

INDUSTRIAL PRODUCT DATASHEET

reComputer RK3576 Module IO Board | Rapid Prototyping and Expansion Board for reComputer Rockchip RK3576 Module

Rapid prototyping and expansion board for the reComputer Rockchip RK3576 Module with rich I/O, M.2 NVMe storage and AI expansion, Gigabit Ethernet PoE PD, and flexible display connectivity for edge AI applications.

SKU

100073450

UPDATED

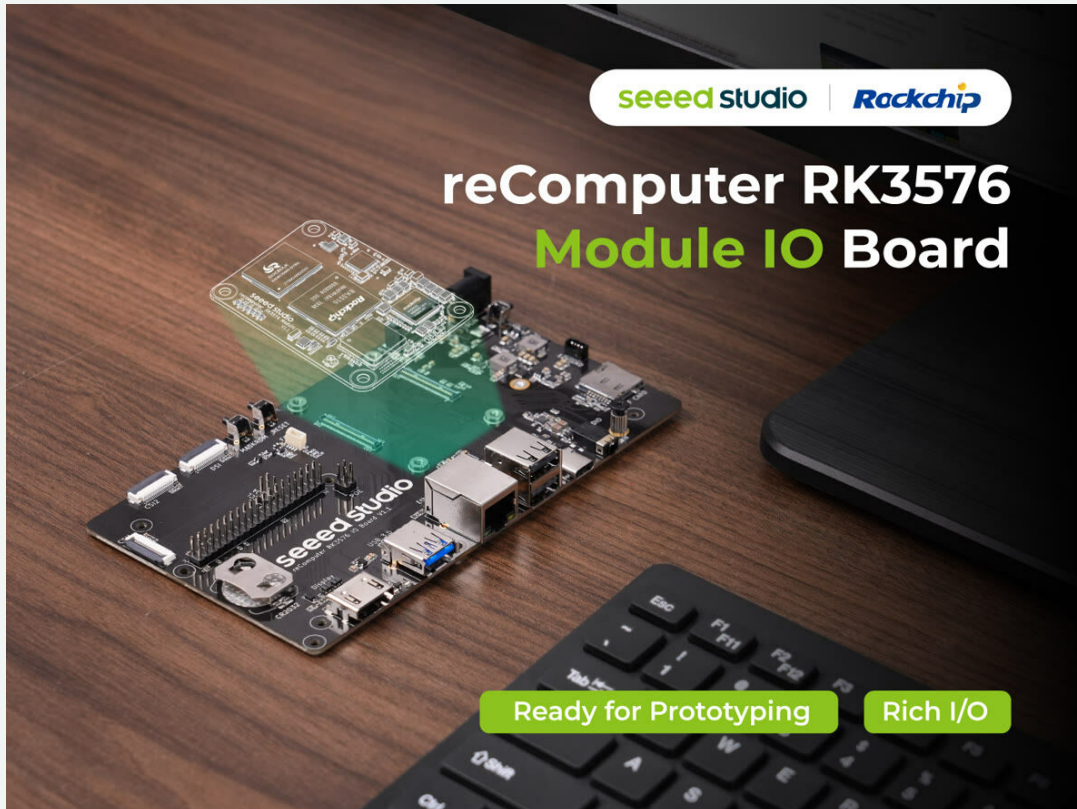
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PRICE

\$18.00(Excl. VAT)



Overview



The reComputer RK3576 Module IO Board is a rapid prototyping and expansion board that converts the reComputer Rockchip RK3576 Module into a development-ready system with standard connectors for display, camera, networking, storage, USB, GPIO, and audio. It offers flexible display connectivity via HDMI 2.1, USB-C DisplayPort 1.4, and 4-lane MIPI DSI, plus M.2 M-Key 2280 NVMe storage/AI expansion and Gigabit Ethernet with IEEE 802.3at PoE PD support, targeting AI vision, smart cameras, interactive AI terminals, and custom edge AI product development.

Key Features

Feature 1. Rapid RK3576 Module Prototyping

Convert the **reComputer RK3576 Module** into a development-ready system without designing a custom carrier board from scratch.

The IO Board breaks out the module's high-density interfaces into standard connectors, making it easier to evaluate the Rockchip RK3576 platform, validate peripherals, develop software, and prototype complete edge computing systems.

- Designed for the **reComputer RK3576 Module**
- Standard interfaces for rapid hardware integration
- Suitable for module evaluation and peripheral validation
- Useful as a reference platform before custom carrier board development

Feature 2. Rich I/O for Peripheral Integration

Access a broad range of native Rockchip RK3576 interfaces through standard development-ready connectors.

The board integrates **display, camera, networking, storage, USB, GPIO**, and **audio connectivity** on a single platform, reducing the need for additional adapter boards during prototyping.

- Gigabit Ethernet
- PoE PD
- M.2 M-Key
- HDMI 2.1
- USB-C with DisplayPort
- MIPI DSI
- MIPI CSI
- USB
- GPIO
- Audio
- Storage interfaces

Feature 3. M.2 NVMe Storage and AI Expansion

The onboard **M.2 M-Key 2280 slot** provides **PCIe 2.1 ×1 connectivity** for high-speed storage and compatible PCIe expansion devices.

It can be used with compatible **NVMe SSDs** for local storage and data logging, or with compatible **M.2 AI accelerators** for additional edge AI computing capability.

- 1× M.2M - Key slot (PCIe 2.1 ×1)
- Supports compatible NVMe SSDs
- Supports compatible M.2 AI accelerators

*Compatibility of individual M.2 devices may depend on power, driver, and operating system support.

Feature 4. Gigabit Ethernet with PoE PD

The board provides **1× native Gigabit Ethernet RJ45 port** for reliable high-bandwidth network connectivity.

Integrated **IEEE 802.3at PoE PD** support allows the RK3576 system to receive both network connectivity and power through a single Ethernet cable, simplifying deployment of network-connected edge devices.

- 1× Gigabit Ethernet RJ45
- IEEE 802.3at PoE PD support
- Power and data over a single Ethernet cable
- Suitable for networked edge computing and remote device deployment

Feature 5. Flexible Display Connectivity

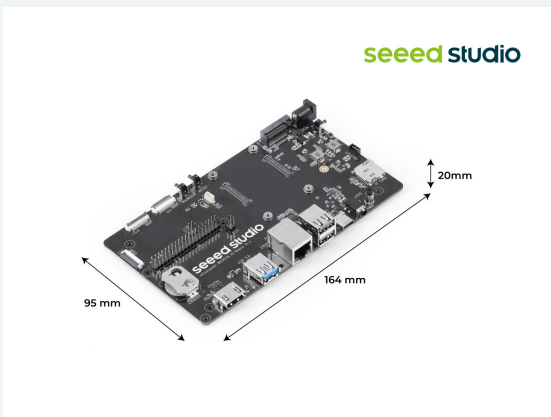
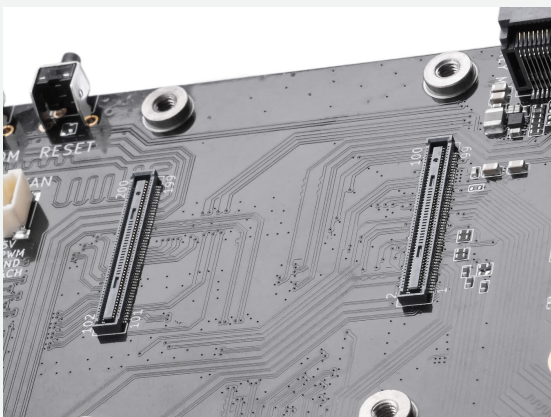
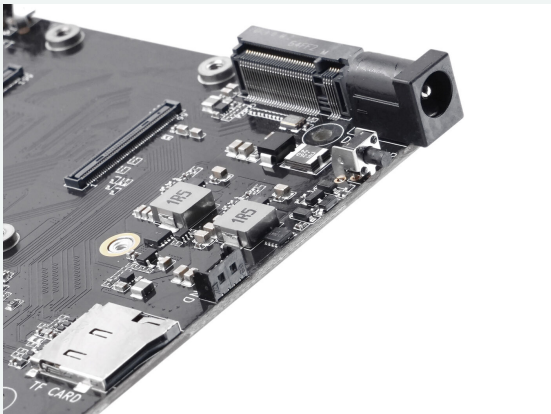
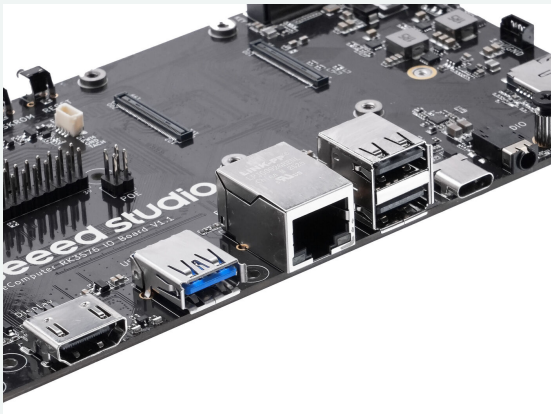
The IO Board provides multiple native display interfaces for developing interactive terminals, embedded displays, dashboards, and multi-screen applications.

- **1× HDMI 2.1:** supports display output up to 4K @ 120Hz
- **1× USB-C DisplayPort 1.4:** supports display output up to 4K @ 60Hz
- **1× 4-lane MIPI DSI:** enables direct integration with compatible embedded displays

Multiple display interfaces give developers greater flexibility when evaluating different display architectures and building RK3576-based visual applications.

*Actual resolution, refresh rate, and simultaneous display capability depend on the connected display, system configuration, software, and RK3576 platform support.

Product Gallery



Specification

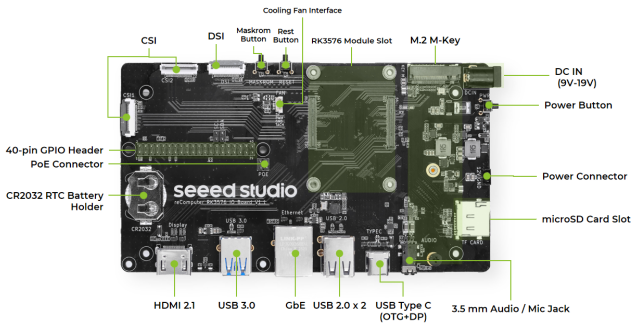
Parameter	Description
Hardware Specification	
Product Series	reComputer RK3576 Module IO Board

System Specification	
Power Input	DC 9V~19V
PoE	1 x PoE PD*
Power	Yes
Recover	Yes
MaskROM	Yes
Interface	
Ethernet	1x Gigabit Ethernet with PoE support(Additional PoE Module Required)
USB	1x Type A USB 3.0; 2x Type A USB 2.0;
	1x Type C for OTG & DP
Display	1x Display; 1x DP1.4 via USB Type C port ; 1x 4-lane MIPI DSI(22pin)
GPIO	1x 40-Pin Expansion header
SD Card	1x Micro SD Card Slot
M.2 Slot	1x M.2 Key M 2280 slot (PCIe 2.1x 1), supporting either an NVMe SSD or an AI accelerator
LED	1x Power; 1x Status
Button	1x Power; 1x Reset; 1x MaskROM
Audio	1x 3.5mm Headphone Jack with Microphone Input
CSI Camera	1x 4-lane MIPI CSI(22pin) ; 1x 2-lane MIPI CSI(22pin)
Fan Connector	1 × 4-pin PWM fan connector
RTC Backup	1 × CR2032 RTC battery holder
Power Input	9~19V DC via DC jack or 2-pin power header
Standards	
Certification	CE, FCC
	TELEC
	RoHS
Ambient Conditions	
Operating Temperature	0 ~ 70°C
Others	
Warranty	1 years
Production Lifetime	Until January 2036
Statement	Options marked with * require additional purchase according to the accessories list.

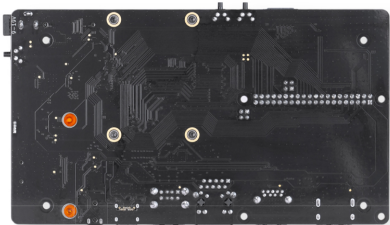
Hardware Overview

Mainboard Overview

Top View



Bottom View



Applications

- AI Vision and Industrial Inspection
- Smart Cameras and PoE Edge Devices
- Interactive AI Terminals
- Local LLM, VLM, and Speech AI Evaluation
- Custom Edge AI Product Development

Part List

reComputer RK3576 Module IO Board	x1
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Compliance & Logistics

HSCODE	8473309000
USHSCODE	8473309100
UPC	
EUHSCODE	8473308000
COO	

Resource Links

- <https://www.seeedstudio.com/reComputer-RK3576-Module-IO-Board-p-6951.html>
- [reComputer RK3576 Module IO Board Schematic](#)

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