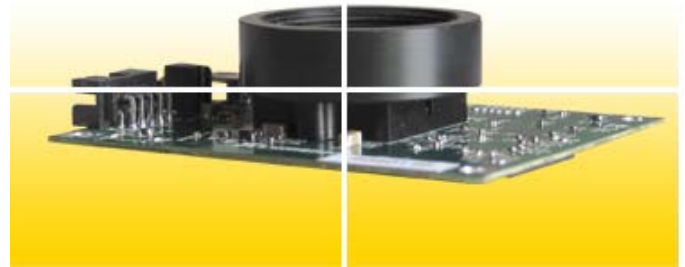


## 3.1 Megapixel USB 2.0 Camera



## Outline

Lumenera's Lu371 series of megapixel cameras are designed to be used in high volume OEM applications. This single board camera with minimal depth will satisfy the smallest of space requirements. Color (only) product models are available.

With 2048x1536 resolution and on-board processing these cameras deliver outstanding image quality and value for industrial applications requiring high resolution and modest cost.

Uncompressed images in live streaming video and still image capture are provided across a USB 2.0 digital interface. No framegrabber is required. Advanced camera control is available through a complete Software Developer's Kit (SDK), with sample code available to quickly integrate camera functions into OEM applications.

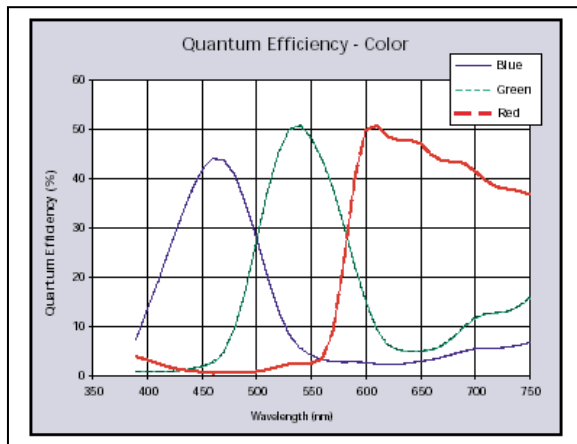
Hardware and software based synchronization trigger is provided standard. Lu371 model cameras are offered in board-level form although enclosure options can be made available. Custom form factor (sizes) can be provided.

All Lumenera products are supported by an experienced team of software developers and application engineers. We understand your imaging needs and are here to help you with your integration and development. Products come with a full one (1) year warranty.

## Performance Features

- Lower fixed pattern noise
- Color, progressive scan, 3.1 megapixel image sensor
- High-speed USB 2.0 (480Mbits/sec)
- 6 fps at full 2048 x 1536 resolution  
20 fps at 1024x768 (sub-sampled)
- Higher frame rates at lower resolution with full sub-window control
- Auto White Balance, Auto Exposure
- Snapshot mode for use with strobe
- GPIOs for control of peripherals and synchronization of lighting (4in/4out)
- FCC Class B, CE Ready
- RGB Bayer video output
- Select 8 or 10-bit pixel data
- Simplified cabling - video, power and full camera control over a single USB cable
- CS-Mount provided
- DirectShow compatible
- USB cameras are software compatible with Windows™ 2K, Windows XP, and Windows Vista operating systems
- Complete SDK available

Image Sensor	<b>1/2" format, color, 6.5mm x 4.9mm array</b>
Effective Pixels	<b>2048 x 1536, 3.2um square pixels</b>
Frame Rate	<b>6 fps at 2048x1536, 20 fps at 1024x768 (sub-sampled)</b>
Sensitivity	<b>High</b>
Dynamic Range	<b>60dB</b>
Auto Exposure	<b>Automatic / Manual</b>
White Balance	<b>Automatic / Manual</b>
Dimensions (W x H x D)	<b>2.00 x 2.50 x 1.00 inches (board level)</b>
Mass	<b>~150g / 300g</b>
Power Requirement	<b>USB bus power, or external 6VDC, 500mA</b>
Power Consumption	<b>~2.5 Watts</b>
Operating Temperature	<b>0°C to +50°C</b>
Operating Humidity	<b>5% - 95%, Non-condensing</b>
Interface Connector	<b>Mini USB (or optional tethered USB cable with lock)</b>
Lens Mount (Lens not included)	<b>CS-mount (C-Mount and microlens option)</b>



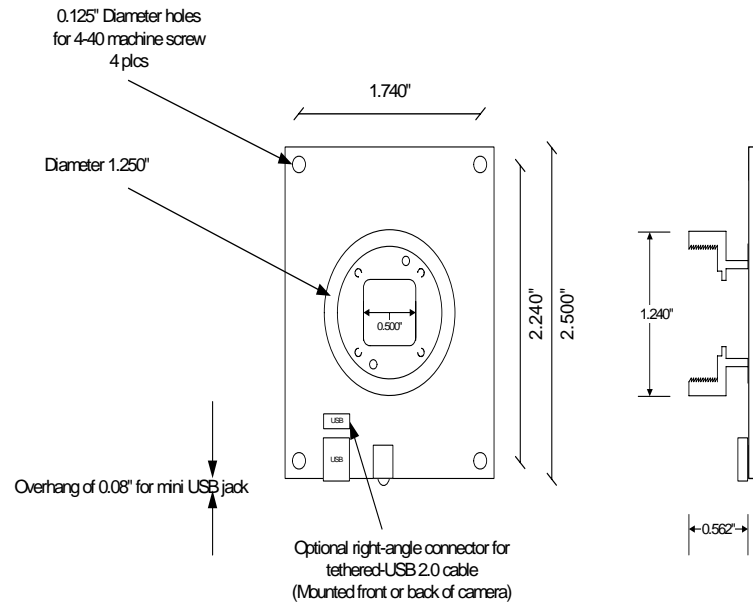
## Ordering Information

Lu371C - Color Camera Module

LuSDK - Software Developer's Kit

***Full customization  
available to meet your  
exact needs!***

## OEM Board-Level Camera



**\*Note:** Microlens and C-Mount options available in place of the CS-Mount above.