

New USB3 Vision Camera

USB[®]
VISION

12.3 MP **DU1207M series**

8.8 MP **DU806M series**

Pregius

New IP Core

High Image Quality

40 × 40 × 35 mm

90 g



Feature

- With Sony's ultra high image quality CMOS sensor
- 12.3Mp (IMX253) 1.1 type : 32 fps / 4,096(H) x 3,000(V) pixels
- 8.8Mp (IMX255) 1.0 type : 40 fps / 4,096(H) x 2,160(V) pixels
- Global shutter type
- Pixel size : 3.45(H) x 3.45(V) μm
- Super high speed response with new IP Core 'TELI CORE TECHNOLOGY' (no CPU)
- Correspond with "TeliCamSDK" (Software development kit, free supply)

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TOSHIBA TELI CORPORATION

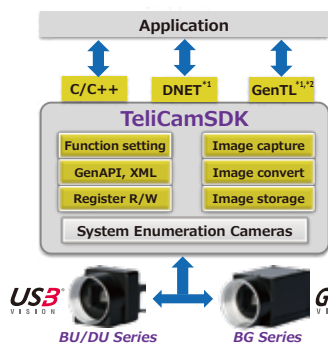
<http://www.toshiba-teli.co.jp/en/>



Specifications

B/W or COLOR	B/W		COLOR		B/W		COLOR		B/W		COLOR			
ITEM	MODEL		DU657M		DU657MC		DU806MG		DU806MCG DU806MCF		DU1207MG		DU1207MCG DU1207MCF	
Interface	USB 3.0 (Only SuperSpeed is supported)													
Imager	1.1 type GS-CMOS (TELI Original)				1.0 type GS-CMOS (IMX255)				1.1 type GS-CMOS (IMX253)					
Resolution	2,560 (H) X 2,560 (V)				4,096 (H) X 2,160 (V)				4,096 (H) X 3,000 (V)					
Max. Frame Rate (all pixels readout)	Mono 8 : 55 fps		Bayer 8 : 55 fps		Mono 8 : 40 fps Mono 10 / 12 : 20 fps		Bayer 8, Mono 8 : 40 fps YUV, Bayer 10 / 12 : 20 fps RGB, BGR : 13 fps		Mono 8 : 32 fps Mono 10 / 12 : 16 fps		Bayer 8, Mono 8 : 31 fps YUV, Bayer 10 / 12 : 16 fps RGB, BGR : 10 fps			
Pixel Size	5.0 (H) X 5.0 (V) μm				3.45 (H) X 3.45 (V) μm									
Electronic Shutter	MANUAL (Global Shutter) / Random Trigger Shutter (Global Shutter)													
Random Trigger Shutter Type	External Trigger / Software Trigger													
Random Trigger Shutter Mode	Edge / Level / Bulk (255 times)													
Sequential Shutter	16 entries (max)													
Exposure Time	10 μs to 200 ms (MANUAL), 10 μs to 200 ms (Edge or Bulk Mode), Trigger width (Level Mode)				30 μs to 16 s (MANUAL), 30 μs to 16 s (Edge or Bulk Mode), Trigger width (Level Mode)									
Scan Method	Progressive													
On-chip Color Filter	-		RGB primary color mosaic		-		RGB primary color mosaic		-		RGB primary color mosaic			
Dust-proof Glass / IR Cut Filter	-		-		MG : with Dust-proof Glass		MCG : with Dust-proof Glass MCF : with IR Cut Filter		MG : with Dust-proof Glass		MCG : with Dust-proof Glass MCF : with IR Cut Filter			
Standard Sensitivity (Gain : 0dB)	900 lx, F5.6, 1/60 s		2,200 lx, F5.6, 1/60 s		TBD lx, F5.6, 1/40 s		MCG : TBD lx, F5.6, 1/40 s MCF : TBD lx, F5.6, 1/40 s		860 lx, F5.6, 1/32 s		MCG : 1,150 lx, F5.6, 1/31 s MCF : 1,425 lx, F5.6, 1/31 s			
Minimum Sensitivity (Video Level:50%)	16 lx (F1.4, Gain x8)		40 lx (F1.4, Gain x8)		TBD lx (F1.4, Gain +24 dB)		MCG : TBD lx, MCF : TBD lx (F1.4, Gain +24 dB)		2 lx (F1.4, Gain +24 dB)		MCG : 3 lx, MCF : 3 lx (F1.4, Gain +24 dB)			
Gain	Digital, x1 to x8 (MANUAL)				Analog, 0 to +24 dB (MANUAL, AGC)									
Black Level	-25 to +25 %													
White Balance	-		Manual, One push		-		Manual, One push MCG : not specify MCF : 2,500 ~ 6,500 K		-		Manual, One push MCG : not specify MCF : 2,500 ~ 6,500 K			
Gamma / LUT	γ=1.0 to 0.45 / In 10 bit, Out 10 bit													
Sharpness	-													
HUE	-													
Saturation	-													
Test pattern	-													
Image Buffer / Number of Frames	64 MB / 10 frames (all pixels readout)				256 MB / 30 frames (all pixels readout)				256 MB / 21 frames (all pixels readout)					
Image Time Stamp	-													
Event Notification	FrameTrigger / FrameTriggerError / FrameTriggerWait / FrameTransferStart / FrameTransferEnd / ExposureStart / ExposureEnd / Timer0Start / Timer0End													
Chunk	-													
Image Output Format	Mono 8 bit All pixel, Scalable, Binning, Mirroring / Flip		Bayer 8 bit All pixel, Scalable, Binning, Mirroring / Flip		Mono 8 / 10 / 12 bit All pixel, Scalable, Binning, Decimation, Mirroring / Flip		RGB 24 bit, BGR 24 bit, YUV411 12 bit, YUV422 16 bit, Bayer 8 / 10 / 12 bit, Mono 8 bit All pixel, Scalable, Binning, Decimation, Mirroring / Flip		Mono 8 / 10 / 12 bit All pixel, Scalable, Binning, Decimation, Mirroring / Flip		RGB 24 bit, BGR 24 bit, YUV411 12 bit, YUV422 16 bit, Bayer 8 / 10 / 12 bit, Mono 8 bit All pixel, Scalable, Binning, Decimation, Mirroring / Flip			
External Trigger Input / Level	1 channel / LVTTL to +24 V													
GPIO Input Output / Level	2 channels / 5 V CMOS													
Power Supply	In / Out : 1 channel (selectable) / 5 V CMOS (each), Out : 1 channel / 5 V CMOS DC +5 V ± 5 % (from USB connector)													
Power Consumption	Max. 3.6 W		Max. 3.6 W		Max. 4.0 W		Max. 4.5 W		Max. 4.0 W		Max. 4.5 W			
Lens Mount	C Mount													
Dimensions / Mass	40 (W) × 40 (H) × 35 (D) mm (Not including protrusion) / 85 g				40 (W) × 40 (H) × 35 (D) mm (Not including protrusion) / 90 g									
Operation Assurance	Temperature : -5 °C to 45 °C, Humidity : 10 % to 90 % (no condensation)				Temperature : -5 °C to 45 °C (below 65 °C on cabinet surface), Humidity : 10 % to 90 % (no condensation)									
Conformity	CE, FCC, RoHS, WEEE, USB3 Vision (Ver1.0), GenICam (Ver2.3), IIDC2 (DU657M/MC:Ver1.0.0, other:Ver1.1.0)													
Product Availability	Available		Available		Planning		Planning		Available		Available			

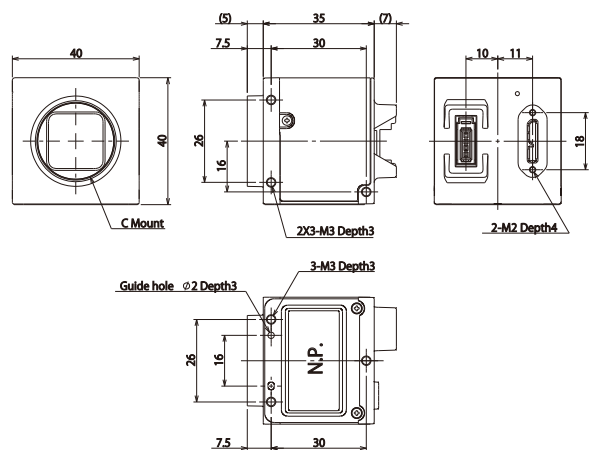
TeliCamSDK



- Easy to capture images
- More than 70% reduction of mounting code
- GEN<i>CAM available
- Varieties of functions for easy programming
- Abundant sample code
- Easy to understand manuals
- Unified SDK for USB3.0 & GIGe

bit	Windows				Linux	
	XP SP3	Vista	7	8.1	Ubuntu 14.04 LTS	Debian 8.1.0
32	✓ (Corresponds to old ver.)	✓ (Corresponds to old ver.)	✓	✓	✓ (i386) (Please contact us)	✓ (i386) (Please contact us)
64	-	✓ (Corresponds to old ver.)	✓	✓	✓ (AMD64) (only for USB3.0)	✓ (AMD64) (only for USB3.0)

Outline Drawing



Notes on Safety

- Before using this product, please read "Operation Manual" carefully in order to use this product safely and correctly.
- If this product should be used in the extraordinary conditions or environments, or if you have any questions or problems, please contact our sales division.

TOSHIBA TELI CORPORATION

URL: <http://www.toshiba-teli.co.jp/en/>

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