



FireWire-B (IEEE-1394.b) Cameras For Factory Automation & Machine Vision

FireDragon™



Key Features

FIREWIRE-B INTERFACE: Toshiba Teli FireDragon™ cameras incorporate the highly-efficient digital interface of FireWire-B (IEEE-1394.b), resulting in ultra-fast transfer rates of 800 Mbps for connection with PC's and other peripheral devices. This is twice the speed of conventional FireWire-A or USB 2.0 cameras, plus it produces less signal distortion.

EIGHT VERSIONS AVAILABLE: To extend the advantages of FireWire-B to virtually any machine vision application FireDragon™ cameras are offered in eight compact, lightweight models in both monochrome (8-bit or 10-bit) and 24-bit color. Cameras deliver full frame images at up to 90 frames-per-second and resolutions ranging from VGA (640 x 480) to UXGA (1600 x 1200). They do not require a frame grabber like analog, Camera Link or LVDS cameras.

COLOR OUTPUT OPTIONS: Cameras can be set for RGB 24-bit, YUV422 or YUV411 output for added versatility.

HIGH PERFORMANCE FEATURES: All eight cameras feature progressive scan, full frame shutter, backwards compatibility with devices equipped with conventional FireWire-A, high shock/vibration resistance, external trigger input for capture of fast moving objects, and RoHS compliance.

SDK AND VIEWER SOFTWARE Download TeliDCAM software for IEEE-1394.b cameras, including FireDragon cameras, at www.toshiba-teli.com.



SPECIFICATIONS (Tentative)

MODEL	CSFV90BC3	CSFX36BC3	CSFS20BC2	CSFU15BC18	CSFV90CC3	CSFX36CC3	CSFS20CC2	CSFU15CC18
Imaging	Monochrome	Monochrome	Monochrome	Monochrome	Color	Color	Color	Color
Resolution	VGA (640x480)	XGA (1024x768)	SXGA (1280x1024)	UXGA (1600x1200)	VGA (640x480)	XGA (1024x768)	SXGA (1280x1024)	UXGA (1600x1200)
Frame Rate	90 FPS	36 FPS	20 FPS	15 FPS	90 FPS	36 FPS	20 FPS	15 FPS
CCD Type	1/3"	1/3"	1/2"	1/1.8"	1/3"	1/3"	1/2"	1/1.8"
Pixel Clock	36 MHz	30 MHz	28 MHz	36 MHz	36 MHz	30 MHz	28 MHz	36 MHz
Cell Size	7.4μm x 7.4μm	4.65μm x 4.65μm	4.65μm x 4.65μm	4.40μm x 4.40μm	7.4μm x 7.4μm	4.65μm x 4.65μm	4.65μm x 4.65μm	4.40μm x 4.40μm
Sync System	Progressive							
Pixel Cell Size	7.4(H) x 7.4(V) (μm)							
Video Output Formats	mono 8 bit/10 bit (monochrome cameras)				RGB 24 bit/YUV422/YUV41 (color cameras)			
Interface	FireWire-B Digital Interface (IEEE1394.b)							
Backwards Compatible	FireWire-A Digital Interface (IEEE1394.a)							
Data Transfer Rate	800 Mbps (FireWire-B), 400 Mbps (FireWire-A)							
Random Trigger	Pulse Width Mode/Exposure Time							
Scalable Function	image output range can be specified arbitrarily							
Dimensions (inches)	1.73" x 1.14" x 1.04" (44mm x 29mm x 26.5mm)							
Lens Mount	C-Mount							
Power Requirements	DC 8 to 30V power supply via IEEE1394 cable							
Cable Length	Up to 100 metersRoHS Compliant Yes							
Software Driver	Teli DCAM software (driver + viewer + SDK)							



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