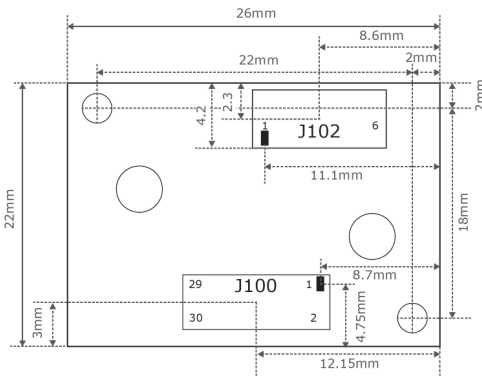
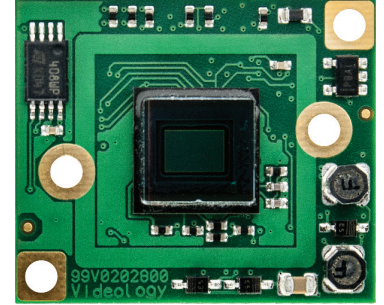


### Product Features

- 22mm x 26mm mini-board is compatible with previous 20K14X family products
- Delivers 8-Bit DIGITAL YUV & composite video output simultaneously
- I<sup>2</sup>C Software controllable features & functions
- Up to 4 overlay images can be stored to SPI FLASH (Overlays require special tooling to produce)
- White balance: AWB and push set
- Mirror and flip mode option
- Lens mounts: metal CS, M12 board or pinhole
- Optional USB (see complementary models)



### Digital YUV Output

#### J100 Connector 30pin MOLEX-501920-3001

01	GROUND	11	YUV4 CCIR656	21	NC
02	GROUND	12	NC	22	GROUND
03	YUV0 CCIR656	13	YUV5 CCIR656	23	Test signal do not use
04	NC	14	NC	24	Test signal do not use
05	YUV1 CCIR656	15	YUV6 CCIR656	25	NC
06	NC	16	NC	26	NC
07	YUV2 CCIR656	17	YUV7 CCIR656	27	I2C data
08	NC	18	NC	28	I2C clock
09	YUV3 CCIR656	19	Data Clock	29	NC
10	NC	20	NC	30	+5V power supply in

### Analog Output

#### J102 Connector 6pin vertical JST: BM06B-SRSS

06	I2C data
05	I2C clock
04	Ground
03	CVBS out
02	Ground
01	Power in (5V)

Remove analog connector (J102) in order to mate directly to Videology USB board)

## Technical Specifications

Electrical	20B14XDIG	21B14XDIG
	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) or Fixed options via software	
Scan Mode	Interlaced	
Mirror Mode	Selectable via software	
Synchronization	Internal	
Back Light Compensation	Default off (selectable via software)	
White Balance Mode	AWB (fixed modes selectable via software)	
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	8-bit digital YUV 4:2:2 @ CCIR656 CVBS	
Control communication	I <sup>2</sup> C control	
Power supply	5VDC +/- 5% (not polarity protected)	
Power consumption	< 0.8W	

### I<sup>2</sup>C Communication Kit (Optional)

60B6-U	kit includes: I <sup>2</sup> C board, program cable, USB cable, camera control software
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### Environmental

Operating Temp.	-40°C ~ 50°C (-40°F ~ 122°F)
Operating Humidity	20% ~ 93%
Storage Temp.	-40°C ~ 90°C (-40°F ~ 194°F)
Storage Humidity	Up to 98% RH
Lifetime MTBF	> 150,000 hrs
Packaging	ESD safe package

### Mechanical

Dimensions WxHxD	26mm x 22mm x 11mm w/o lens (1" x 0.87" x 0.43")
Weight	6.4g (0.23 oz)
Lens Mounts	Replace "X" in model number with desired lens:
Change 20B14X-DIG to 20B145DIG to select an M-12 board mount	2 = Metal M-12 Pinhole 5 = Metal M-12 Board 8 = Metal CS Board

Connectors	J102	J100
Remove analog connector J102 in order to mate directly to Videology USB board	Power/ analog video/ 6pin mount I <sup>2</sup> C connector Vertical JST: BM06B-SRSS	Board to Board connector (J102)
	Power/ video/ digital YUV, all in a 30 pole board to board connector	
	MOLEX-501920-3001	
	MOLEX-52991-0308	Mating part, must be used on the application side

### Accessories

Included	60C1039 6 pin cable with flying leads
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### Complementary Models

20/21B14XUSB	USB 2.0 dual board camera
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