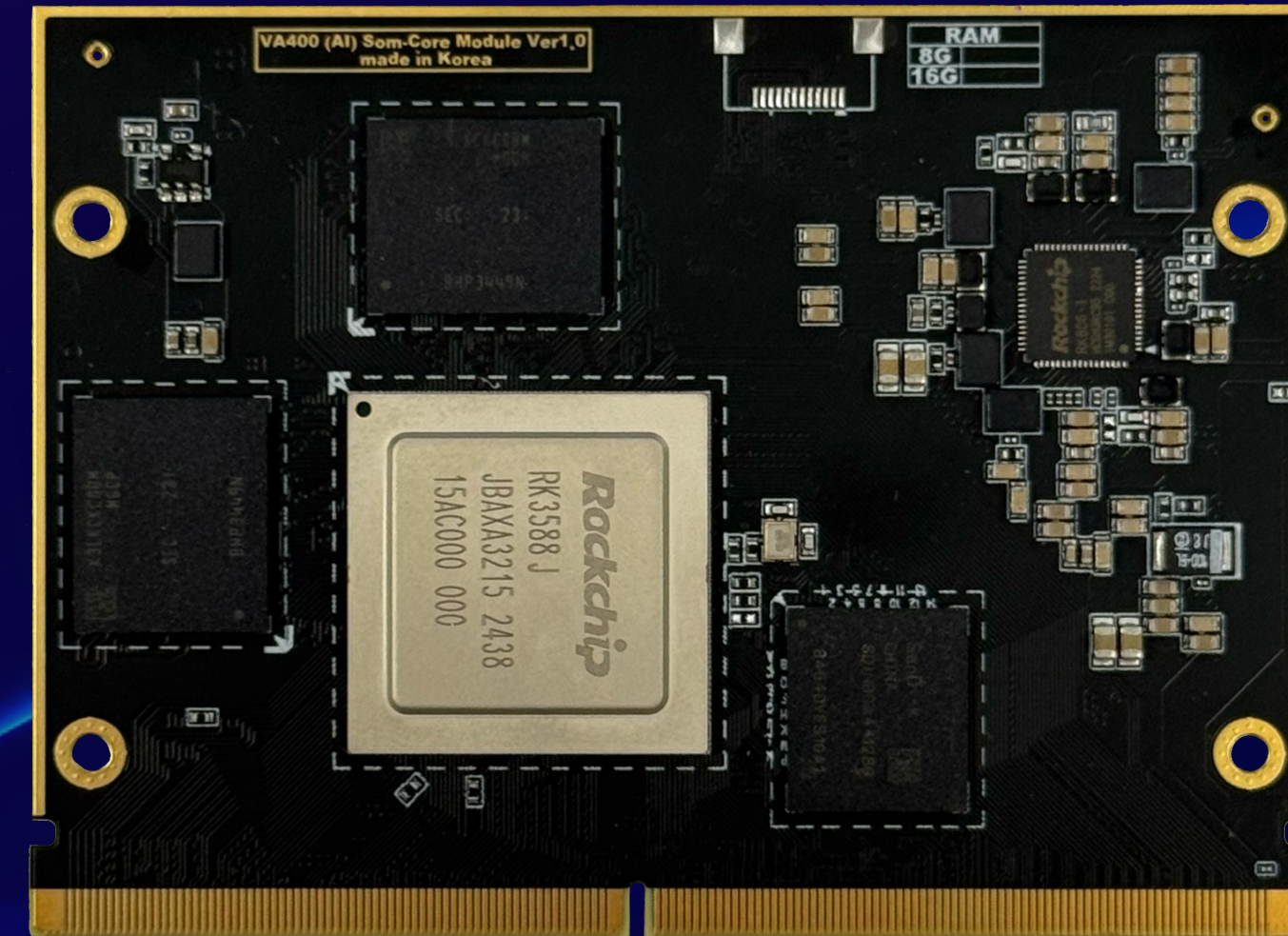


[VA400 Core SoM]

(Octa-Core 8K AI Edge SoM)

제품 사양서

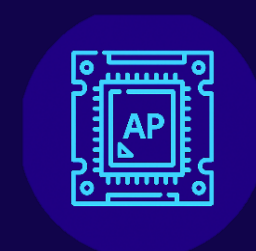
- VA400-3588 (Commercial)
- VA400J-3588J (Industrial)



Overview

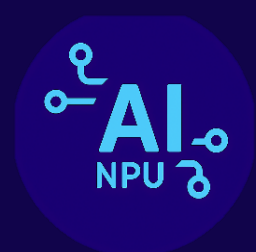
- VA400 은 Rockchip RK3588 옥타코어 64비트 프로세서 와 인공지능 처리 NPU가 탑재된 **AI Core SoM Module**
- **Optimized for AI on-device edge computing systems.**
- 메모리는 최대 **32GB RAM** /저장 메모리는 기본 **e-MMC 256GB**까지 확장 가능. (외장 M.2 NVMe SSD) 대용량 저장지원
- OS는 **LINUX (Ubuntu Desk top, Devian), Android OS** 지원
- **8K HDMI 출력과 4K HDMI 멀티 3포트 출력/4K급 HDMI 입력**을 지원
- **AI Edge PC, AI 비전 카메라, AI산업용보드, AI의료기기, 8K급(LED,LCD)사이니지셋탑, 로봇등** 에 활용

Features



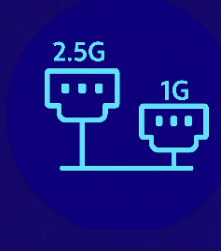
8-Core 64bit processor

- 8-Core 64bit processor RK3588
- 8nm lithography process
- up to 2.4GHz



NPU processor

- 6Tops NPU
- INT4/INT8/INT16 mixed operation
- TensorFlow / MXNet / PyTorch / Caffe



Network communication

- Support 2.5GbE + 1GbE 2ch
- 2.4G/5G dual-band WiFi6+Bluetooth5.0 (옵션)
- PoE 지원 (별도문의)



Camera

- USB3.0 Vision Camera
- 4K IP Camera
- MIPI CSI Camera



8K Powerful GPU

- Support HDMI 3Port (8K+4K)
- 8K@60fps H.265/VP9 Decoding
- 8K@30fps H.265/H.264 Encoding



Android



Linux

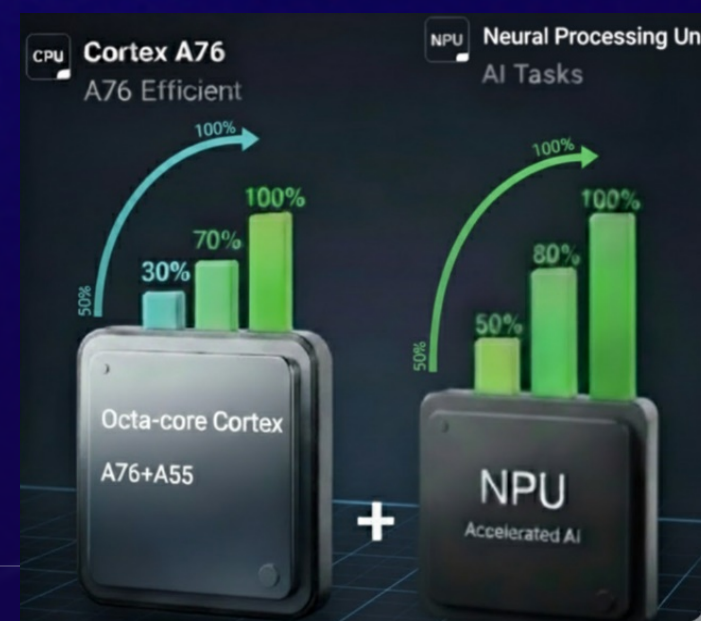
High performance



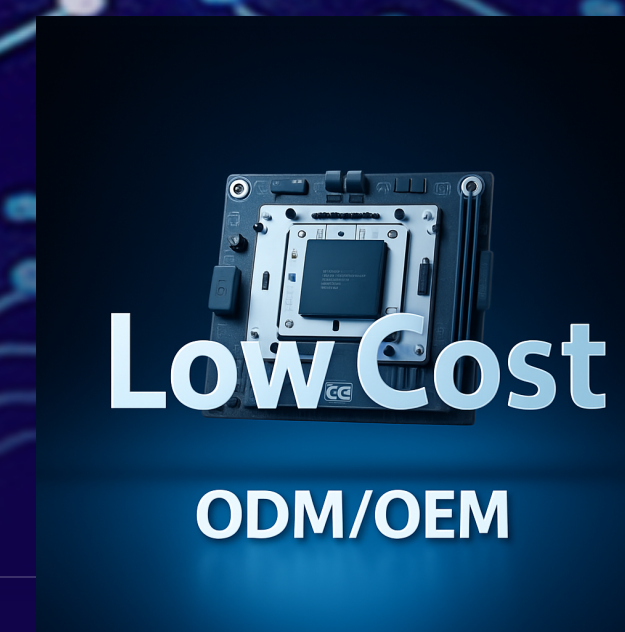
Powerful Graphic



On Device AI



Korean technical support

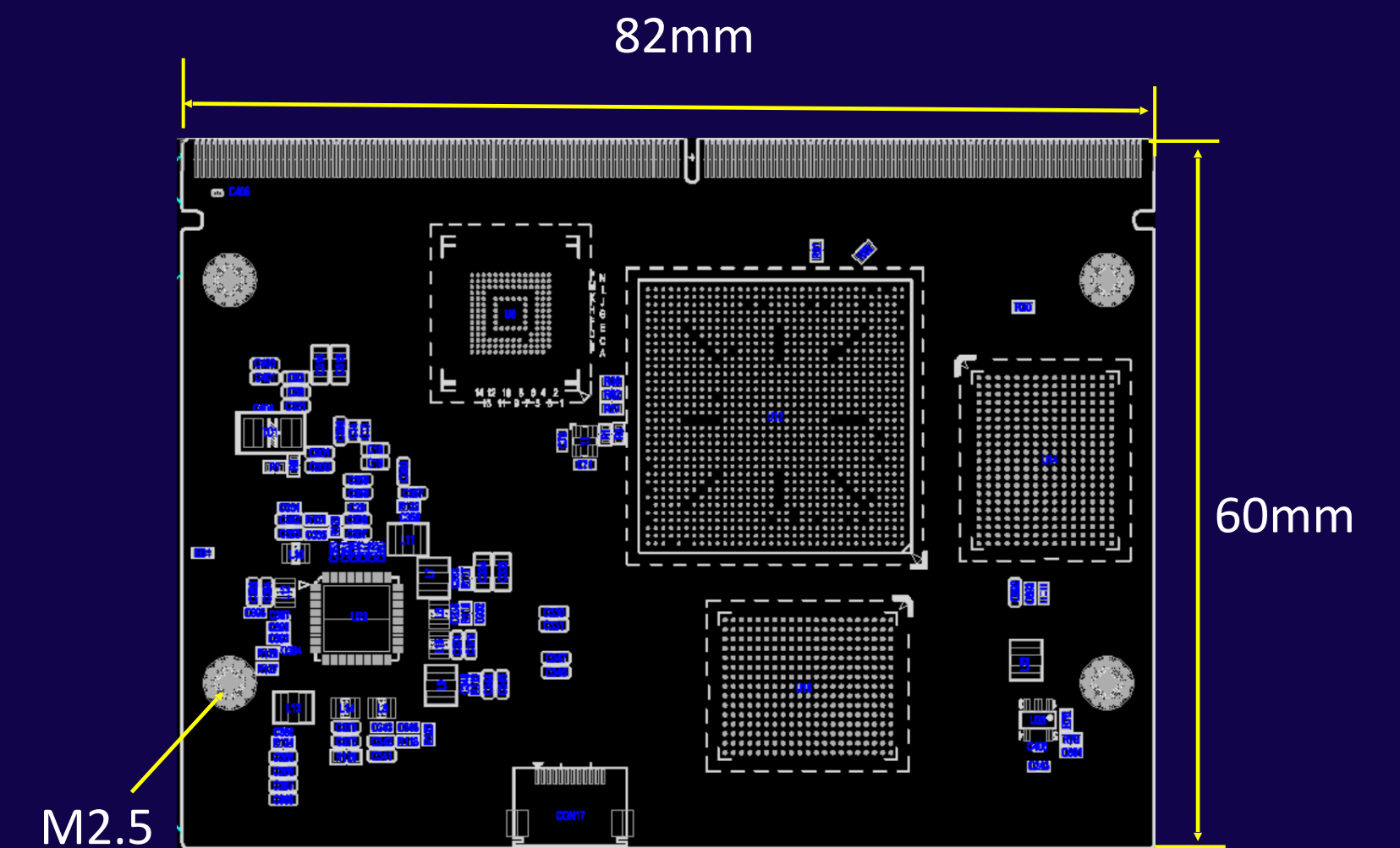
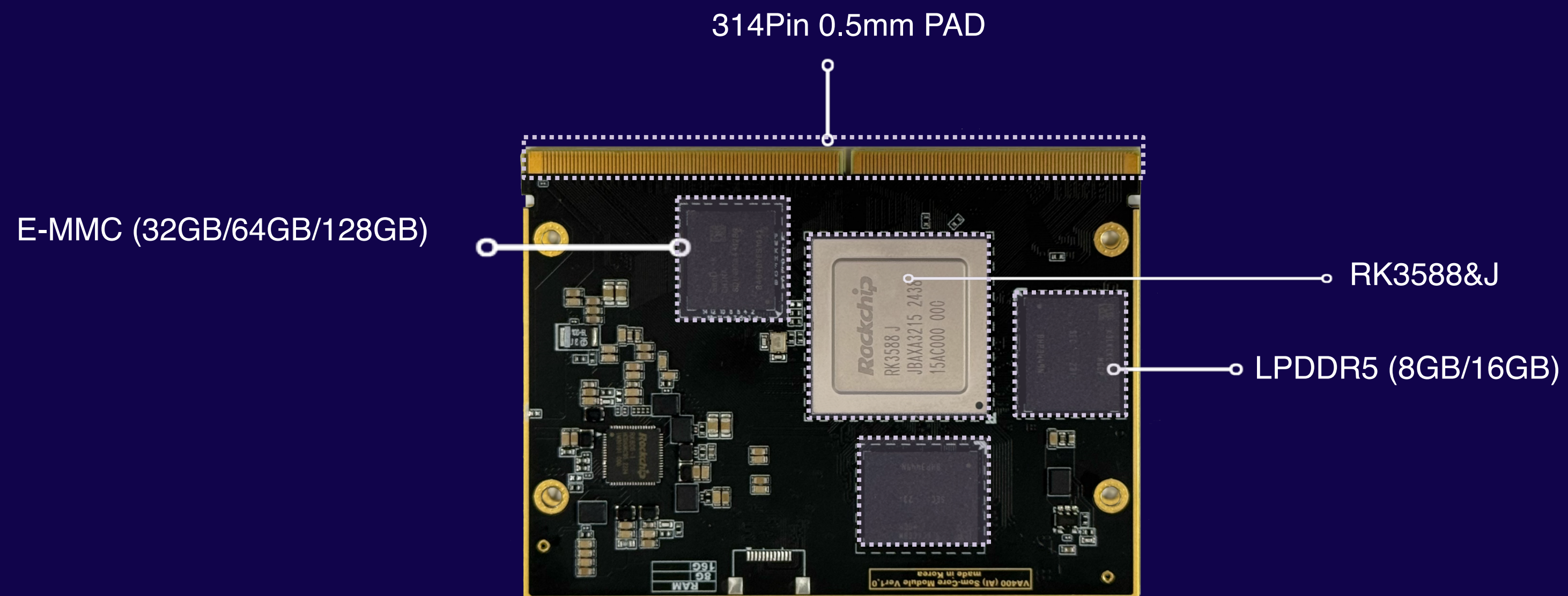


Specification

기능		VA400 (Commercial)	VA400J (Industrial)
Basic Specifications	CPU	RK3588 Octa-core 64-bit (4xCortex-A76+4xCortex-A55) Up to 2.4 GHz	RK3588J Octa-core 64-bit (4xCortex-A76+4xCortex-A55)Up to 1.6 GHz VA400J supports industrial temperature range and long-term supply.
	GPU	■ ARM Mali-G610 MP4 quad-core GPU, support OpenGL ES3.2/OpenCL 2.2/Vulkan1.1, 450 GFLOPS ■ Embedded high performance 2D image acceleration module	
	NPU	6TOPS NPU, triple core, support int4/int8/int16/FP16/BF16/TF32 acceleration (enable various AI applications)	
	ISP	Dual 16M Pixel ISP with HDR&3DNR	
	VPU	■ Hardware decoding: 8K@60fps H.265/VP9/AVS2, 8K@30fps H.264 AVC/MVC, 4K@60fps AV1, 1080P@60fps MPEG-2/-1/VC-1/VP8 ■ Hardware encoding: H.265/HEVC, H.264/AVC: up to 8K@30fps	
	RAM	LPDDR5/LPDDR5X: 8GB / 16GB / 32GB (optional)	
	Storage	eMMC: 32GB / 64GB / 128GB (optional)	
	Storage Expansion	■ 1 x M.2 SATA3.0 SSD (2242) ■ 1 x MicroSD Card (TF)	
	Ethernet	1 x 2.5GbE, 2 x 1GbE (RJ45)	
	Wireless Network	2.4GHz/5GHz dual-band Wi-Fi 6 (802.11ax, backward compatible with a/b/g/n/ac), Bluetooth 5.1 (optional)	
	Video Output	■ 1 x HDMI2.1 (8K@60fps or 4K@120fps) ■ 2 x HDMI2.0 (4K@60fps) ■ 1 x DSI-to-HDMI 2.0 (4K@60fps, optional) ■ 1 x MIPI-DSI (4K@60fps)+C-Touch	
	Video In	■ 1x HDMI-IN (4K@60fps), support HDCP 2.3 ■ 1 x MIPI_CSI0 (1x4 lanes)	
	USB	4 x USB3.1 (Gen1), USB-C (OTG/DP1.4)	
	Audio	High performance Audio CODEC stereo	
	Other	■ 1x RS232, 1x RS485, 3x UART, 1xDebug, 1x IR, 1x RTC, Key: 2 x Function, Reset, Power, 2x LED ■ 1x 14P-1.27mm (6xGPIO, 1x PWM, 1x USB2.0, 1x I2C)	
	OS	■ Linux OS (Ubuntu Desktop, Debian12) ■ Android 12/15	
	Size	82 mm x 60 mm, thickness 4 mm	
	Environment	Commercial: -20°C to +60°C	Industrial: -40°C to +85°C

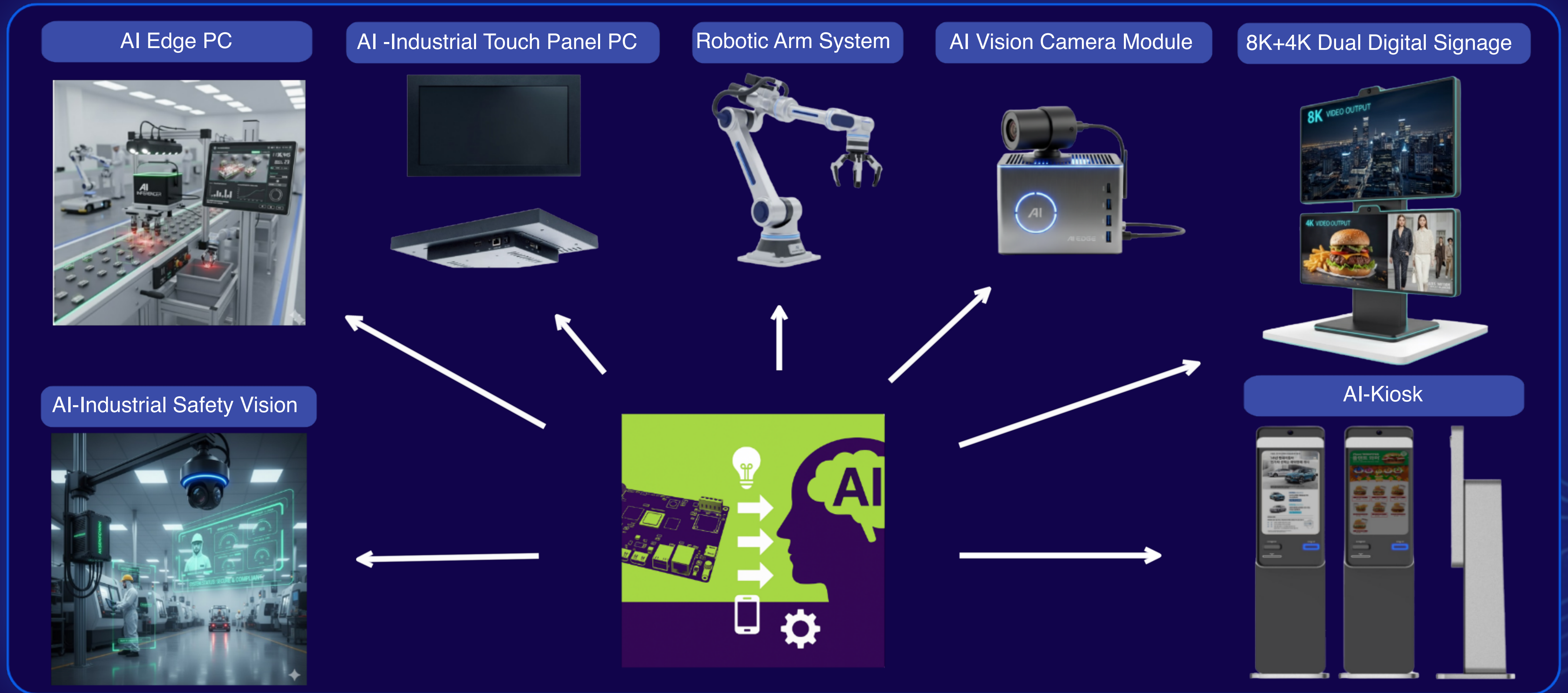
VA400 Core SoM

VA400 Info. & Demension

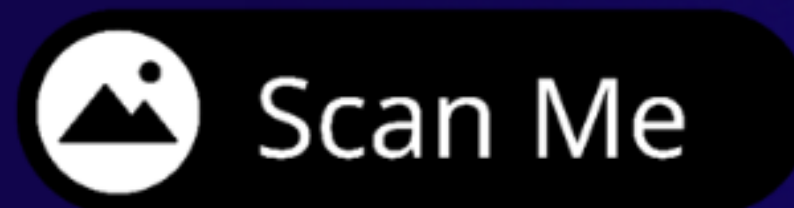


* 기구 도면 (DXF_File)제공

Target Products



| 구입처 및 문의



KANT Co., LTD.



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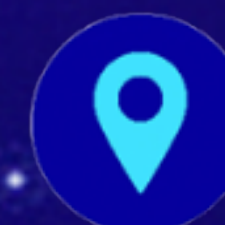
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