PixeLINK

PixeLINK offers a line of FireWire digital cameras and software to support high-performance Machine Vision applications.

- FireWire Interface
- Color/Monochrome
- Global and Rolling Shutter
- 40-48 MHz Pixel Clocks
- 1.3 to 6.6 Megapixel
- General Purpose Outputs
- External Trigger
- On-Board Flat Field Correction
- Excellent Anti-Blooming
- ROI Sub-Windowing
- Software Developer's Kit
- Direct Show Compatible
- OEM Private Labeling

- Powerful, Easy to Use and Cost Effective
- Generic Commands for all Camera Models
- Capture and save still images and AVI video clips
- Fast and flexible access to streaming video

PixeLINK Software Developer's Kit

Providing full control of all camera functions

The PixeLINK SDK contains a full Application Programming Interface, a sample application with source code, LabVIEW wrappers and documentation. The SDK is compatible with Visual Basic and Visual C++ on Windows™ 2000 and XP platforms.

With the SDK, developers can integrate PixeLINK cameras into their custom applications with ease. A small set of API functions can be used to determine and control the camera feature set required for your application. Integration is fast and simple.

The SDK includes *PixeLINK Capture OEM*, a free sample application that controls all the camera functions and demonstrates camera performance. *PixeLINK Capture OEM* provides integrators with examples of how a PixeLINK camera can be integrated into a complex application. An API function call log displays the sequence of API calls used and their parameter values any time a control on the GUI is accessed.

PixeLINK Capture OEM also acts as a camera configuration utility and provides access to all camera features that are not available with standard interfaces such as Direct Show.

PixeLINK offers full technical support with the purchase of the SDK. The support includes access to our advanced support area on the PixeLINK website, free software upgrades as well as assistance from our experienced support team.

FireWire Digital Imaging Solutions for Machine Vision

PL-B700F series are high-performance megapixel color and monochrome cameras designed for machine vision and industrial inspection applications. The cameras are complemented by on-board look-up tables, multiple triggering modes, flexible ROI sub-windowing and excellent anitblooming. Real-time flat-field correction provides image quality similar to high-end CCD cameras.

For OEM and end-users who require increased flexibility, PixeLINK offers all of its cameras with both standard and right-angle mechanical configurations.

Contact us or your PixeLINK Representative directly to determine which configuration best suits you application.

For more information, contact:

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FIREWIRE MACHINE VISION CAMERAS

Camera Model >	PL-B741F [1]PL-B741EF	PL-B742F	PL-B771F	PL-B774F	PL-B776F	PL-B781F	PL-B782F
Camera Specifications							
Color / Mono	Mono	Color	Mono	Color	Color	Mono	Color
Resolution	1280 x 1024	1280 x 1024	1280 x 1024	1600 x 1200	2048 x 1536	2208 x 3000	2208 x 3000
Frame Rate at Full Resolution	27	27	30[†]	20[†]	12[†]	5[†]	5[†]
Sensor Type	CMOS	CMOS	CMOS	CMOS	CMOS	CMOS	CMOS
Shutter Type	Global	Global	Rolling	Rolling	Rolling	Rolling	Rolling
Lens Format	C 2/3"	C 2/3"	C1/2"	C1/2"	C 1/2"	C 1"	C 1"
Pixel Pitch	6.7 µm	6.7 µm	5.2 µm	4.2 µm	3.2 µm	3.5 µm	3.5 µm
Sensor Diagonal	11.01 mm	11.01 mm	8.52 mm	8.40 mm	8.19 mm	13.1 mm	13.1 mm
Bit Depth	8 or 10	8 or 10	8 or 10	8 or 10	8 or 10	8 or 10	8 or 10
Power Consumption (Watts)	2.9W	2.9W	3.2W	3.2W	3.2W	3.7W	3.7W
Variable ROI	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Right-angle Capable	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interface (FireWire)	6 pins x 2	6 pins x 2	6 pins x 2	6 pins x 2	6 pins x 2	6 pins x 2	6 pins x 2

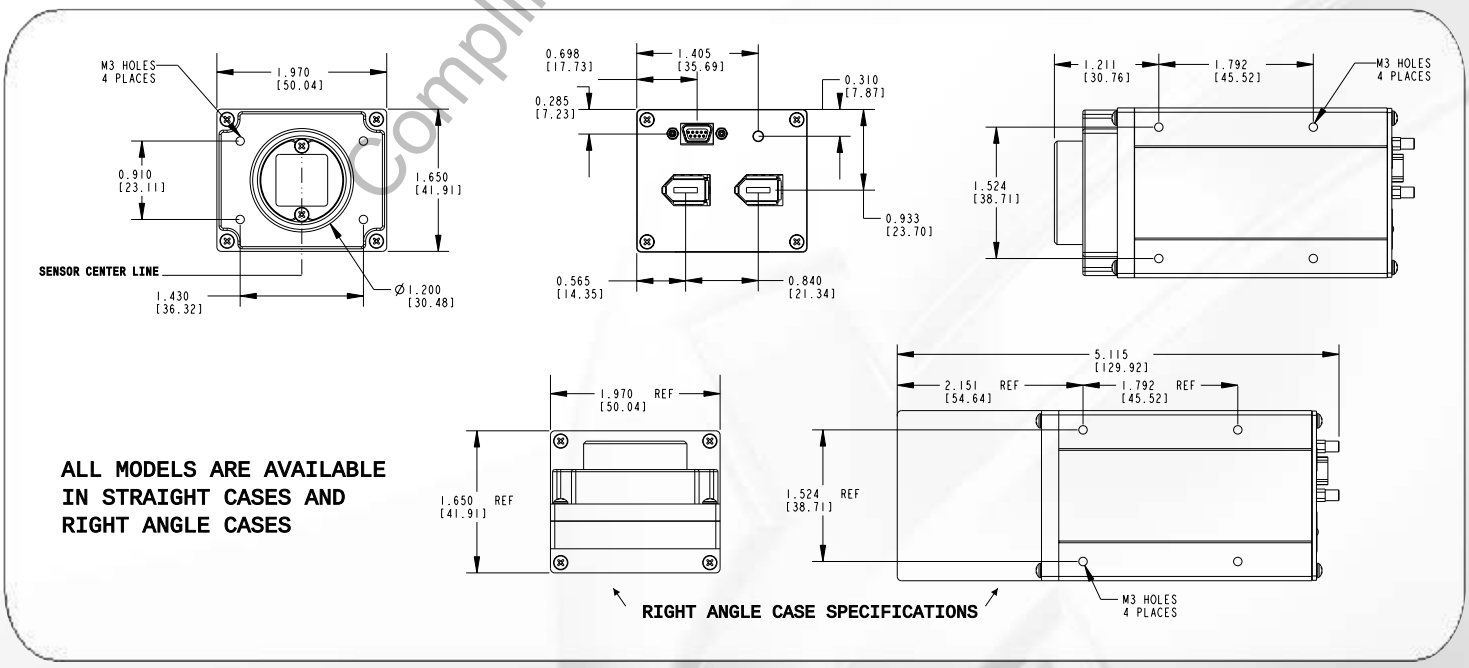
[†] Non-triggered frame rates. Triggered frame rates will be slower

[1] PL-B741EU BL Sensor has enhanced responsivity from 650nm to 1000nm

Camera Features via FireWire	
Trigger Options	Hardware - Optically Isolated 5-12V @ 4-11mA, Software and Free Running
General Purpose Outputs	2 Optically Isolated - Maximum 40V Differential. Maximum 15mA

Image Quality Measures	(See the Knowledge Base at http://www.pixelink.com for a description of Image Quality Measures)						
Responsivity (Peak)	9.4DN/(nJ/cm^2)	7.3DN/(nJ/cm^2)	11.8DN/(nJ/cm^2)	2.7DN/(nJ/cm^2)	1.8DN/(nJ/cm^2)	6.7DN/(nJ/cm^2)	7.5DN/(nJ/cm^2)
Dynamic Range	54.6 dB	54.6 dB	60 dB	60 dB	60 dB	60 dB	60 dB
FPN	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%	< 1.5%
PRNU	< 1%	< 1.5%	< 1%	< 1%	< 1%	< 2%	< 3%
Read Noise	< 2 DN	< 2 DN	< 1 DN	< 1 DN	< 1 DN	< 1 DN	< 1 DN

Software							
PixeLINK Capture OEM	Free Download at http://www.pixelink.com						
SDK (incl. LabView Wrappers)	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Direct Show Compatible	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Windows Compatible	2000/XP	2000/XP	2000/XP	2000/XP	2000/XP	2000/XP	2000/XP
IIDC DCAM Compatible	(Version 1.31) Including Format 7 Extensions						



Subject to change without notice