

7000 Series

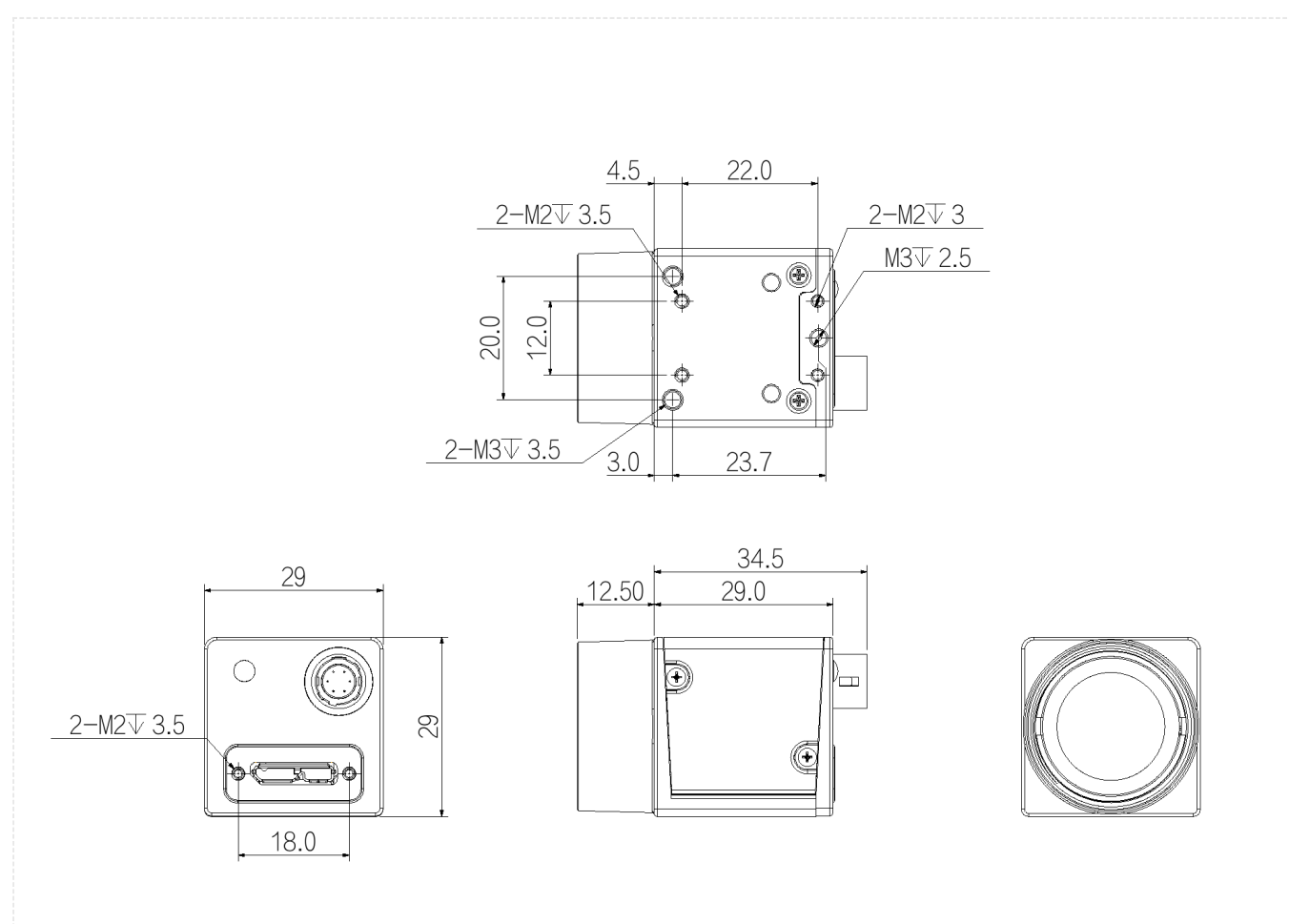
A7300MU90E



Features

- USB3.0 interface, 5Gbps theoretical transfer bandwidth, power supply via USB interface ;
- 128MB on-board cache for data transmission or image resend;
- Support Software Trigger/Hardware Trigger/Software & Hardware Hybrid Trigger/Free Run Mode;
- Support ISP functions including Sharpness/Denoising/Gamma/LUT/BlackLevel Correction/TargetBrightness/Contrast etc.;
- Support multiple image data formats output/ ROI/Binning/Mirror, etc. ;
- Compatible with USB3.0 Vision protocol and GenICam standard;
- Comform to CE, FCC, RoHS;

Dimensions (mm)



Specification

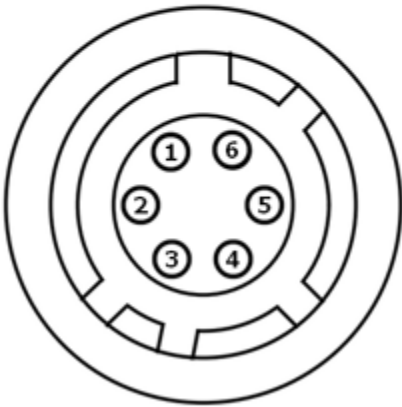
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|-------------|-----------------------|--|
| Model | | A7300MU90E |
| Basic | Sensor | IMX252 |
| | Image Sensor | 1/1.8" CMOS |
| | Shutter | Global |
| | Resolution | 2048 × 1536 |
| | Frame Rate | 120 fps |
| | Bit Depth | 10 |
| | Mono/Color | Mono |
| | Pixel Size | 3.45 μm × 3.45 μm |
| Image | Pixel | 3.2MP |
| | S/N Ratio | >38dB |
| | WDR | >70dB |
| | Image Format | Mono8/10/10Packed |
| | Binning | Support |
| | ROI | Support |
| | X Flip | Support |
| | Y Flip | Support |
| | Gain | 1~32 |
| | Gamma | 0~4 |
| | Exposure Time | 20μS~1S |
| | Trigger Mode | Software Trigger/Hardware Trigger/Free Run Mode |
| | SPC | Support |
| Performance | User Setting | Support two sets of user-defined configurations |
| | Image Buffer | 64MB image cache , 64M data cache |
| Port | Port | USB3.0 |
| | GPIO Interface | 6 pin Hirose: 1x Opto-isolated input, 1x Opto-isolated output, 1 configurable input and output |
| | Lens Mount | C |
| Power | Power Supply | Power supply via USB connector /DC power supply by Hirose connector, with voltage range from 9V to 24V |
| | Power Consumption | ≈3.91W |
| Structure | Product Dimensions | 29mm*29mm*29mm (not including lens mount and rear case connector) |
| | Net Weight | 60 g |
| Environment | Storage Temperature | - 30℃~+80℃ |
| | Operating Temperature | - 30℃~+50℃ |

Connector Pin-out

Definitions of camera 6-pin ports:

| Pin | Description | Features |
|-----|-------------|---|
| 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) |

Definition of 6-pin power port



Spectrogram

(Excludes lens characteristics and light source characteristics.)

