DALSA DCI0605C

CMOS VGA Sensor Module



Key Features

- Compact size sensor module with integrated two-element lens system
- 640H x 480V (VGA)
- Up to 30 fps @ 12 MHz
- 4.48 mm (1/4") active image diagonal
- Highly sensitive, low noise
- Bayer-RGB color filter array with micro lenses
- Antiblooming
- Integrated on-chip timing
- Programmable via I²C serial interface
- Electronic shutter control
- 24dB Programmable Gain (255 steps of 0.094 dB/step)
- 9 bit digital output
- User programmable window of interest
- Single 2.6 3.6V supply voltage range, low power consumption
- Real time white pixel correction

Typical Applications

- Mobile phone
- PDA
- PC camera
- Automotive
- Security

Overview

CMOS VGA Image Sensor Module with integrated two-element lens and digital output, available for high volume applications.

The DCl0605C is a fixed-focus, highly integrated 1/4" CMOS color imager module that supports up to VGA resolution formats in a small package including a focused optical system with high sensitivity and low noise. The sensor is digitally programmable via an I²C serial interface and is equipped with an integrated Programmable Gain Amplifier and a 9-bit A-to-D Converter. The embedded flexible timing generator enables easy matching to various digital signal processing chips.

The module can operate as a master or as a slave. In the master mode, line and frame synchronization output signals are generated by the module. In the slave mode, the same pins are used as input for the horizontal and vertical synchronization signals.

Specifications

Resolution 640 x 480 Pixel Size 5.6 μ m

Optical Size 3.6 mm x 2.7 mm

Max. Line/Frame Rate 30 fps

Data Rate 13 MHz 9 Bit Digital Responsivity 1500 mV/lux•s (green)

Dynamic Range 56 dB

Package 32 pin ceramic quad chip carrier

Operating Temperature -20 °C to 70 °C Example Part Number DCI0605C



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