



# Videology

Industrial-Grade Cameras

an inTEST Company



INDUSTRIAL IMAGING WITH AI ON THE EDGE



## 10x SCAiLX-TZB Camera with Ethernet Output

**Preliminary**

### THIS IS SCAiLX-TZB BY VIDEOLOGY.

Videology Zoom Block cameras powered with SCAiLX technology are smarter than ever before with artificial intelligence and machine learning on the Edge.

The intelligent SCAiLX-TZB cameras can detect, analyze, and compare images right at the device level, driving new opportunities in many industries including manufacturing, retail, financial services, transportation, energy, and healthcare.

The SCAiLX-TZB has many configurations from its modular design.

- System-on-Modules
- Output Board
- Interface modules

SCAiLX-TZB cameras can be used in diverse applications such as:

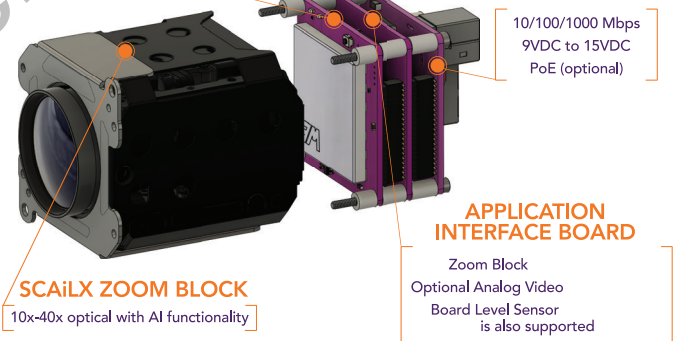
- ANPR/LPR
- Traffic/crowd monitoring
- Pipe inspection
- Robotic crawlers/UAVS/submersibles
- Machine vision sorting/monitoring

#### NXP i.MX 8M PLUS/MINI

Quad Cortex-A53 + M7  
1.6 GHz, with 2.3 TOPs NPU for AI

#### ETHERNET + PWR

10/100/1000 Mbps  
9VDC to 15VDC  
PoE (optional)



#### SCAiLX ZOOM BLOCK

10x-40x optical with AI functionality

#### APPLICATION INTERFACE BOARD

Zoom Block  
Optional Analog Video  
Board Level Sensor  
is also supported

### Current Model Option Configurations

Option	Zoom Block*	Application Interface Board	Output Board	NXP i.MX 8M SoM Board	Power Option
1	LVDS zoom block 10x	LVDS-2-MIPI-SD	ETH-RTL	NXP i.MX 8M Mini	9-12VDC power supply
2	LVDS zoom block 10x	LVDS-2-MIPI-SD	ETH-RTL-POE+**	NXP i.MX 8M Mini	PoE+
3	LVDS zoom block 10x	LVDS-2-MIPI-SD	ETH-RTL	NXP i.MX 8M Plus	9-12VDC power supply
4	LVDS zoom block 10x	LVDS-2-MIPI-SD	ETH-RTL-POE+**	NXP i.MX 8M Plus	PoE+

\*\* In development

\*SCAiLX-TZB is available on all Videology zoom block camera models.

SCAiLX is available as a stand alone SoM for custom applications.



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### Technical Specifications

#### NXP SoM Boards

	<b>NXP i.MX 8M 1MIPI MINI</b>	<b>NXP i.MX 8M 2MIPI PLUS</b>
Processor/Technology	NXP i.MX 8M Mini 1.6 GHz Quad Cortex®-A53	NXP i.MX 8M Plus 1.6 GHz Quad Cortex®-A53
Memory	2GB LPDDR4, 4GB eMMC	2GB LPDDR4, 8GB eMMC
NPU (Neural Processing Unit)	N/A	NN Neural Network Accel 2.3 TOPS
Video processing	H.264/265	H.264/265
Operating system	Embedded Linux	Embedded Linux
3rd party development environment	YOCTO Kirkstone	YOCTO Kirkstone
Video inputs	1x MIPI CSI-2	2x MIPI CSI-2
Video input connector	1x FPC 28p 0.5 mm pitch	2x FPC 28p 0.5 mm pitch
Processor operating temperature	Industrial -25°C to 85°C	Industrial -25°C to 85°C
Dimensions	42mm x 42mm	42mm x 42mm
Weight	23 gr (/wo heatsink)	23 gr (/wo heatsink)

#### Application Interface Board

	<b>LVDS-2-MIPI-SD</b>
Video input	single/double mode LVDS
Video input connector	KEL 30p micro coaxial
Video resolutions	1080p@30fps, 720p@25/30fps (single LVDS mode) 1080p@50/60fps (dual LVDS mode)
Video output	1x MIPI CSI-2 4-lanes
Video output connector	1x FPC 28p 0.5 mm pitch
Processor/Technology	FPGA
Storage memory	micro SD cardtridge
Dimensions	42mm x 42mm
Weight	9 gr

#### Output and Power Board

	<b>ETH-RTL</b>
Video Input	N/A
Network Connection	10/100/1000 Mbps
Connector	RJ-45 + Barrel PWR
Power Connector	Barrel jack Ø2.5 mm pin diameter
Power Supply	9-15 VDC
Processor/Technology	Ethernet PHY RGMII
Processor	N/A
Memory	N/A
Weight	19 gr

#### \*SCAiLX-TZB 10x Zoom

	<b>24Z2.1W-10X-LVDS-344</b>
Memory	microSD cartridge (on LVDS-2-MIPI-SD)
Protocols	DHCP, RTSP, HTTP, SSH
Camera control	VISCA via HTTP API

More technical information is available for 24Z2.1W-10X-LVDS-344. Please ask a Videology sales rep. or visit us at [videologyinc.com](http://videologyinc.com).

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