ICAM-540 Industrial AI Camera



Features

- 8MP 30 fps SONY industrial grade sensor
- Support variable and fixed focus lens
- Advanced LEDs illumination
- NVIDIA® Jetson Orin™ system-on-module
- Supports software, including NVIDIA DeepStream, QV4L2, and VLC utility

Description

Advantech ICAM-540 series is a highly integrated Industrial AI Camera equipped with SONY industrial grade image sensor, multiple core ARM processors and NVIDIA® Jetson Orin™ system-on-module. Featuring CAMNavi SDK, HTML5 web based utility andNVIDIA Deepstream SDK, ICAM-540 series accelerates the development and deployment of cloud-to-edge vision AI applications. The CAMNavi SDK uses Python language by default and is better adapted to image acquisition and AI algorithm integration. Meanwhile the HTML 5 web based utility can be used to setup the cameras and network configuration to lower the installation effort. The preloaded, optimized Jetpack board support package V4L2 and RTSP interface seamlessly connect to AI cloud services. Advantech ICAM-540 series is a compact and rugged industrial AI camera, and is ideal for a variety of Edge AI vision applications.

Specifications

Model		ICAM-540-3CN	ICAM-540-30W	ICAM-540-31W
Image Sensor	Sensor	SONY IMX334, 8MP@30fps		
	Size, Shutter	1/1.8", Rolling Shutter, Color		
Processor system	CPU/GPU	NVIDIA Orin NX CPU: 6-core Cortex A78AE ARM® v8.2 (64-bit) | 2x clusters (4x 256KB L2 +2MB L3) + 4MB LLC | L3 Cache: 4 MB | Max. 2 GHz GPU: 1024 cores | 32 Tensor		
	Memory/ Storage	8 GB 128-bit LPDDR5 / 256GB NVMe		
Optical	Lens	Compatible with c-mount lens	12mm variable focus lens	4.4mm variable focus lens
	LED illumination	NA	8x PWM white LEDs, programmable	
Synchronization		Hardware trigger / software trigger / free-run		
HW ISP		Color debayering, sharpness, white balance, dark noise correction and brightness		
I/O	Peripheral	1 x USB 3.0 Type C, 1 x USB 3.0 Type A		
	Digital I/O	1x trigger in, 2 x Inputs, 1 x Outputs		
	Display	1 x HDMI 2.0		
LAN		1 x 10/100/1000 Base-T		
Power Requirements		19~24V_{DC} Max: 18W, typical 15W (Power mode 2)		
Dimensions		78mm (W) x 121mm (H) x 49.31 mm(D)	79.5mm (W) x 121mm (H) x 62.9 mm(D)	
Environment		0-45° C, 5Grms		
Certification		CE/FCC IP 40	CE/FCC IP 54	
Software support	OS	Ubuntu 20.04, JetPack 5.1.1 or above		
	Software	NVIDIA Deepstream SDK		
	SDK/Utiltiy	CAMNavi SDK, Web based camera utility, IP configure tool, NVIDIA DeepStream SDK & example, QV4L2 and VLC utility.		

Ordering Information

P/N	Description
ICAM-540-3CN	Orin NX, 8MP@30fps, color, C-mount
ICAM-540-30W	Orin NX, 8MP@30fps, color, 12mm Variable Focal length, White LEDs
ICAM-540-31W	Orin NX, 8MP@30fps, color, 4.4mm Variable Focal length, White LEDs

Accessories

P/N	Description
96PSA-A60W24T2-3	Power supply A/D 100-240V 60W 24V
1700034995-01	3 m Power & DI/O cable with M12 female connector
1700034091-11	3 m Ethernet cable with M12 male connector
XICAM-OPT-COB0628B	Lens, 6mm focal length, resolution 2.2µm, image circle Ø9 (1/1.8"), working distance 250mm – 5,000mm
XICAM-OPT-COB1228B	Lens, 12mm focal length, resolution 2.2µm, image circle Ø9 (1/1.8"), working distance 250mm – 5,000mm
XICAM-OPT-COB2528B	Lens, 25mm focal length, resolution 2.2µm, image circle Ø9 (1/1.8"), working distance 250mm – 5,000mm

All product specifications are subject to change without notice.
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