PRODUCT SELL SHEET
ZEBRA IRIS GTX

Zebra Iris GTX
Enhanced smart camera for machine vision at the edge

Zebra® Iris GTX is the next evolution of smart cameras from Zebra Technologies. Offering faster, higher-resolution sensors and substantially more processing power than its predecessor, Zebra Iris GTX provides exceptional performance for a compact all-in-one vision system. Bundled with flowchart-based Aurora Design Assistant® software, users can quickly configure and deploy machine vision to the Zebra Iris GTX smart cameras.

Business Benefits

- **Performs fast and accurate manufacturing verification and defect detection** in dirty, humid, or harsh industrial environments
- **Boosts performance by up to 3x over its precursor** thanks to an Intel® Atom® x6000 series dual-core embedded processor
- **Leverages deep learning for automated visual inspection** through image classification and segmentation tools
- **Captures high-resolution images at high speed** through a choice of CMOS sensors from two to 16 Megapixels
- **Delivers quick and reliable response**, performing data acquisition and analytics completely on the unit and responding directly to the manufacturing process requiring guidance or inspection
- **Simplifies setup and upkeep** with lens focus and illumination intensity control directly from within on-device software, eliminating the need for manual intervention in hard-to-reach places
- **Offers a compact, IP67-rated footprint for harsh industrial spaces**
- **Solves machine vision applications efficiently** through the construction of flowcharts within the Aurora Design Assistant software environment

Value differentiators

- **Increased processing power** courtesy of its new Intel dual-core embedded processor that enables the Zebra Iris GTX to handle both traditional machine vision workloads as well as deep learning inference
- **Faster and higher-resolution CMOS image sensors** for high-speed, high-resolution image capture
- **Preserves the same small footprint and cabling connections** as the Zebra Iris GTR, for ease of adoption and upgrade
- **Provides up to 3x the performance power,** compared to previous model, at the same image resolution using vision tools from Zebra software

Key messages & tactical strategies

Handle traditional machine vision operations and deep learning inference directly on Zebra Iris GTX smart cameras, through image classification and segmentation tools built into Aurora Design Assistant, the powerful on-device software.

Higher processing performance thanks to a new dual-core embedded processor, which allows the use of faster and higher-resolution image sensors and results in a three-fold performance boost compared to the Zebra Iris GTR.

Backed by powerful, flowchart-based Aurora Design Assistant software for quick configuration and deployment of projects. Video capture, analysis, classification, location, measurement, reading, verification, communication, and I/O operations—as well as a web-based operator interface—are all set up within the same software.

Ease of upgrade and implementation, with the same small footprint, IP67 rating, cabling connections, and on-device software as its immediate predecessor

Hardware Features

Model	GTX 2000	GTX 2000C	GTX 5000	GTX 5000C	GTX 8000	GTX 8000C	GTX 12000	GTX 12000C	GTX 16000	GTX 16000C
Sensor Geometry	1/1.25 in		2/3 in		1/1.1 in		1 in		1.1 in	
Resolution	1920 x 1200		2592 x 2048		4096 x 2160		4096 x 3072		4000 x 4000	
Frame Rate (Effective)	Up to 70 fps	Up to 17 fps	Up to 41.7 fps	Up to 10 fps	Up to 39.6 fps	Up to 10 fps	Up to 28 fps	Up to 7 fps	Up to 21.6 fps	Up to 5 fps
Pixel Size	3.2 x 3.2 µm									
Processor	Intel Atom x6211E with two cores and 1.3 GHz base (3.0 GHz burst) frequency									
Memory	4 GB LPDDR4/x									
Storage	32 GB eMMC									
Network	Gigabit Ethernet									
HMI	VGA									
	USB 2.0 (for keyboard and mouse)									
Others	Dedicated 0 V-10 V LED lighting intensity control for Advanced illumination ICS 3 or Smart Vision Lights brick spot light									
	Dedicated interface for Corning Varioptic C-C Series auto-focus lens									
Digital I/Os	Three (3) opto-coupled inputs (with incremental rotary encoder support)									
	One (1) dedicated opto-coupled trigger input									
	Three (3) opto-coupled trigger outputs									
	M12-X 8-pin (female) for Gigabit Ethernet									

Software Environment

Zebra Iris GTX smart cameras are ready to run applications developed using the Aurora Design Assistant integrated development environment (IDE) for Microsoft® Windows®. Users can easily configure flowcharts to create machine vision applications, rather than write program code. The IDE also lets users design a graphical web-based operator interface for the application. The flowchart-based approach streamlines development to get applications up and running quickly.

Competitive landscape

SICK
- Lector series
- Inspector series

Banner Engineering
- VE Smart Camera

Cognex
- In-Sight series
- In-Sight D900

Keyence
- Vision Sensor series

Adlink Tech
- NEON series

Hikrobot
- SC2000 series
- X86 Open Platform

Teledyne Dalsa
- BOA series

Data logic
- P2X-series
- P1X-series
- T-series
- A-series

Industries

- Automotive manufacturing
- Electronics manufacturing
- Food and beverage production
- Logistics
- Packaging
- Pharmaceutical production

Applications

- Assembly verification
- Defect detection
- Machine and robot guidance
- 2D measurements
- Label and print quality inspection
- Pick and place
- ID mark reading and OCR applications
- Track and trace applications
- Part alignment, finding, and positioning
- Presence/absence verification
- Surface inspection

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