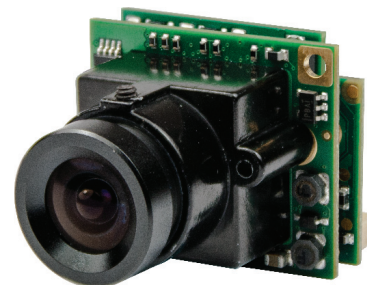


Product Features

- 22mm x 26mm mini-board is compatible with previous 20/21K14XUSB-C family products
- All-digital design uses camera board's digital (D1) output for input to USB board
- USB 2.0 bus provides power to camera
- Complete SDK available

Software

- USB 2.0 viewer software and Microsoft Digitally Certified WDM Device Drivers for 32bit and 64bit Windows operating systems
- DirectX/DirectShow compliant
- TWAIN compliant



shown with optional lens

Technical Specifications

Electrical	20B14XUSB	21B14XUSB
	NTSC	PAL
Image Sensor	1/4" CMOS	
Resolution (HxV)	640 x 480 (max)	
Frame Rate	30fps	25fps
Sensitivity	< 0.05 lux, (50 IRE) F1.2, 3200°K, lens transmission 80%, scene reflection 75%	
Signal to Noise Ratio	> 46 dB digital output	
Gamma	0.45 default	
Gain Control	Automatic 36 dB (AGC default)	
Scan Mode	Interlaced	
Mirror Mode	Selectable via software	
Synchronization	Internal	
Back Light Compensation	Default off	
White Balance Mode	AWB	
Contour Enhancement	Default on	
Iris Control	Electronic Rolling Shutter	
Shutter Speed	Automatic from 1/60 to 1/100,000	Automatic from 1/50 to 1/100,000
Video Outputs	USB	
Control Communication	USB	
Power Supply	USB 2 bus	
Power Consumption	< 0.8W	

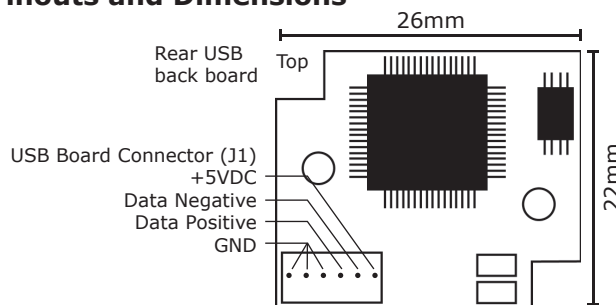
Mechanical

Dimensions WxHxD	26mm x 22mm x 16mm without lens (1" x 0.87" x 0.63")		
Weight	19g (0.67oz)		
Lens Mounts	Replace "X" in model number with desired lens:		
Example: Change 20B14XUSB to 20B145USB to select an M-12 board mount	2 = Metal M-12 Pinhole	5 = Metal M-12 Board	8 = Metal CS Board
Connectors	Camera board	30 pin to USB board (J100) MOLEX-501920-3001	
	USB board	6 pin JST, power & data (J1)	

Standards

	RoHS
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Pinouts and Dimensions



Environmental

Operating Temperature	-15° C ~ 55° C (5° F ~ 131° F)
Storage Temperature	-25° C ~ 70° C (-13° F ~ 158° F)
Operating Humidity	20 up to 93% RH
Storage Humidity	Up to 98% RH
Lifetime MTBF	> 150,000 hrs
Packaging	ESD safe package

Note: Camera is not USB 1.1 compliant

Software

Viewer (included) SFT-07019	<ul style="list-style-type: none"> • WDM device drivers • DirectX/DirectShow compliant • TWAIN compliant (requires driver installation)
SDK (optional) SFT-07019-SDK	Complete software development kit and support for OEMs

Recommended System Requirements

Hardware	Pentium IV	2.3GHz +, 1GB hard drive, Intel USB 2.0 Host controller
Software	Windows 7, 8, 10	32 bit and 64 bit
	Windows Vista	32 bit and 64 bit
	Windows XP	Service pack 2 +, DirectX 9.0c or above

Accessories

Optional USB 2.0 cable	60C1062	8 ft. (2.4384m)
	60C1062-1	40 in. (1.016m)
	60C1062-2	12 in. (304.8mm)
	60C1062-3	6 in. (152.4mm)
	60C1062-4	15 ft. (4.572m)

Complementary Models

20/21B14XDIG	YUV digital and composite video output
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