FEATURES

- Built-in frame buffer (8 frames at full resolution)
- Support multi-camera applications
- 4-pin GPIOs
- 1,392 x 1,040 active pixels
- Ultra compact
- High-speed USB2.0 (480Mb/s)
- Digital output, no need for frame grabber
- Full-featured SDK
- Compatible with Windows 2000, XP, Vista, Windows 7 and 8
- TWAIN driver
- USB protocol for non-Windows based applications
- External and Software trigger
- Strobe output for external flash
- ROI & pixel skipping/ binning
- No need for external power supply
- OEM versions available

APPLICATIONS

- Digital microscopy
- Machine vision
- Fluorescence imaging
- Medical imaging
- Semiconductor equipment
- Test instruments
- Document scanners
- 2D barcode readers
- High-quality ID photos
- Security camera
- Astrophotography

PRODUCT DESCRIPTION

Mightex USB 2.0 CCD cameras with frame buffers are optimized for machine-vision applications, and they can also be used for a wide variety of other applications such as digital microscopy and medical imaging, where quality, ease of use, and cost-effectiveness are crucial. These cameras have built-in frame buffers, external trigger-in, strobe-out, and a powerful camera engine that supports multiple cameras. Frame rate can be as high as 15 fps in full resolution and up to 80 fps using ROI mode. In addition, a user-friendly GUI based application software and an SDK are provided for custom software development. A USB command set protocol is also provided for non-Windows based applications.

PERFORMANCE SPECIFICATIONS

Parameters	CXN-C013-U	CXE-C013-U	Unit
Board-level / enclosed	Board-level	Enclosed	
Number of GPIOs	4	4	
Resolution	1,392 x 1,040 Color		
Bit	8/12		bits
CCD Chip	2/3" Sony ICX285AQ, Global shutter		
Pixel Size	6.45 x 6.45		μm
Active Imager Size	Diagonal 11.0		mm
Scanning System	Progressive		
Frame Rates* (@28MHz Clock)	15 @1,392 x 1,040 49 @348 x 256 (1:4 Skip)		fps
Sub Resolutions	348 x 256 (1:4 Skip)		
Shutter Speed (Exposure time)	0.05 ~ 200,000		ms
Hardware Gains	6 ~ 43		dB
Trigger Mode	With external trigger**		
Trigger Delay	< 25		μs
Strobe Out	Yes		
Lens Mount	C– mount or CS-mount		
Built-in Filters	IR-cut (factory standard), no filter, or IR-pass		
Power Consumption	< 1.8		W
Dimension	89 x 64 x 34 (CS-mount) 89 x 64 x 39 (C-mount)	95 x 70 x 38.5 (CS-mount) 95 x 70 x 43.5 (C-mount)	mm
Weight (excluding lens)	80	150	g

* The actual achievable frame rate depends on exposure time, as well as available resources of PC system.
** Part number of the trigger cable for external trigger : ACC-CAM-DIN8

Mightex
Simply Brighter

OPERATION CONDITION

Operating Temperature Range: 0°C ~ 45°C
Storage Temperature Range: -25°C ~ 85°C
Relative Humidity, Non-condensing: 5% ~ 95%

RECOMMENDED SYSTEM CONFIGURATION
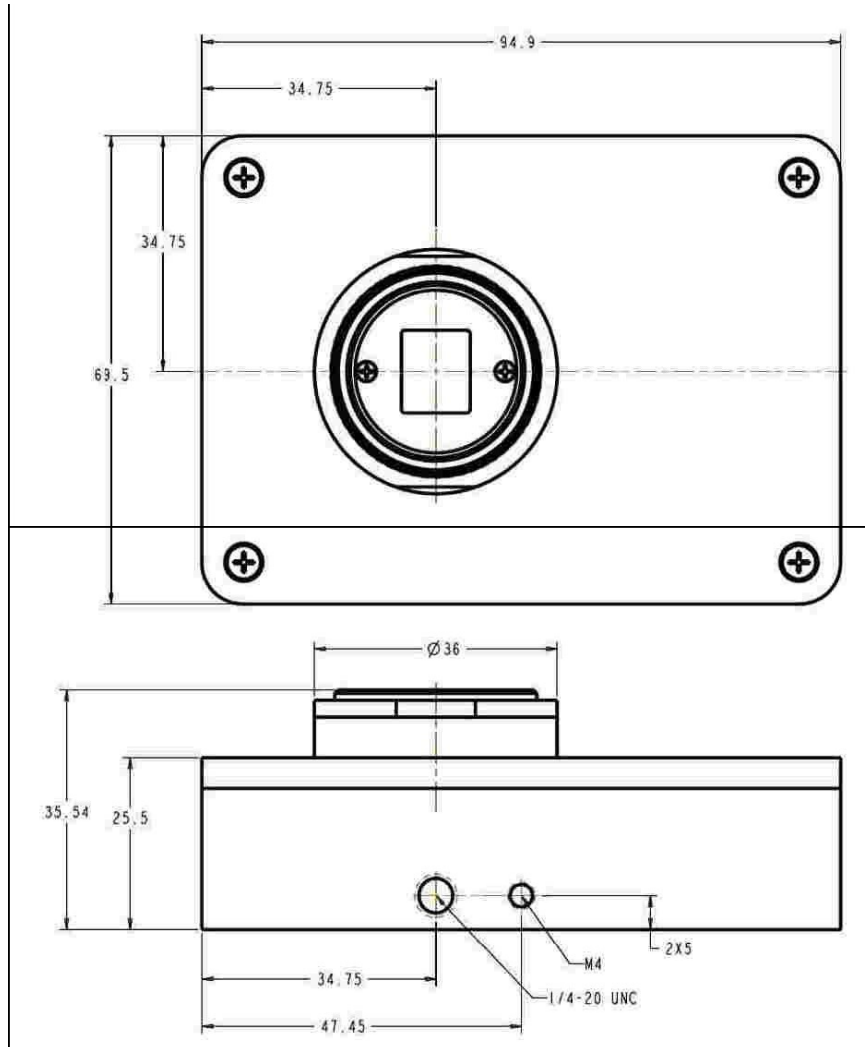
Processor: Pentium III 900 MHz or better, or a compatible processor
Operating System: Windows 2000, XP, Vista, Windows 7 AND 8
RAM: 256MB or greater
Hard Disk Space: 30MB for software installation, plus additional space for storing captured images
USB2.0 Host Controller: Intel integrated host controller (recommended)

EXAMPLE OF GRAPHICAL USER INTERFACE
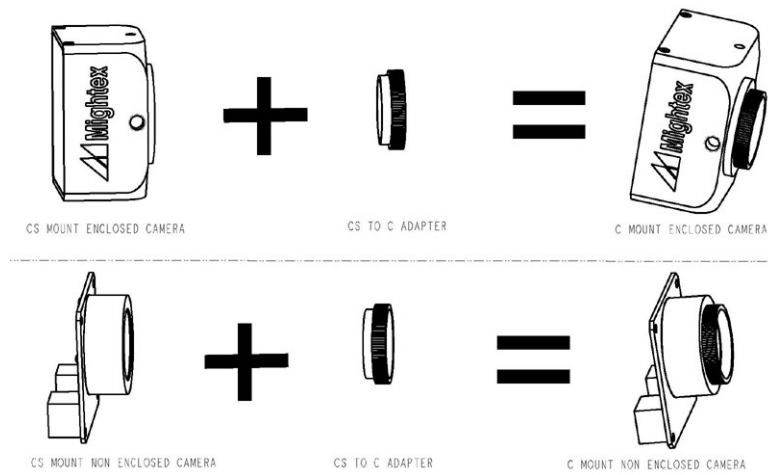
Mightex Systems, 2343 Brimley Road, Suite 868, Toronto, Ontario M1S 3L6, Canada
Tel: 1-416-840-4991 or 1-925-218-1885, Fax: 1-416-840-6541, Email: sales@mightex.com
www.mightex.com or www.mightexsystems.com

Mightex
Simply Brighter

INSTALLATION DRAWINGS

Enclosed camera with CS-mount

Mightex Systems, 2343 Brimley Road, Suite 868, Toronto, Ontario M1S 3L6, Canada
Tel: 1-416-840-4991 or 1-925-218-1885, Fax: 1-416-840-6541, Email: sales@mightex.com
www.mightex.com or www.mightexsystems.com

Mightex
Simply Brighter

WHAT'S IN A C-MOUNT CAMERA?

A C-mount camera is composed of a CS-mount camera and a CS-to-C-mount adapter. The latter is essentially a 5mm thick threaded ring.

With a world-class OEM design team, Mightex offers a broad range of customized solutions in order to meet individual customer's unique requirements. Please call 1-416-840 4991 or email sales@mightex.com for details.

Mightex
Simply Brighter