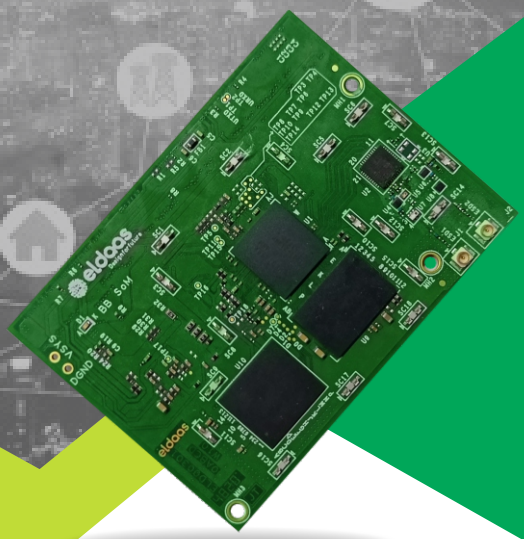
eldaas
Design for future

MEDIATEK

elSoM-i500

Powerful and efficient AIoT System on Module



elSoM-i500, is a plug-and-play system on module (SoM) designed for proficient AIoT functions that require sophisticated multimedia, like multiple high-resolution cameras, or integration with multi-touch displays. The inbuilt NeuroPilot engine befits any edge processing application at 1 TOPS. Our partnership with Mediatek aids customers with software development kits powered by android and Linux operating systems.

It is capable of handling deep learning and neural network algorithms. For all applications which need analysis of motion and other predictive and preventive analytics, elSoM-i500 is an impeccable fit.

With its small form factor, this economical option gives the user voluminous flexibility to incorporate it in your end-products. The Development board (elDB-i500) can integrate with all high-speed interfaces and is available for immediate hookup. We customize the Development board (elDB-i500) as per customer requirements. This drastically trims down the time to reach the market.

Key Features:

- Quad-core Arm Cortex-A73 CPU @ upto 2GHz
- Quad-core Arm Cortex-A53 CPU @ upto 2GHz
- Mali-G72 MP3 GPU @ upto 800MHz
- AI Dual core processor (APU) operates up to 500MHz
- Single camera 25MP, Dual camera 16MP + 16MP
- Configurable I/Os –24no's
- Operating Temperatures: - 20°C to 80°C
- Intelligent Edge solution for Amazon AWS IoT & Microsoft Azure IoT Edge

Memory

- 1GB/2GB/4GB LPDDR4/4X,
- 16GB/32GB eMMC 5.1
- Micro SD card slot expandable up to 32GB

Target Applications:

- Smart City & Automated Parking Solution
- Industrial IoT & Rugged HMI Computers
- Smart AI & Edge Computing
- Defense and aerospace
- Next generation education
- Smart Home Appliances
- Digital Signage and Construction
- POS, Kiosk and Solar
- Bio-Metric & Access Control
- ePDS & Retail Solutions

Communication

- USB2.0 Host & OTG
- Debug Console - Micro USB
- Ethernet - 10/100

elSoM-i500

Wireless Connectivity

- Wi-Fi - 802.11 a/b/g/n/ac MIMO or b/g/n
- Bluetooth v2.1+EDR 3.0+HS, 4.2 (Low Energy), 5.0 (Low Energy)
- GNSS - GPS+Glonass +Galileo/Beidou
- FM

Display & Touch

- LCM (DSI-Interface)& Touch Display–5"/7"/10"
- HDMI - 1.4a

Camera

- 3xMIPI CSI-2
- Single camera capture–Max 25MP
- Dual Camera – 16MP + 16MP

Audio

- 3.5mm Audio jack with Microphone
- External Speaker
- External MIC

Sensors

- 6-axis MEMS Gyroscope
- Accelerometer Compass
- 3-axis Magnetometer
- Can be customized based on the requirement

Operating System

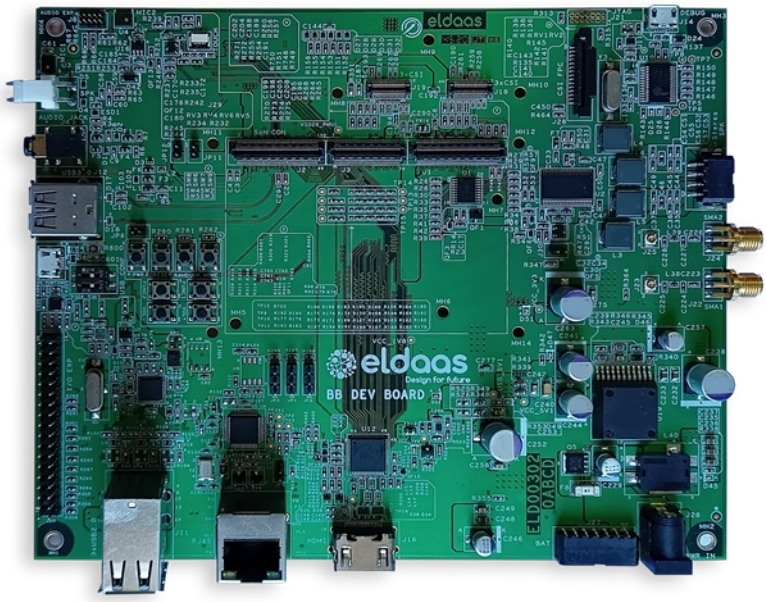
- Android 9.0 / Linux
- Powerful Edge Processing Supports Tensorflow, Caffe and ONNX

Other Interfaces

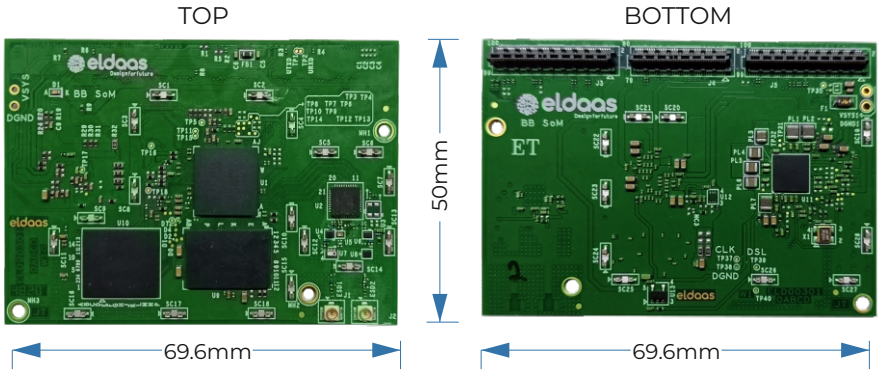
- 2x SPI, 2x I2C, 1x I2S, 1x UART, 24x GPIO

Power supply

- SoM standalone - 5V
- DEV Board Primary power supply – 12V power adapter.
- Battery (Optional)



elDB-i500 (Development Board)



elSoM-i500 (SoM)

About Eldaas

ELDAAS Technologies is a 10-year-old company having good expertise in Turnkey Product Design, RF design, Embedded hardware/software Solutions, ASIC Verification and Validation, Cloud computing, AI Algorithm development and Signal processing. We support our global customers from our offices in **Raleigh, NC, USA** and Bangalore, India.

ELDAAS has partnered with MediaTek to design edge AIoT, Computer vision and System on Modules, with their chipsets.

Our state-of-the-art technology and Lab facilities help us to design right product at first time. Our innovative solutions minimize costs and reduce manufacturing time. ELDAAS is dedicated to delivering superior value products.

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