A Series

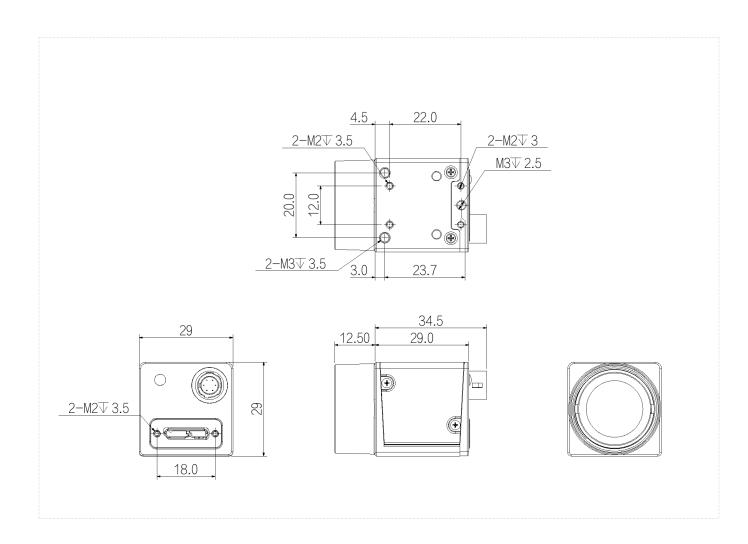
A3A20CU24E



Features

- USB3.0 interface, 5Gbps theoretical transfer bandwidth, power supply via USB interface;
- Compact size of 29mmx29mmx29mm;
- 128MB on-board cache for data transmission or image resend;
- Support Software Trigger/Hardware Trigger/Free Run Mode;
- Support ISP functions including Sharpness/Denoising/Gamma/LUT/BlackLevel Correction/TargetBrightness/Contrast etc.;
- Color cameras support interpolation, white balance, color conversion matrix, chroma, saturation, etc.;
- Support multiple image data formats output/ROI/Mirror, etc.;
- Compatible with USB3.0 Vision protocol and GenICam standard;
- Comform to CE, FCC, RoHS;

Dimensions (mm)





Specification

Sensor		Model	A3A20CU24E
Shutter Rolling		Sensor	IMX226
Resolution 4000 × 3000 Frame Rate 30 fps Bit Depth 10 Mono/Color Color Pixel Size 1.85 μm × 1.85 μm Pixel 12MP S/N Ratio >38dB Dynamic Range 66dB Image Format BayerRG8/10/10Packed , BayerGB8/10/10Packed ROI Support Image Gain 1~32 White Balance Automatic white balance		Image Sensor	1/1.7"CMOS
Basic Frame Rate 30 fps Bit Depth 10 Mono/Color Color Pixel Size 1.85 μm × 1.85 μm Pixel 12MP S/N Ratio >38dB Dynamic Range 66dB Image Format BayerRG8/10/10Packed , BayerGB8/10/10Packed ROI Support Image Gain 1~32 White Balance Automatic white balance		Shutter	Rolling
Frame Rate 30 fps	Dania	Resolution	4000 × 3000
Mono/Color Color Pixel Size 1.85 μm × 1.85 μm Pixel 12MP S/N Ratio >38dB Dynamic Range 66dB Image Format BayerRG8/10/10Packed , BayerGB8/10/10Packed ROI Support Image Gain White Balance Automatic white balance	Basic	Frame Rate	30 fps
Pixel Size 1.85 μm × 1.85 μm Pixel 12MP S/N Ratio >38dB Dynamic Range 66dB Image Format BayerRG8/10/10Packed , BayerGB8/10/10Packed ROI Support Image Gain 1~32 White Balance Automatic white balance		Bit Depth	10
Pixel 12MP S/N Ratio >38dB Dynamic Range 66dB Image Format BayerRG8/10/10Packed , BayerGB8/10/10Packed ROI Support Gain 1~32 White Balance Automatic white balance		Mono/Color	Color
S/N Ratio >38dB Dynamic Range 66dB Image Format BayerRG8/10/10Packed , BayerGB8/10/10Packed ROI Support Gain 1~32 White Balance Automatic white balance		Pixel Size	1.85 μm × 1.85 μm
Dynamic Range 66dB Image Format BayerRG8/10/10Packed , BayerGB8/10/10Packed ROI Support Gain 1~32 White Balance Automatic white balance	Image	Pixel	12MP
Image Format BayerRG8/10/10Packed , BayerGB8/10/10Packed ROI Support Gain 1~32 White Balance Automatic white balance		S/N Ratio	>38dB
ROI Support Gain 1~32 White Balance Automatic white balance		Dynamic Range	66dB
Image Gain 1~32 White Balance Automatic white balance		Image Format	BayerRG8/10/10Packed , BayerGB8/10/10Packed
White Balance Automatic white balance		ROI	Support
		Gain	1~32
Gamma From 0 to 4 , support LUT		White Balance	Automatic white balance
		Gamma	From 0 to 4, support LUT
Exposure Time 55µS~1S		Exposure Time	55µS~1S
Trigger Mode Software Trigger/Hardware Trigger/Free Run Mode		Trigger Mode	Software Trigger/Hardware Trigger/Free Run Mode
SPC Support		SPC	Support
User Setting Support two sets of user-defined configurations	Dorformana	User Setting	Support two sets of user-defined configurations
Performance Image Buffer 64MB	'ertormance	Image Buffer	64MB
Port USB3.0		Port	USB3.0
Port GPIO Interface 6 pin Hirose: 1x Opto-isolated input, 1x Opto-isolated output, 1 configurable in and output	Port	GPIO Interface	6 pin Hirose: 1x Opto-isolated input, 1x Opto-isolated output, 1 configurable input and output
Lens Mount C		Lens Mount	С
Power Supply Power Supply Power supply via USB connector /DC power supply by Hirose connector, with voltage range from 9V to 24V	Power	Power Supply	Power supply via USB connector /DC power supply by Hirose connector, with voltage range from 9V to 24V
Power Consumption ≈3.1 W		Power Consumption	≈3.1 W
Product Dimensions 29mm*29mm*29mm	Structure	Product Dimensions	29mm*29mm
Structure Net Weight 68 g	Suucture	Net Weight	68 g
Storage Temperature - 30°C~+80°C	- nuiron manat	Storage Temperature	- 30°C~+80°C
Environment Operating Temperature - 30°C∼+50°C	:nvironment	Operating Temperature	- 30°C∼+50°C

Connector Pin-out

Pin	Description	Features	Definition of 6-pin power port
1	-	+9VDC to 24VDC power supply	
2	Line1	Opto-isolated input	
3	Line2	GPIO (I/O can be configured for non-isolated software)¹	
4	Lineo	Opto-isolated output	
5	-	Opto-isolated signal ground (ISO_GND)	
6	-	Camera DC power ground and GPIO signal ground (GND)	

Spectrogram

