

## VGA USB2 Digital Camera with Excellent Low-light Performance



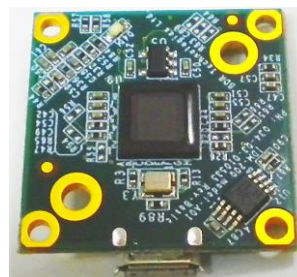
## INTRODUCTION

**IDM-200** is a digital camera for machine vision applications with a fast USB2 connection that is capable of performing advanced image processing algorithms in the sensor, on the fly. These powerful yet compact cameras are intended for medical, security, automotive and industrial applications requiring superior image quality and high performance, and yet are priced attractively.

### IDM-200 Features

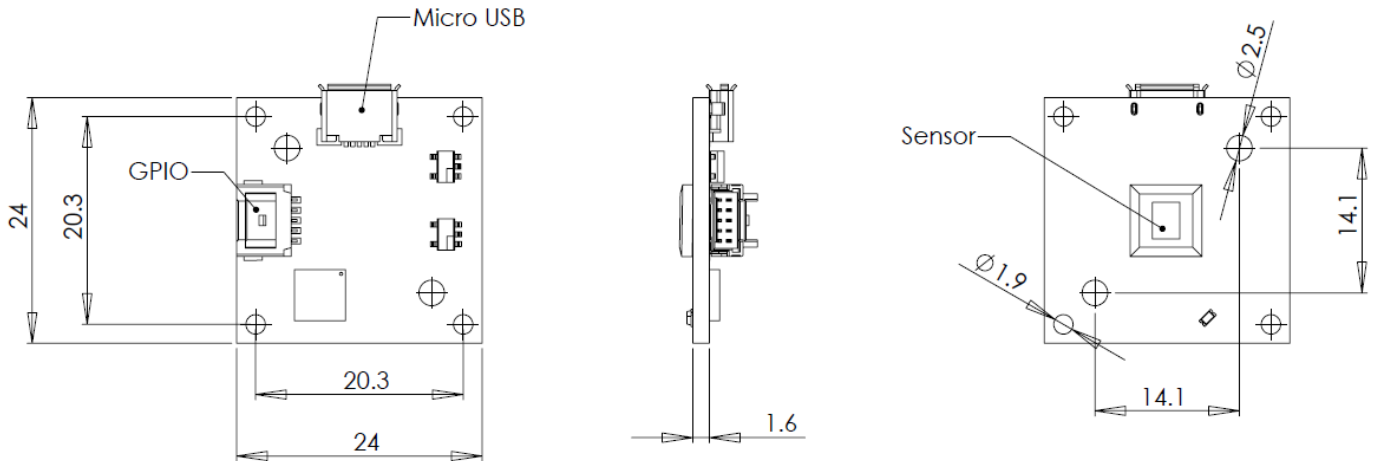
- Ultra compact design
- Built-in image processing
  - AGC, Auto Gain Control,
  - AWB, Auto white balance,
  - AE, Auto Exposure,
  - Excellent Low-Light Performance
  - Auto Pilot Mode or Programmable
  - Sub resolutions
  - Configurable ROI
  - Color correction – sharpening, Gamma
- Board level option
- Micro lens support
- Software Development Kit
- USB Powered
- Hi Sensitivity, Low noise

Item	Description or Value
<b>Sensor</b>	Aptina ASX340
<b>Resolution</b>	VGA (640x480)
<b>Optical Format</b>	1/4-inch
<b>Optical Area</b>	4.077mm x 3.136mm
<b>Active Pixels</b>	752H x 490V
<b>Pixel Size</b>	5.6µm x 5.6µm
<b>Color Filter Array</b>	Color RGB Bayer pattern
<b>Shutter Type</b>	Electronic rolling shutter, ERS
<b>Frame Rate</b>	60fps
<b>Full Resolution</b>	752 x 480
<b>ADC Resolution</b>	8bit or 10bit
<b>Responsivity</b>	16.5V/lux-sec (550nm)
<b>Dynamic Range</b>	>74.8dB
<b>Power Consumption</b>	625mW



## Physical Characteristics

### Dimensions



### Communications Interface

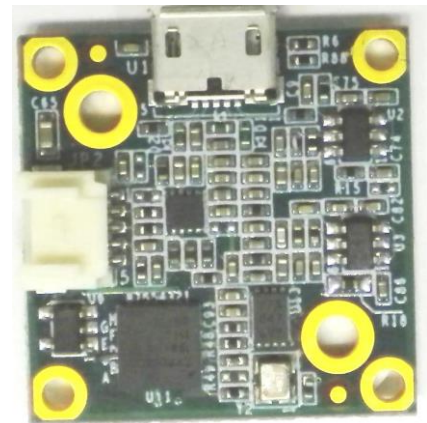
- USB2 high speed (480Mbps)

### Power Source

- USB – 5V

### Connectors

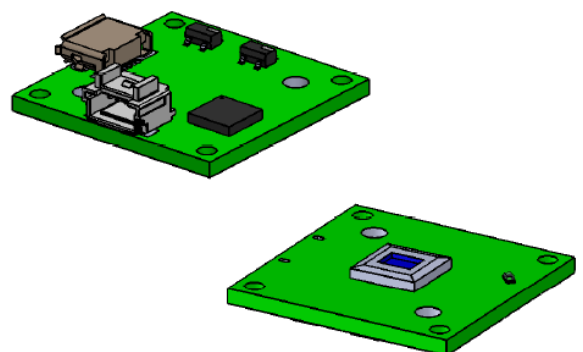
- Micro USB USB-B type –Cable connection
- GPIO-5 pin connector Molex Pico-Clasp, 1mm, 1x5 pins - board to wire connector



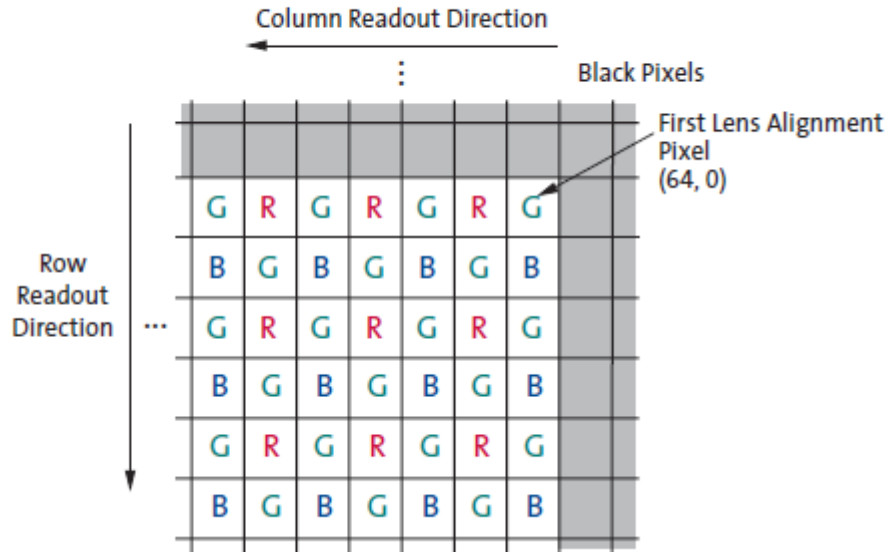
### GPIO Connector

The GPIO connector on the Main board uses a 5-pin plug, Molex PN: 5019390500

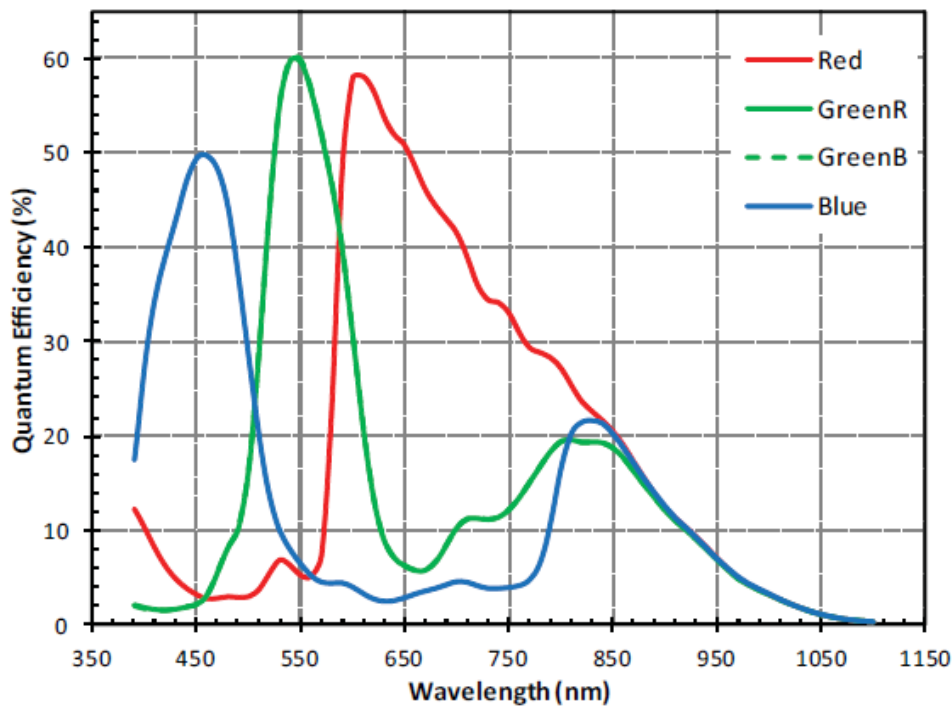
Pin	Signal
<b>1</b>	5V
<b>2</b>	GPIO1
<b>3</b>	GPIO2
<b>4</b>	GPIO3
<b>5</b>	GND



**Pixel Color Pattern Detail (top right corner)**



**Quantum Efficiency**



Note: The measurements were done on packaged parts with regular glass coating (that is, without Anti-Reflective Glass (ARC) coating).

## HOW TO CONTACT US

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### Support

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**October 2013**