



## 2M DVP Camera Module GC2145

### Key Properties

GC2145 Image Sensor

Output Formats: Bayer RGB / RGB565 / YUV422

Frame Rate:

30fps for 1600(H)x1200(V)

30fps for 1280(H)x720(V)

30fps for 800(H)x600(V)

30fps for 640(H)x480(V)

S-mount M7 Lens Holder



### Application

Security / Surveillance / Automotive Cameras / Industrial Machine Vision  
/ Consumer Electronics / Smart Home / IoT Devices / AI Vision

### Feature

- ♦ 2M(1600x1200) image sensor GC2145
  - Low illumination and high dynamic range sensor
- ♦ Megapixel M7 lenses optional
- ♦ RGB565 / YUV422
- ♦ DVP parallel Output
- ♦ STM32 or ESP32 Application

### Introduction

DCM2M30M7 is a high-performance 2-megapixel CMOS image sensor developed by GalaxyCore, designed for applications that demand excellent image quality, low-light sensitivity, and efficient power consumption. Featuring a 1616 × 1232 (Full HD) resolution with 2.8 μm pixel size, it delivers sharp, detailed images even in challenging lighting environments.

Equipped with an advanced electronic rolling shutter, the DCM2M30M7 supports a wide dynamic range of up to 81 dB, enabling effective capture of both bright and dark regions in the same scene.

Thanks to its low power consumption (~100 mW) and high sensitivity, the DCM2M30M7 is ideally suited for:

- Smart security cameras
- Automotive monitoring systems
- Smart home and IoT imaging devices
- Industrial vision systems



## Specifications

|                           |                                                                          |
|---------------------------|--------------------------------------------------------------------------|
| Model                     | DCM2M30M7                                                                |
| Sensor                    | GC2145                                                                   |
| Image Size                | 1/5 inch                                                                 |
| Pixel Size                | 1.75 x 1.75 $\mu\text{m}$                                                |
| Image Area                | 2828 $\mu\text{m}$ x 2156 $\mu\text{m}$                                  |
| Image Pixels & Resolution | 1616(H) x 1232(V)                                                        |
| Output Formats            | RGB565 / YUV422                                                          |
| Image Transfer Rate       | Full resolution (1600x1200): 30 fps<br>1280x720 @30fps<br>800x600 @30fps |
| SNR10                     | < 70Lux                                                                  |
| Dark Current              | 4.2 mv/s                                                                 |
| Sensitivity               | 1200 mV/Lux-sec                                                          |
| Shutter Type              | rolling shutter                                                          |
| Lens Parameters           | Standard: FOV(D)68°                                                      |
| Lens Holder               | Standard M7 lens holder                                                  |
| Power Supply              | External Power                                                           |
| Operating Voltage         | DC 1.8V / 2.8V / 2.8V                                                    |
| Power Consumption         | 180mW (Active)<br>< 100uA (Standby)                                      |
| Operating Temperature     | -20 ~ 70°C                                                               |
| Stable Image Temperature  | 0 ~ 50°C                                                                 |
| Total length              | 21mm                                                                     |
| FFC Pin Numbers           | 24                                                                       |
| FFC Pin Pitch             | 0.5mm                                                                    |
|                           |                                                                          |

Specifications are subject to change without notice.

## Sensor Board Drawings

