Connect Tech

EDGE AI SYSTEM

FOR TORADEX AQUILA TI AM69

Toradex
Swiss. Embedded. Computing.

PART NUMBER: ESG202

Connect Tech's EdgeAQ is a complete Edge AI System equipped with the Toradex Aquila TI AM69 SoM. EdgeAQ delivers state-of-the-art AI and machine learning performance.

With four GMSL2 camera inputs, EdgeAQ enables high-bandwidth, real-time video capture for demanding computer vision applications. Its compact design ensures reliable operation in challenging environments, making it ideal for edge deployments where performance and durability are critical.

Pre-integrated with Toradex's highest-performing SoM, EdgeAQ is a compact, high-performance Edge AI platform for vision processing and real-time AI.

FEATURES

- ✓ Extremely small footprint 135.5mm x 75mm x 109mm
- ✓ 1 x NVMe (PCIe x 2, 2242), Up to 256GB eMMC
- ✓ 4x GMSL2 camera inputs
- ✓ 4x USB Type-A, 1x USB Type-C, 2x UART, 2x CAN 2.0b, 1x RS-422, 2x I2C, 1x SPI, 4x GPIO

SPECIFICATIONS

Compatibility	Pre-integrated with Toradex Aquila TI AM69	**AI Performance**	32 TOPS
GPU	IMG BXS-4-64	**CPU**	Up to 8x Arm Cortex™-A72
Memory*	Up to 32GB LPDDR4 (128 Bit)	**Dimensions**	136mm (w) x 75mm (h) x 109mm (d) 5.35" (w) x 2.95" (h) x 4.29" (d)
Video Encode	H.264/AVC and H.265/HEVC	**Video Decode**	H.264/AVC and H.265/HEVC
WiFi/Bluetooth*	2.4/5/6 GHz Tri-band 2x2 Wi-Fi 7 (802.11be) Bluetooth Classic / BLE 5.3	**Networking**	2x 10/100/1000 BASE-T Ethernet
Display Output	1 x Display Port 1.4	**USB**	4 x USB 5Gbps (Type-A) 1 x USB 10Gbps (Type-C)
GMSL Camera Inputs	4x GMSL2 Camera Input via on-board 3x Quad Lane MIPI CSI-2 on the AM69	**Storage***	Up to 256GB eMMC
Storage Expansion	1 x NVMe Expansion (M.2 M-Key PCIe x2, 2242)	**Wireless / Misc Expansion**	1 x M.2 B-Key (USB 3.0/2.0, 3042) 1 x M.2 E-Key (PCIe x 1 + USB +UART, 2230)
MISC / IO Connector	2x UART 3.3V (1x console debug), 1x RS-422, 2x I2C 3.3V, 1x SPI 3.3V, 4x GPIO 3.3V (2x IN and 2x OUT), 2x 5V Output, 2x 3V3 Output, 1x HW Camera Trigger	**CAN**	2x CAN 2.0b Ports
Input Power	+12V	**Operating Temperature**	TBD
Weight	Actively Cooled System (ESG202-02): 944g (2.08 lb) Passively Cooled System: TBD	**Warranty and Support**	1 Year Warranty and Free Support

* Determined by the AM69 SOM SKU

RoHS

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