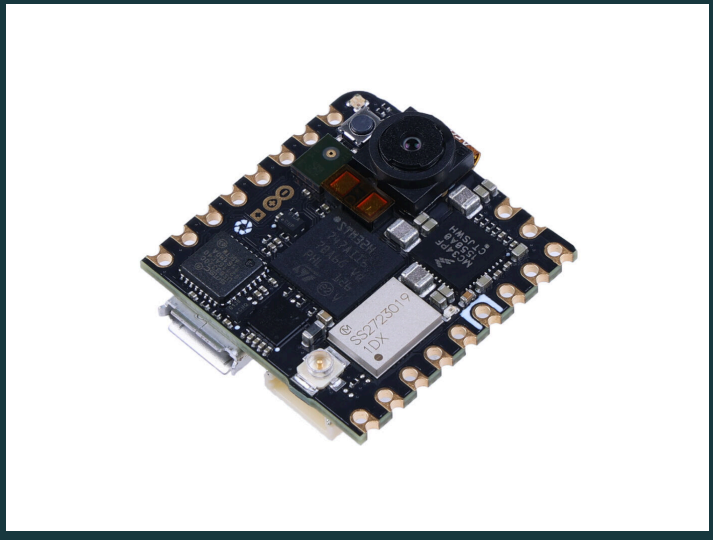
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INDUSTRIAL PRODUCT DATASHEET

Arduino Nicla Vision - Dual Arm® Cortex® M7/M4, NXP SE050C2 Crypto chip, Wi-Fi, Bluetooth®, 2 MP Color Camera, 6-Axis IMU, Distance/Time of Flight sensor, Microphone

The Arduino Nicla Vision is a high-performance MCU board equipped with Cortex® M7 and Cortex® M4 cores.

SKU	UPDATED	PRICE
102080087	2026-11-11 08:57:40	$115.00(Excl. VAT)



Overview



The Arduino Nicla Vision is a high-performance MCU board equipped with Cortex® M7 and Cortex® M4 cores. The microcontroller boasts wireless connectivity, flexible I/O options and a range of sensors. It is also equipped with an NXP SE050C2 Crypto chip for added security.

Key Features

01

Dual Arm® Cortex® M7/M4 MCU Board

Equipped with STM32H747AII6 Dual ARM® Cortex® M7/M4 IC processor to handle complex tasks, providing 2MB Flash and 1MB RAM memory, as well as 16MB QSPI flash for storage

02

Wireless Connectivity

Provide Wi-Fi and Bluetooth® Low Energy 4.2 connectivity, allowing it to connect to other devices and networks.

03

On-board Sensor Integration

Integrate a 2 MP color camera, a 6-Axis IMU (LSM6DSOX), a distance/time of flight sensor (VL53L1CBV0FY/1), and a microphone (MP34DT05), enabling the device to gather data and perform various tasks.

04

Flexible I/O connectors

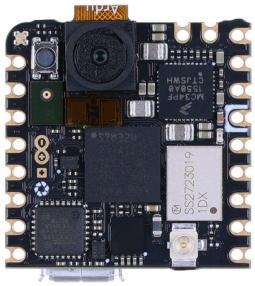
Offer 1x I2C bus (with ESLOV connector), JTAG, power and GPIO pin headers, 1x serial port, 1x SPI, and 2x ADC. It also has a programmable I/O voltage from 1.8-3.3V, making it compatible with various devices.

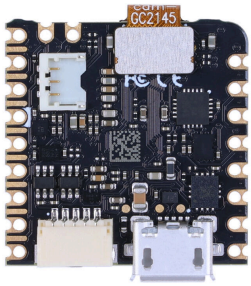
05

Security Functionality

Include an NXP SE050C2 Crypto chip for added security. This chip ensures that data is stored securely and prevents unauthorized access to the device.

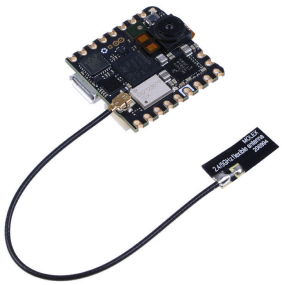
Product Gallery

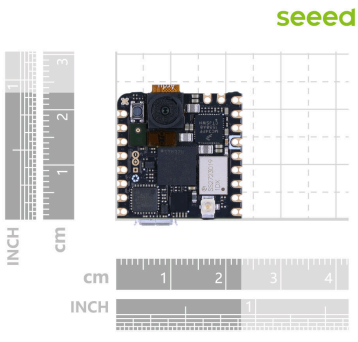












Applications

- **Image processing**
- **Machine Vision at the Edge**
- **Asset Tracking**
- **Object Recognition**
- **Predictive Maintenance**

Resource Links

- https://www.seeedstudio.com/Nicla-Vision-p-5689.html
- Arduino Nicla Vision Pinout Diagram
- Arduino Nicla Vision Schematic diagram
- Arduino Nicla Vision Datasheet

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