

# DEEPX DX-M1 AI Accelerator

DX-M1 sets a new benchmark in energy-efficient AI computing, delivering **25 TOPS (200 eTOPS) at under 5W**, significantly outperforming competitors in performance-per-watt.

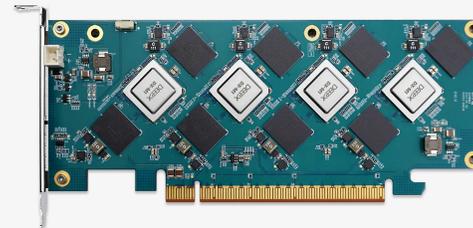


## DX-M1 Chip-Based Application Modules



### DX-M1 M.2 LPDDR5x2

Type: AI Accelerator  
 AI Perf: 25 TOPS / 3~5W  
 Form Factor: M.2 M Key (22 x 80 mm)  
 Interface: PCIe Gen.3 x4  
 Memory: 4GB LPDDR5, QSPI 1Gbit NAND



### DX-M1 PCIe Card Quattro

Type: AI Accelerator  
 AI Perf: 100 TOPS / 20W  
 Form Factor: PCIe Card (167mm x 66.4mm)  
 Interface: PCIe Gen.3 (4x4x4x4 Bifurcation)  
 Memory: 16GB LPDDR5, QSPI 1Gbit NAND



## Key Features



### Outstanding Power Efficiency

Exceptional AI performance with reduced power consumption, enabling longer battery life for your products and greater energy savings for data centers. (Butter-Proof)



### Dedicated DRAM Design

Engineered for simultaneous multi-model processing, our dedicated DRAM ensures smooth, high-performance AI execution—even when running several models at once.



### Universal CPU Compatibility

Designed for seamless integration with any host CPU architecture, enabling faster deployment, simplified development, and full compatibility of existing infrastructure.



### Leading Cost Efficiency

Minimizes reliance on costly on-chip SRAM, delivering high performance with a dramatically lower bill of materials—bringing powerful AI accessible across more devices.

## AI Performance

AI Model	Input Resolution	Accuracy (mAP) FP32 GPU	Accuracy (mAP) *IQ8 DX-M1	FPS DX-M1	NPU Power (W) DX-M1	FPS/W DX-M1
YOLOv5m6	640x640	45.08	45.07	40.42	2.20	18.37
YOLOv7-e6	640x640	55.58	55.45	19.49	2.50	7.81
YOLOv8x	640x640	53.63	53.12	49.03	3.17	15.48
YOLOv8l	640x640	52.57	52.01	91.13	3.60	25.32
YOLOv8m	640x640	50.11	49.56	133.60	2.76	48.32
YOLOv9c	640x640	52.86	52.36	47.89	2.83	16.95



DEEPX Headquarters  
 5F, 20, Pangyojeok-ro 241beon-gil, Bundang-gu,  
 Seongnam-si, Gyeonggi-do, 13494, Republic of Korea



Official Website - [deepx.ai](https://deepx.ai)  
 Sales Support - [sales@deepx.ai](mailto:sales@deepx.ai)



Product details  
<https://deepx.ai/products/ai-chips/>