Valens

The High-Performance Connectivity Company

Extending the most advanced camera interfaces, including USB3.2 and CSI-2, for precise machine vision and seamless factory automation

The **Highest** Bandwidth

High-speed connectivity with no latency

The **Longest** Reach

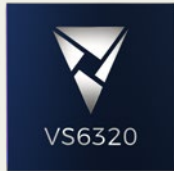Unprecedented design flexibility over the simplest wiring

The **Lowest** Error Rate

Reliable, error-free connectivity
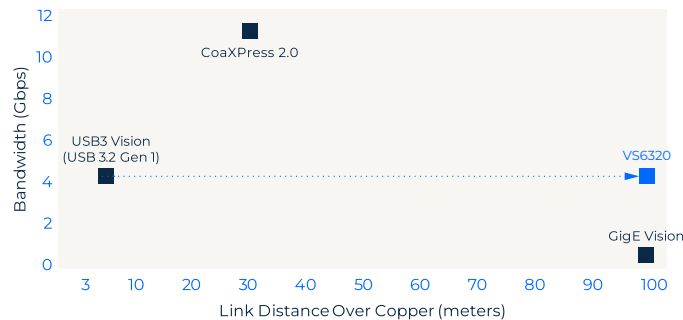
Select Customers & Partners

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AIRY3D

ASEM • A ROCKWELL AUTOMATION COMPANY

ATEN

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BizLink

D3 Embedded

FABRIMEX SYSTEMS

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RA Rockwell Automation

SIEMENS

TELEDYNE

USB3.2 Extension

VS6320

Standardized by: **HDBT** BASE

USB3 Extension EVK

CSI-2 Extension

VA7000

Standardized by: mipi alliance

The VS6320 is the first ASIC-based USB 3.2 high performance extension solution on the market, converging SuperSpeed USB 3.2 Gen 1 (5Gbps), Hi-Speed USB 2.0 (480Mbps), and Control signals over a standard Cat 6A cable for distances of up to 100 meters (328 feet).
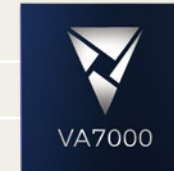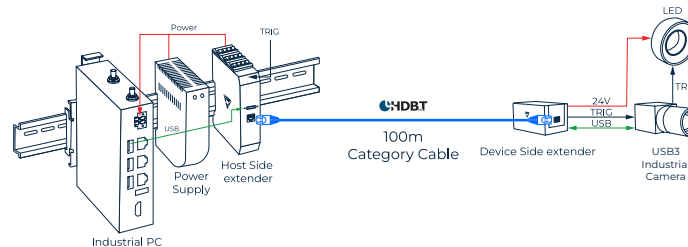
The world's first industrial-grade USB 3.0 extender product, converging multiple interfaces with data transfer rates of 5Gbps over a field-terminated Category cable, with zero latency and no frame loss for distances of up to 100 meters.

With unprecedented EMC resilience, the VA7000 chipsets offers multi-gig extension of the CSI-2 interface, providing high bandwidth of 8Gbps, with a roadmap to 16Gbps, over link distances of up to 40 meters.

Eliminating the link distance shortcoming of USB 3.2

Extending and powering any Industrial USB3 camera

Removing the need for an ISP in the camera

Bandwidth (Gbps)
12
10
8
6
4
2
0

CoaXPress 2.0

USB3 Vision
(USB 3.2 Gen 1)

VS6320

GigE Vision

3 10 20 30 40 50 60 70 80 90 100
Link Distance Over Copper (meters)

Power
TRIG
USB

HDBT
100m
Category Cable

LED
TRIG
24V
TRIG
USB

Industrial PC
Power
Supply
Host Side
extender
Device Side extender
USB3
Industrial
Camera

Sensor — CSI-2 — ISP — USB / ETH

Sensor — CSI-2 — ▽ — A-PHY

Before

After