection**
- **Industrial Inspection**
- **OCT**

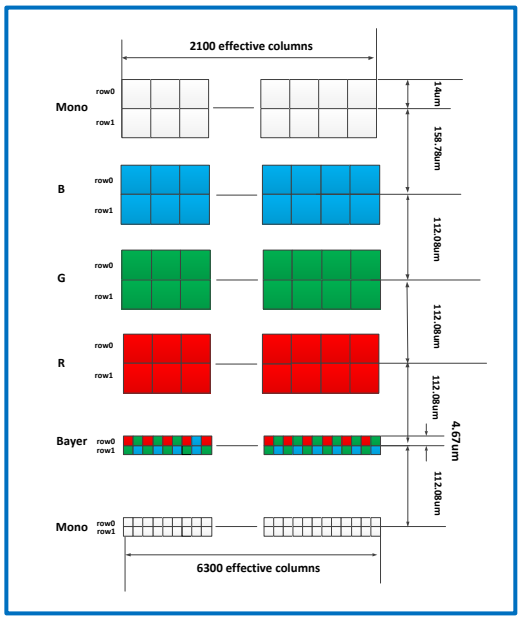
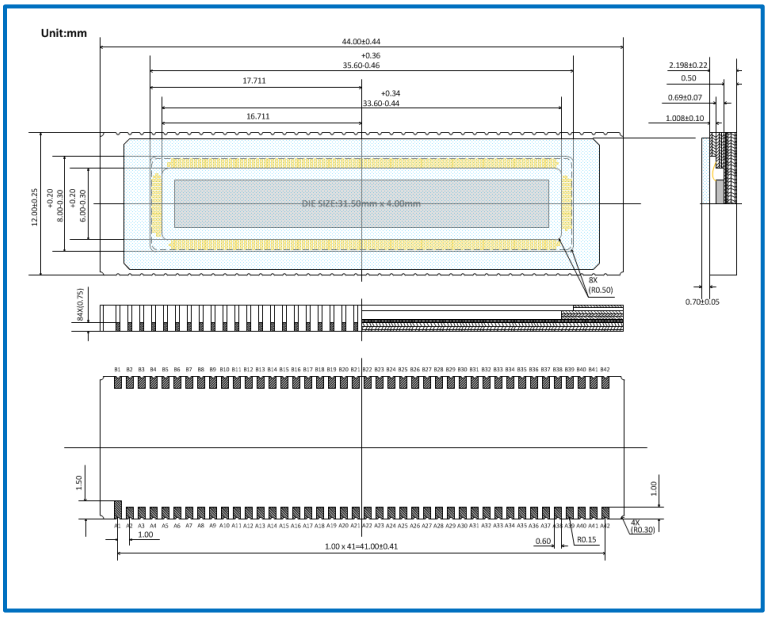
SENSOR DESCRIPTIONS

Designed for color sorting applications, GL0204 is one of the most versatile line scan sensors in the market. All assembled inside a CLCC84 package, its 14.01um pixel is focusing on high sensitivity applications, such as color sorting and OCT applications, while the 4.67um pixel has both Bayer and mono rows and offering 6.3K resolution at a frame rate of 20kHz, applicable for many industrial inspection applications. 4 different operating modes are available, one may choose the pixel size and operating mode according to the application, and the pixel gain and the programmable gain amplifier (PGA) can be adjusted for best image quality.

SENSOR SPECIFICATIONS

Modes / Specifications	14.01µm Mono dual line	14.01µm RGB 3-line	14.01µm RGB 6-line	4.67µm Bayer/Mono
Resolution	2100 × 2	2100 × 3	2100 × 6	6300 × 2
Pixel size	14.01µm × 14.01µm			4.67µm × 4.67µm
Pixel gain	Low Gain	Low Gain	High gain	Medium gain
PGA gain	1.40x	2.32x	2.32x	1.88x
Dark noise	124e$^-$	70e$^-$	13.3e$^-$	19.3e$^-$
Full well capacity	330ke$^-$	173ke$^-$	16.4ke$^-$	31.2ke$^-$
Signal-to-noise ratio (max)	53.7dB	52.3dB	42.0dB	44.4dB
Dynamic range (intra-scene)	68.4dB	67.8dB	61.8dB	64.0dB
Line rate	46kHz	46kHz	20kHz	20kHz
QE x FF	78.7%@mono, 56.6%@blue, 58%@green, 67.9%@red			
PRNU	0.64%	0.57%	2.75%	0.86%
LVDS pairs	8	12	12	12

OPERATION MODE



PACKAGE OUTLINE