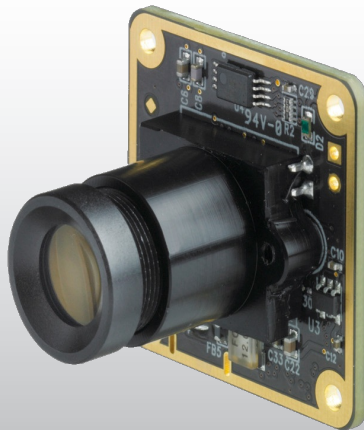


DFM 42BUC03-ML Color Board Camera

The Imaging Source "42" Series USB 2.0 Board Camera



Only 30x30x15 mm

Lens and holder not included

The Imaging Source DFM 42BUC03-ML color camera has a USB 2.0 interface and is the perfect solution for many industrial automation, quality assurance, security, surveillance and medical applications. The color camera ships with the very sensitive $\frac{1}{3}$ " Micron CMOS MT9M021 sensor. With up to 25 images per second, the DFM 42BUC03-ML is a low cost, yet highly versatile imaging solution. The optional lens holders in various lengths, makes the camera compatible to M12 board lenses. Using the optional C and CS mount lens holder, the camera is also compatible to C and CS mount lenses.

Drivers, SDKs, programming samples, extensions and end-user software for Microsoft Windows can be freely downloaded from our web site (see below). Community-driven, Open Source projects allow the camera to be used on Linux. Extensions for Microsoft Windows enable the camera to be integrated in to common machine vision software libraries, such as LabView. In addition, the camera is compatible to the Open Source computer vision library, OpenCV.

Features

- USB 2.0 interface.
- Windowing and high-speed readout.
- $\frac{1}{3}$ " Micron CMOS MT9M021.
- Global shutter.
- Up to 1,280 x 960 (1.2 MP).
- Up to 25 images per second.
- Trigger input and I/Os.
- Only 30 x 30 x 15 mm.

Accessories

- Lens holder in various lengths (6 mm to 20 mm) for M12 board lenses.
- Lens holder for C and CS mount lenses.
- M12 board lenses.
- C and CS mount lenses.
- Standard USB 2.0 cable in various lengths.
- 5 m USB 2.0 cable with fixing screws.
- Trigger cable.
- I/O cable.

Device Drivers

Device Driver for The Imaging Source USB 2.0 Cameras.

Software Development Kits (SDKs)

IC Imaging Control .NET Component, C++ Class Library, IC Imaging Control C Library, IC Imaging Control for VC++ 6.0, IC Imaging Control ActiveX and IC Imaging Control ActiveX Runtime Setup.

Programming Samples

Barcode Scanner C# Sample for IC Imaging Control.

Extensions

TWAIN Source for IC Imaging Control, Cognex VisionPro AIK Plugin for IC Imaging Control, ActivisionTools Driver for IC Imaging Control, HALCON Extension for IC Imaging Control, LabVIEW Extension for IC Imaging Control and IC Matlab Plugin for Matlab 10.0.

End User Software

IC Capture, Image Acquisition.

Software Tools

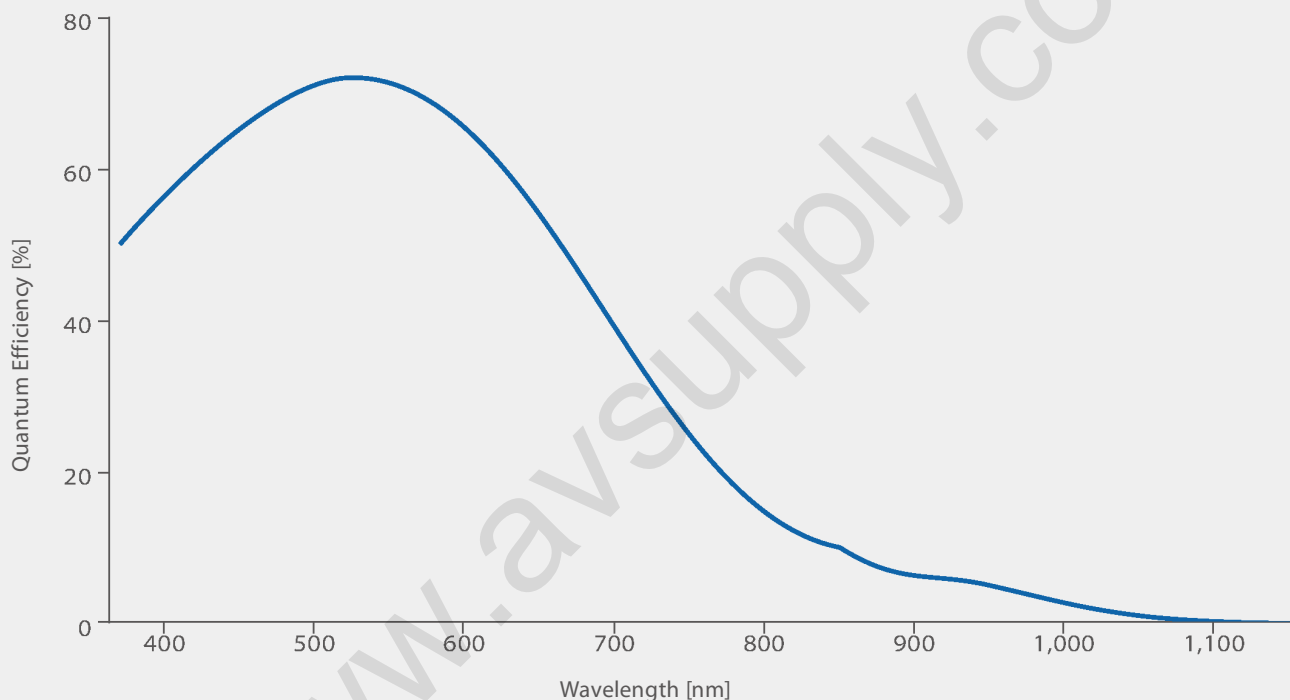
Processor Idle State Manager.

DFM 42BUC03-ML Specification

GENERAL BEHAVIOR				
Example Configurations				
Resolution		Format	FPS	Sensitivity
1,280 x 960 (1.2 MP)		1/3 "	25	2 V/lux-sec
1,280 x 720 (0.9 MP)		1/3 "	33	2 V/lux-sec
1,024 x 768 (0.8 MP)		1/4 "	31	2 V/lux-sec
640 x 480 (0.3 MP)		1/5.5 "	49	2 V/lux-sec
Set resolution, format, FPS and sensitivity with shipped software.				
Color format		Y800, RGB24, RGB32		
Dynamic range		8 bit		
INTERFACE (OPTICAL)				
IR cut filter		no		
Sensor specification		Micron MT9M021		
Shutter		Global		
Format		1/3 "		
Resolution		H: 1,280 pixel, V: 960 pixel		
Pixel size		H: 3.75 μm, V: 3.75 μm		
Lens mount		M12x0.5		
INTERFACE (ELECTRICAL)				
Supply voltage		4.5 VDC to 5.5 VDC		
Current consumption		approx 250 mA at 5 VDC		
INTERFACE (MECHANICAL)				
Dimensions		H: 30 mm, W: 30 mm, L: 15 mm		
Mass		7 g		
ADJUSTMENTS (MANUAL)				
Shutter		1/10,000 s to 1/4 s		
Gain		0 dB to 18 dB		
White balance		-6 dB to 6 dB		
ADJUSTMENTS (AUTOMATIC)				
Shutter		1/10,000 s to 1/4 s		
Gain		0 dB to 18 dB		
White balance		-6 dB to 6 dB		
ENVIRONMENTAL				
Temperature (operation)		-5 °C to 45 °C		
Temperature (storage)		-20 °C to 60 °C		
Humidity (operation)		20 % to 80 % non-condensing		
Humidity (storage)		20 % to 95 % non-condensing		
Subject to change				

Micron MT9M021 Spectral Response Curve

CMOS Sensor in DFM 42BUC03-ML



Distributed By: Audio Video Supply -- Tel: 1-800-284-2288 -- www.avsupply.com

Machine Vision - Designed in Germany



Ever since The Imaging Source was founded in 1990, it has been one of the leading manufacturers of industrial cameras, frame grabbers and video converters for automation, quality assurance, logistics, medicine, science and security.

Our extensive range of industrial cameras ships with USB 3.0, USB 2.0, GigE, FireWire 800 and FireWire 400 interfaces. Thanks to their multi-purpose features and extremely high quality standards, the cameras are commonly used in demanding applications.

The software support offered by the cameras fulfill the requirements of demanding end-users and programmers. The cameras can be put into operation within a few minutes, or integrated into new or existing applications with only a few lines of code. All camera drivers are Microsoft certified. The ease with which the cameras can be integrated, the corresponding low integration costs, and the high quality of the software set the industry standard.

All cameras, frame grabbers and video converters, manufactured by The Imaging Source, are the result of decades of experience, uncompromisingly high quality standards, and continual development. Developers and system engineers prefer The Imaging Source cameras due to their ease of system integration.

World Class Support

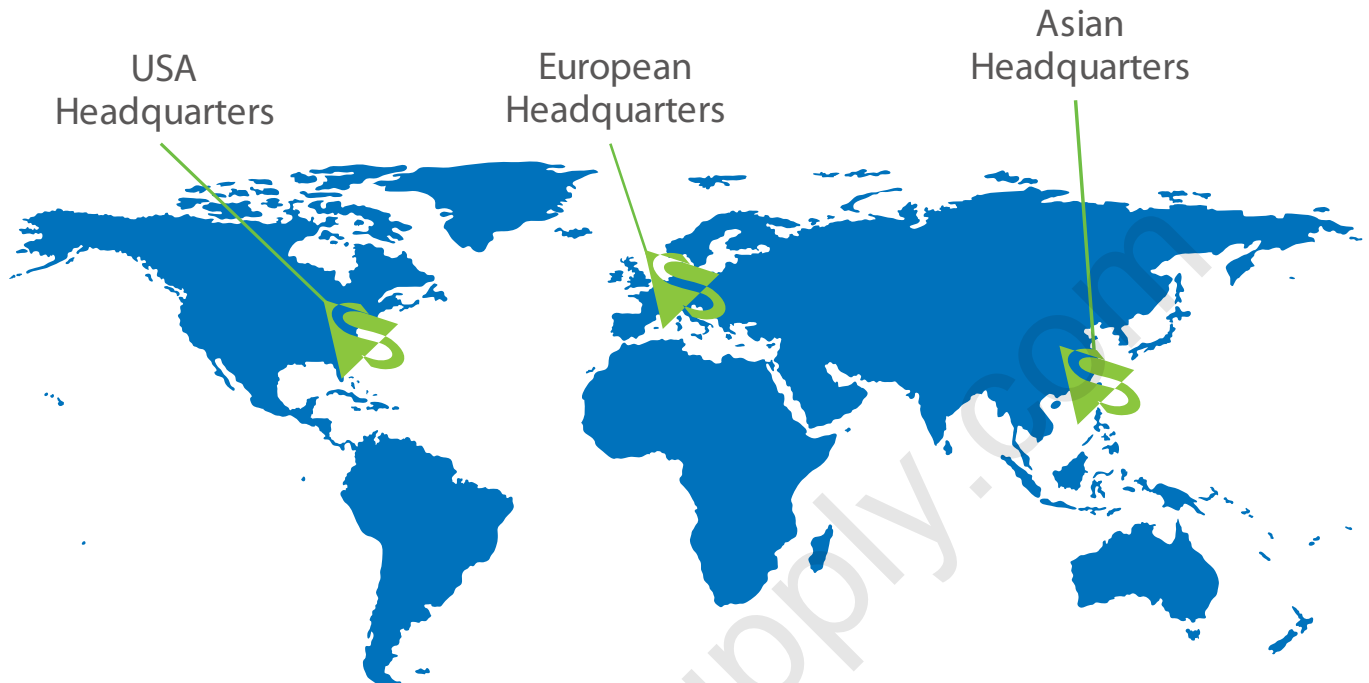


What really separates The Imaging Source from its competitors is the unsurpassed customer service and technical support we provide for our products.

Industrial cameras consist of two basic components: Hardware and software. We guarantee fast and efficient support for both components through our highly skilled support representatives and expert product developers. Not only will we provide support regarding technical issues, but we will also work to provide assistance with software implementation issues.

All cameras, frame grabbers and video converters, manufactured by The Imaging Source, are compatible with IC Imaging Control. Using this SDK, programmers can quickly integrate our machine vision devices into their own applications.

Download IC Imaging Control, drivers, extensions and programming samples from our web site:
www.theimagingsource.com



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All weights and dimensions are approximate. Unless otherwise specified the lenses shown in the context of cameras are not shipped with these cameras.

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