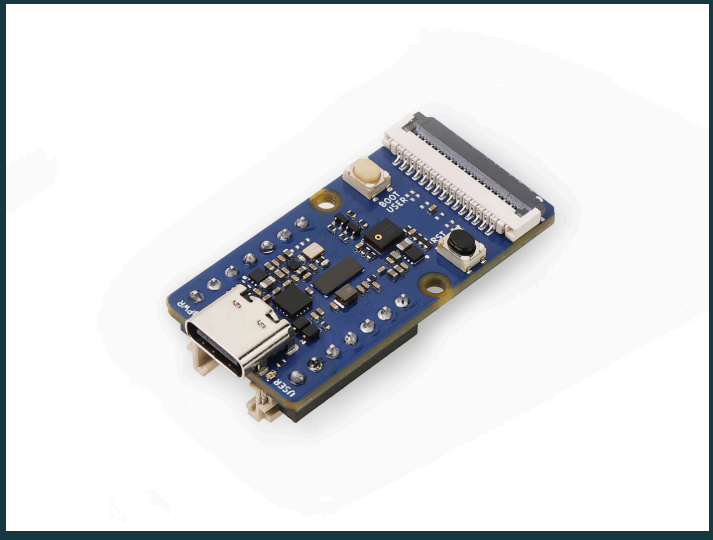
seeed studio

INDUSTRIAL PRODUCT DATASHEET

Grove - Vision AI Module V2 - Arm Cortex-M55 & Ethos-U55, TensorFlow and PyTorch supported, Arduino, Raspberry Pi, Seeed Studio XIAO, ESP-based dev board compatible

It is an MCU-based vision AI module powered by Himax WiseEye2, featuring Arm Cortex-M55 & Ethos-U55.

SKU	UPDATED	PRICE
101021112	2026-11-11 09:01:18	$15.99(Excl. VAT)



Overview



It is an MCU-based vision AI module powered by Himax WiseEye2, featuring Arm Cortex-M55 & Ethos-U55. TensorFlow and PyTorch frameworks are supported. Compatible with Arduino IDE and no code model deployment and immediate visualization of identification results with SenseCraft AI.

Key Features

01 **Powerful AI Processing Capabilities**

Utilizes WiseEye2 HX6538 processor with a dual-core Arm Cortex-M55 and integrated Arm Ethos-U55 neural network unit.

02 **Versatile AI Model Support**

Easily deploy off-the-shelf or your custom AI models from SenseCraft AI, including Mobilenet V1, V2, Efficientnet-lite, Yolo v5 & v8. TensorFlow and PyTorch frameworks are supported.

03 **Rich Peripheral Devices**

Includes PDM microphone, SD card slot, Type-C, Grove interface, and other peripherals.

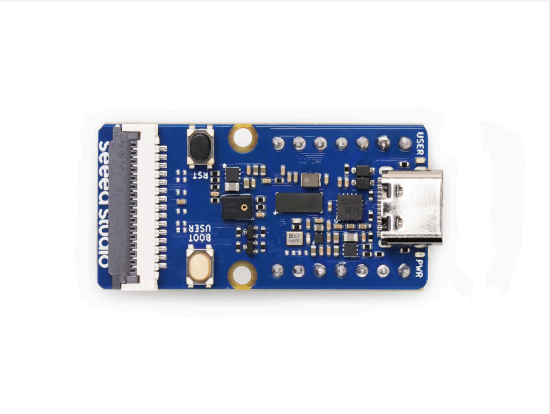
04 **High Compatibility**

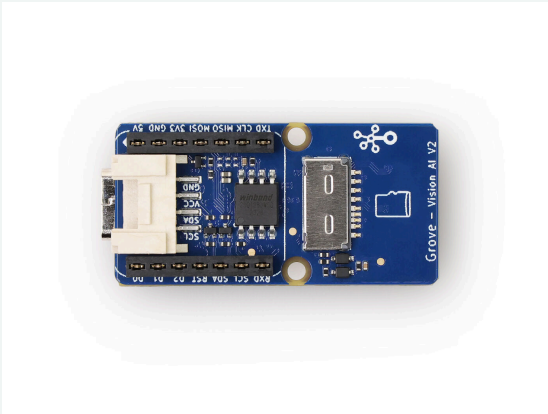
Compatible with XIAO series, Arduino, Raspberry Pi, ESP32 dev board, easy for further development

05 **Fully Open Source**

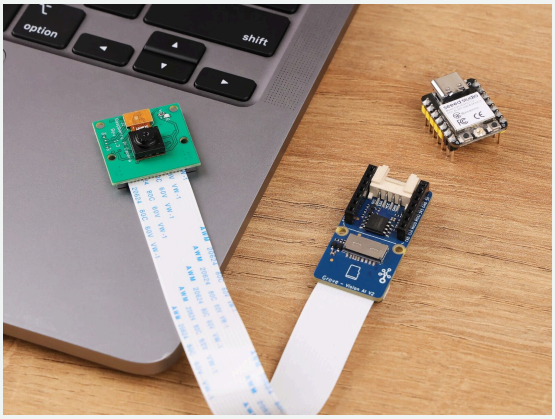
All codes, design files, and schematics available for modification and use.

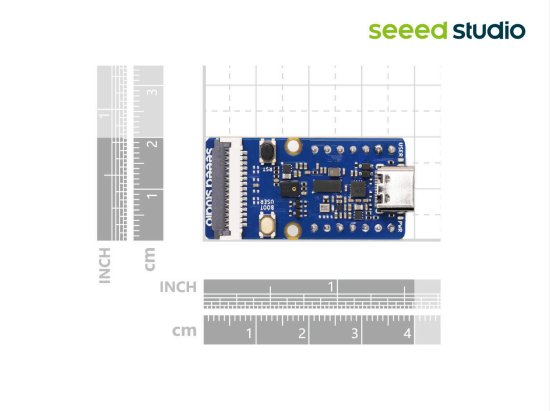
Product Gallery



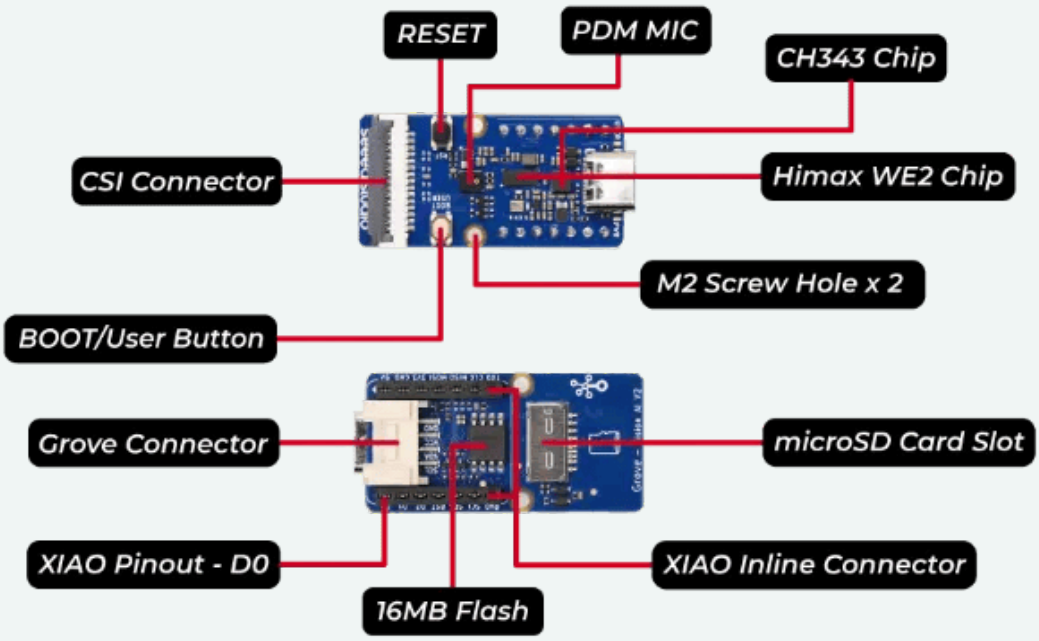








Hardware Overview



Applications

- **Earlier MCU-based vision sensors were constrained by limited computing power, typically only supporting simple tasks like face detection. We believe this product surpasses the limits, enabling functionalities that were previously unachievable with traditional MCU-based vision AI sensors, such as:**
- **Facial Keypoint Detection: Beyond basic facial recognition, detailed facial keypoint detection is capable of running. It accurately identifies critical features such as eyes, nose, and mouth.**
- **Human Pose Estimation: It analyzes key joints and limbs to determine human posture, identifying body parts like arms, legs, torso, and head. This is useful for fitness tracking, posture correction, and motion recognition.**
- **Object Detection: It supports powerful models like the Yolo v8n model, which can detect and classify over 80 types of objects.**
- **How to use it?:** SenseCraft AI is a platform that enables easy AI model training and deployment with no-code/low-code. It supports Seeed products natively, ensuring complete adaptability of the trained models to Seeed products. Moreover, deploying models through this platform offers immediate visualization of identification results on the website, enabling prompt assessment of model performance.
- **Ideal for tinyML applications, adding vision AI to your smart sensor with Grove Vision AI V2 is made easy with the SenseCraft AI. Effortlessly deploy off-the-shelf or custom AI models by connecting the device, selecting a model, and viewing identification results.**

Resource Links

- https://www.seeedstudio.com/Grove-Vision-AI-Module-V2-p-5851.html
- 3D Printed Foldable Holder for Grove Vision AI Module V2 Kit (Grove Vision AI Module V2 + OV5647 Camera + XIAO)
- HX6538 Datasheet
- Himax examples for Seeed Grove Vision AI Module V2
- Grove_vision_ai_v2_kit_case

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