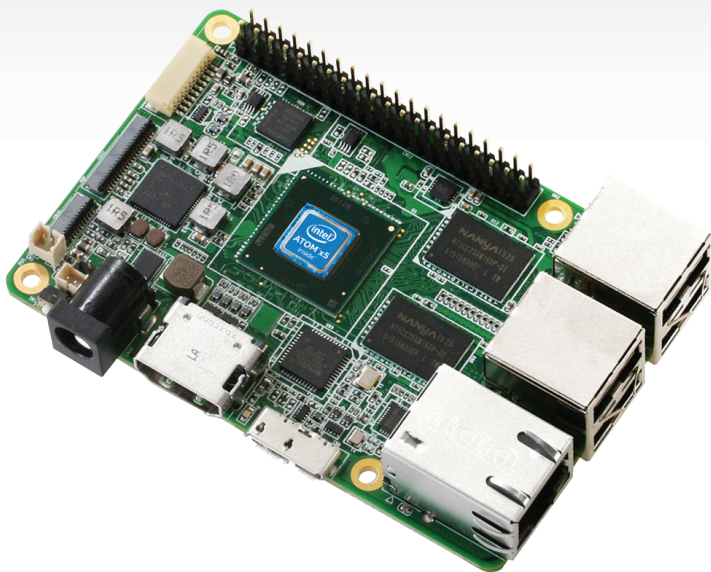# UP

bridge
the gap

UP Embedded Vision Starter Kit

Powered by Basler AG, the leading manufacturer of industrial digital cameras

Starting an embedded vision project has never been so easy. With UP Embedded Vision Start kit, you get everything you need including :

-1x Basler dart daA2500-14uc 5MPX camera
-1x S-Mount lens
-1x UP board with 2GB RAM/32GB eMMC
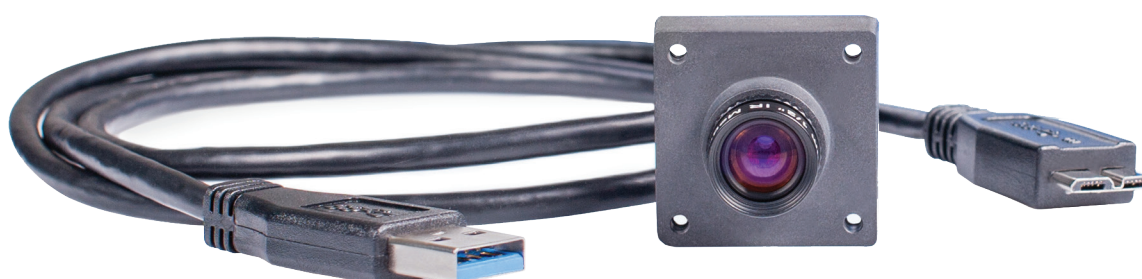**-1x USB3.0 OTG cable**
-1x power supply

In addition to these, a software image is available at UP Community at your disposal.

Basler dart with USB 3.0 Interface – Plug and Play for Easy Integration

The dart camera series offers USB 3.0 interface, you can benefit from compliance with the international USB3 Vision standard and the upcoming next generation of camera interfaces.
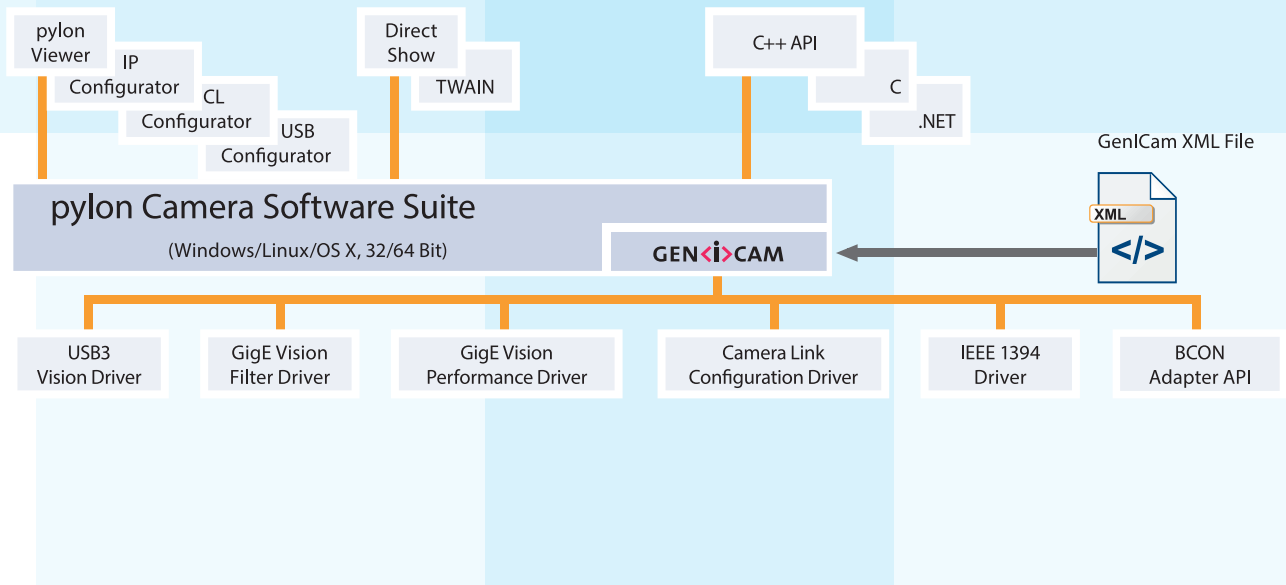
All dart cameras with USB 3.0 interface provide camera data and power over only one cable. The high bandwidth of USB 3.0 technology enables the dart cameras to deliver high-quality raw picture and video data in full motion. Compressing data, which causes image quality loss, is not necessary. These models also offer backward compatibility to USB 2.0.

With USB 3.0, you can be sure to enjoy an extraordinarily high transfer bandwidth, outstanding real-time capability, high stability and smooth fault handling, as well as simple integration with all machine vision applications.

Basler pylon Camera Software Suite

The pylon Camera Software Suite operates with Basler dart cameras. It offers stable, reliable, and flexible data exchange between Basler cameras and computer systems: for Windows, Linux — at a very low processor load.

pylon Viewer

IP Configurator

CL Configurator

USB Configurator

Direct Show

TWAIN

C++ API

C

.NET

GenICam XML File

XML
</>

pylon Camera Software Suite

(Windows/Linux/OS X, 32/64 Bit)

GEN<i>CAM

| USB3 Vision Driver | GigE Vision Filter Driver | GigE Vision Performance Driver | Camera Link Configuration Driver | IEEE 1394 Driver | BCON Adapter API |

UP board features

- Intel Atom QuadCore x5-Z8350 1.44GHz (up to 1.92GHz)
- 2GB DDR3 RAM onboard (optional : 4GB)
- 32GB flash eMMC 5.0 onboard (optional 16GB/64GB)
- 1 x HDMI 1.4b
- 1 x MIPI-CSI
- 1 x DSI/eDP
- 4x USB 2.0 Port
- 1 x USB 3.0 OTG
- 1 x GBit Ethernet
- 40-pin GP-bus
- Power Input : 5V@4A
- Operating Temperature : 0-60 Degrees
- Dimension: 56.5x85.6mm
- Supported OS: Linux, Microsoft Windows 10, Android 6.0

More optional expansion accessories: www.up-shop.org

Basler camera specs (daA2500-14uc)

Resolution (H $\times$ V pixels)	2592 $\times$ 1944
Sensor	Aptina MT9P031
Sensor Size (optical)	1/2.5"
Sensor Technology	CMOS, rolling shutter
Pixel Size [μm]	2.2 $\times$ 2.2
Frame Rate [fps]	14
Mono / Color	Color
Video Output Format	YUV 4:2:2 Packed (YCbCr 422), Bayer 8, Bayer 12, RGB 8
Interface	USB 3.0
Synchronization	Via external trigger or free-run
Exposure Control	Via external trigger or programmable via camera API
Housing Size (L×W×H)	20 $\times$ 29 $\times$ 29 mm (S-mount)
Housing Temperature	Up to 50°C
Lens Mount	S-Mount
Digital I/O	2 Fast-GPIO
Power Requirements	Via USB 3.0 interface
Power Suspend Mode	Yes, less than 20 mW, configurable
Power Consumption (typical)	~1.3 W
Weight (typical)	S-mount model: <15 g

About UP

UP is a brand of AAEON Europe, an associate company of ASUS group, focused on Embedded, Internet Of Things, Industry 4.0. UP's mission is to spread the intelligence in all the world around us. UP bridges the gap between the world of prototypes and the world of high-grade mass-produced embedded systems solutions.UP gives affordable and easily accessible and support of all the latest technologies to embeded industry.

About Basler

Founded in 1988, Basler is a leading global manufacturer of high quality digital cameras and lenses for factory automation, medical & life sciences, retail and traffic applications.Basler's portfolio of products offers customers the vision industry's widest selection of industrial and network cameras as well as lenses. Today it includes some 300 camera models .

Part number :
UP-PACK-VISION-001   UP Embedded Vision Starter Kit

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

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Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

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С нами вы становитесь еще успешнее!

Наши контакты:

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