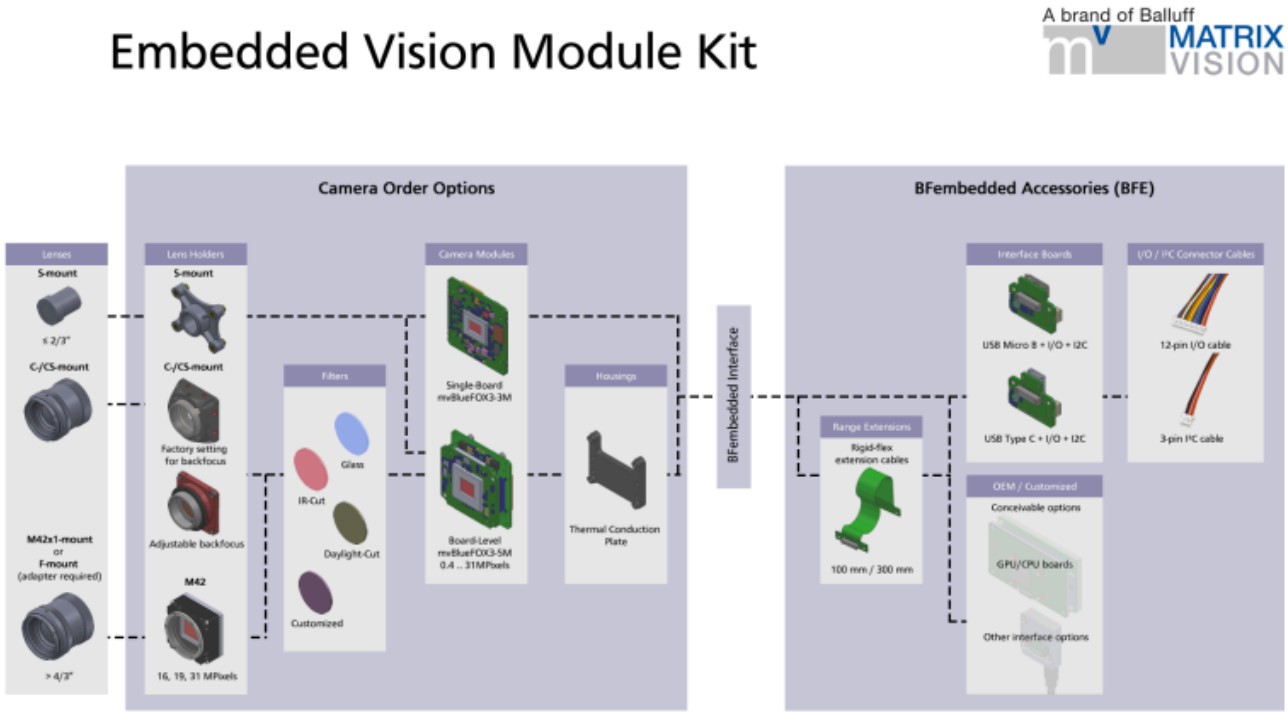
Our USB3 Vision Module Kit



_ Embedded Vision Module Kit with BFembedded Interface

Based on the new "**BFembedded Interface**" we offer a flexible and modular interface concept with suitable Embedded Vision Module Kit. I.e. you can select suitable components for your project, your assembly situation and your connection to the computer from a variety of possibilities. The "**BFembedded Interface**" provides the following data transfer and communication possibilities:

- 4 digital inputs
- 4 digital outputs
- a UART interface for serial communication
- a I^2C two wire serial interface
- USB 3.0

With the "**BFembedded Interface**" Module Kit you can combine cameras from a wide range of products with different USB 3.0 connection boards, which can be mounted separately from the camera using flex cable extensions. Custom specific connection boards can be developed on request, where no limits are set

to imagination. You could think about connection boards to GPU boards, other connectors or different connector orientations, etc.

Embedded Vision products with "BFembedded Interface"

- mvBlueFOX3-3M - Compact USB3 Vision single-board camera with Sony Starvis rolling shutter sensors
- mvBlueFOX3-5M - Compact USB3 Vision board-board camera with Sony Pregius global shutter and Starvis rolling shutter sensors

Embedded Vision products without "BFembedded Interface"

- mvBlueFOX3-M1 - USB3 Vision board-level camera with e2v / Aptina sensors
- mvBlueFOX3-M2 - USB3 Vision board-level camera with Sony Pregius CMOS sensors

About USB 3

The consumer interface USB 3 was introduced in 2010 and is very popular not only for the USB 2.0 backwards compatibility. In the meantime, every new PC hardware is shipped with USB 3. There are several other advantages: the USB 3 interface supports a **gross bandwidth of 5000 MBit/s**, however, the draft of version 3.1 announced a bandwidth of 10000 MBit/s. A **max. cable length of 3.5 m (using consumer cables)** is supported (8 m is possible with good cables). The interface is suitable for applications

1. with high resolutions,
2. high frame rates, and
3. short distances between the camera and the processing unit.

Optical cables extend the distance to 100 m. However, this is not expensive, because USB 3 as a consumer interface provides a wide range of cost-effective accessories.

	USB 2.0	USB 3.2 Gen 1	PCI Express Gen.2
Gross bandwidth [MBit/s]	480	5000	16000 (x4 Lanes)

			1500 (x4 Lanes)
Max. cable length [m]	3.5	8 (100 with optical cables)	0.3
Introduction interface	2000	2010	2007
Introduction image processing standard	-	2013	-