

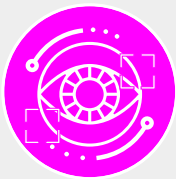
DeviceEdge Mini Series

Mini Device Max Discernment





Edge computing reached a market value of USD 2281.8 million in 2020, and it is likely to reach a value of USD 10,971.54 million by 2026, registering a CAGR of 29.4% over the forecast period. It's noteworthy that computer vision is one of essential technologies to accelerate solutions that turn raw IoT data (from video/cameras) into actionable insights. Thus, Aetina was continuously dedicated to developing computer-vision-related products, such as the DeviceEdge Mini Series.



AI-enabled Vision

Suitable for various AI-enabled vision applications



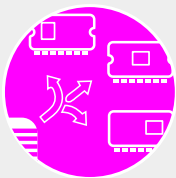
HW/SW Integration

Ready for remote monitoring via EdgeEye



Smart Button-iTons

Attain one-key recovery via smart button called iTons



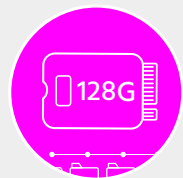
Flexible Modules

Support NVIDIA® Jetson Nano™, Xavier™ NX and TX2 NX module



Compact Configuration

Tiny and fanless design
Substantial performance with low power consumption



Ample Storage

Expand storage into 128G

Make Edge AI Into Infinite Possibilities

DeviceEdge Mini Series is designed to be palm-size, featuring high performance and low power consumption to fit in limited space. With fanless design, it runs silently and saves the maintenance cost. Users are free to choose various modules based on different performance demands without changing mechanism design. To solve the problem of insufficient data storage in edge computing, DeviceEdge Mini Series expanded into 128G with faster data transmission.

Smart Factory

Smart Security

Smart City



Smart Healthcare

Smart Retail

Smart Transportation

Remote Monitoring

To fully take control of all the deployed devices, DeviceEdge Mini Series realizes remote monitoring via EdgeEye. It shows diversified status of devices to help users check if it's in the range of normal values, including CPU/GPU temperature, memory loading, storage status, even battery status and environmental indicators in the near future. When facing critical system failure or during the development stage, users easily attain one-key recovery via button called iTons.





For M1, it features Powered Device(PD) support. That is, receiving electricity from Ethernet equipment without an adapter to help users simplify installation, saving space, reducing the material and labor cost. M1 is suitable for AGV in intelligent warehousing.

M1 Specifications

Model Number	AIE-CO11	AIE-CN11	AIE-CT41
Module Option	NVIDIA® Jetson Nano™	NVIDIA® Jetson Xavier NX™	NVIDIA® Jetson TX2™ NX
CPU	Quad-core ARM Cortex-A57 MPCore processor	6-core NVIDIA Carmel ARM®v8.2 64-bit CPU 6MB L2 + 4MB L3	Dual-core NVIDIA Denver 2 64-bit CPU and quad-core Arm® Cortex®-A57 MPCore processor complex
GPU	NVIDIA Maxwell™ GPU with 128 CUDA® cores	NVIDIA Volta™ GPU with 384 CUDA® cores and 48 Tensor Cores	NVIDIA Pascal™ GPU with 256 CUDA® cores
AI Performance	0.5 TFLOPS (FP16) at 5-10W	14 TOPS (INT8) at 10W 21 TOPS (INT8) at 15W	1.33 TFLOPS at 7.5-15W
System Memory	4 GB 64-bit LPDDR4	8 GB 128-bit LPDDR4	4 GB 128-bit LPDDR4
Storage	16GB eMMC 5.1 Flash		
Display	1x HDMI 1.4 with microHDMI D Type connector		
Audio	HDMI Integrated		
LAN	2x RJ-45 for GbE (1 for PoE PD 802.3 at)		
Expansion	1x M.2 M-key 2242 : NVMe 128G SSD (build-in) 1x M.2 E-key 2230 : WiFi/BT function		
USB	2x USB 3.2 Gen1 Type A / 1x USB Type-C (OTG only)		
MISC. External Interfaces	1x AI button (iTons) 1x Power button 1x DB15 female connector (5x GPIO, 1x UART, 1x I2C, 1x CAN bus) 1x Recovery button 1x Reset button 2x Antenna (optional)		
Power Input	DC-in 12V~24V (DC Jack 4pin)		
Dimension	132.6 x 88.7 x 63.55mm (WxDxH)		
Mounting	VESA		
Net Weight	0.9kg		
Operating Temperature	-20°C ~ +50°C		
Operating Humidity	10% ~ 90%		
Storage Temperature	-40°C ~ +85°C		
Certification	CE / FCC		
Operating System	Ubuntu 18.04		



When it comes to M2, Power Sourcing Equipment(PSE) must be highlighted. It means supply power via Ethernet cables, supporting two PoE cameras with the longest transmission distance up to 100 meters, perfect for security and detection systems.

M2 Specifications

Model Number	AIE-CO12	AIE-CN12	AIE-CT42
Module Option	NVIDIA® Jetson Nano™	NVIDIA® Jetson Xavier NX™	NVIDIA® Jetson TX2™ NX
CPU	Quad-core ARM Cortex-A57 MPCore processor	6-core NVIDIA Carmel ARM®v8.2 64-bit CPU 6MB L2 + 4MB L3	Dual-core NVIDIA Denver 2 64-bit CPU and quad-core Arm® Cortex®-A57 MPCore processor complex
GPU	NVIDIA Maxwell™ GPU with 128 CUDA® cores	NVIDIA Volta™ GPU with 384 CUDA® cores and 48 Tensor Cores	NVIDIA Pascal™ GPU with 256 CUDA® cores
AI Performance	0.5 TFLOPS (FP16) at 5-10W	14 TOPS (INT8) at 10W 21 TOPS (INT8) at 15W	1.33 TFLOPS at 7.5-15W
System Memory	4 GB 64-bit LPDDR4	8 GB 128-bit LPDDR4	4 GB 128-bit LPDDR4
Storage	16GB eMMC 5.1 Flash		
Display	1x HDMI 1.4 with microHDMI D Type connector		
Audio	HDMI Integrated		
LAN	3x RJ-45 for GbE (2 for PoE PSE 802.3 af, total power: 15W)		
Expansion	1x M.2 M-key 2242 : NVMe 128G SSD (build-in) 1x M.2 E-key 2230 : WiFi/BT function		
USB	2x USB 3.2 Gen1 TypeA / 1x USB Type-C (OTG only)		
MISC. External Interfaces	1x AI button (iTons) 1x Power button 1x DB15 female connector (5x GPIO, 1x UART, 1x I2C, 1x CAN bus) 1x Recovery button 1x Reset button 2x Antenna (optional)		
Power Input	DC-in 12V~24V (DC Jack 4pin)		
Dimension	132.6 x 88.7 x 63.55mm (WxDxH)		
Mounting	VESA		
Net Weight	0.9kg		
Operating Temperature	-20°C ~ +50°C		
Operating Humidity	10% ~ 90%		
Storage Temperature	-40°C ~ +85°C		
Certification	CE / FCC		
Operating System	Ubuntu 18.04		



M3

M3 is ideal for flow inspection in smart factory or smart retail by supporting eight USB cameras.

M3 Specifications

Model Number	AIE-CO13	AIE-CN13	AIE-CT43
Module Option	NVIDIA® Jetson Nano™	NVIDIA® Jetson Xavier NX™	NVIDIA® Jetson TX2™ NX
CPU	Quad-core ARM Cortex-A57 MPCore processor	6-core NVIDIA Carmel ARM®v8.2 64-bit CPU 6MB L2 + 4MB L3	Dual-core NVIDIA Denver 2 64-bit CPU and quad-core Arm® Cortex®-A57 MPCore processor complex
GPU	NVIDIA Maxwell™ GPU with 128 CUDA® cores	NVIDIA Volta™ GPU with 384 CUDA® cores and 48 Tensor Cores	NVIDIA Pascal™ GPU with 256 CUDA® cores
AI Performance	0.5 TFLOPS (FP16) at 5-10W	14 TOPS (INT8) at 10W 21 TOPS (INT8) at 15W	133 TFLOPS at 7.5-15W
System Memory	4 GB 64-bit LPDDR4	8 GB 128-bit LPDDR4	4 GB 128-bit LPDDR4
Storage	16GB eMMC 5.1 Flash		
Display	1x HDMI 1.4 with microHDMI D Type connector		
Audio	HDMI Integrated		
LAN	1x RJ-45 for GbE		
Expansion	1x M.2 M-key 2242 : NVMe 128G SSD (build-in) 1x M.2 E-key 2230 : WiFi/BT function		
USB	8x USB 3.2 Gen1 TypeA / 1x USB Type-C (OTG only)		
MISC. External Interfaces	1x AI button (iTons) 1x Power button 1x DB15 female connector (5x GPIO, 1x UART, 1x I2C, 1x CAN bus) 1x Recovery button 1x Reset button 2x Antenna (optional)		
Power Input	DC-in 12V~24V (DC Jack 4pin)		
Dimension	132.6 x 88.7 x 63.55mm (WxDxH)		
Mounting	VESA		
Net Weight	0.9kg		
Operating Temperature	-20°C ~ +50°C		
Operating Humidity	10% ~ 90%		
Storage Temperature	-40°C ~ +85°C		
Certification	CE / FCC		
Operating System	Ubuntu 18.04		