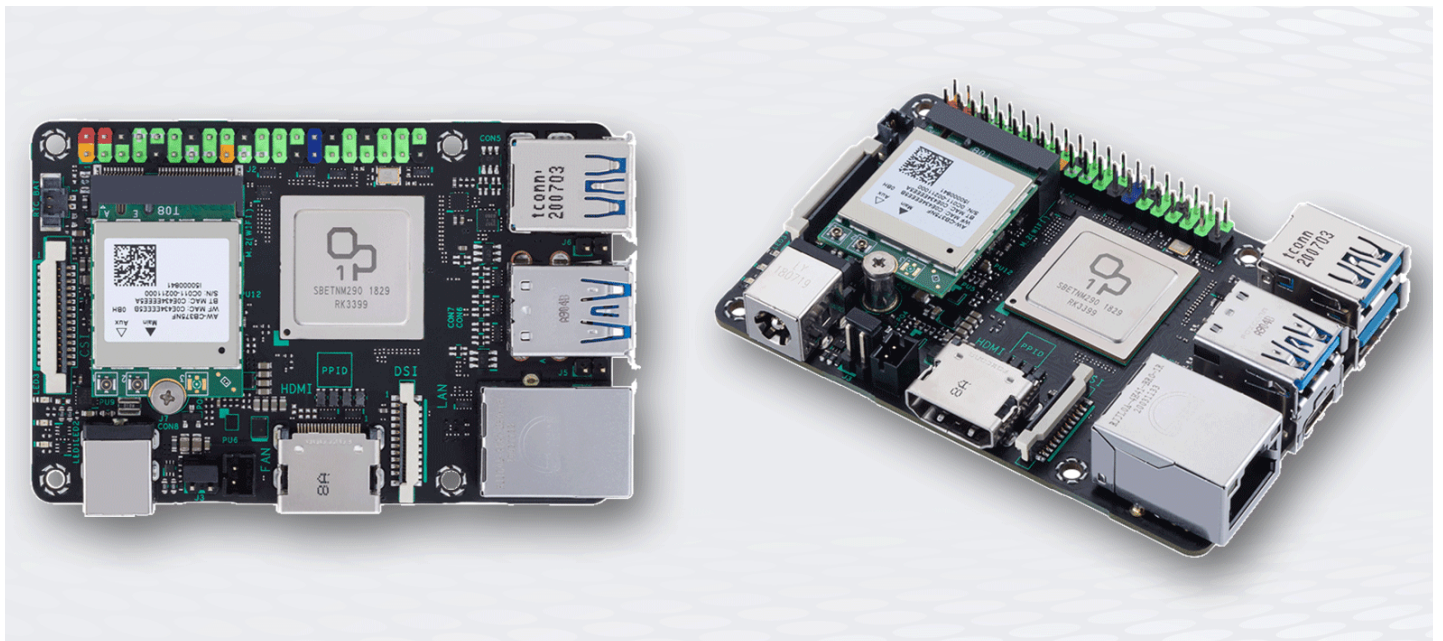


# Tinker Board 2S Data Sheet

An Arm®-based Single Board Computer (SBC), uses Arm® big.LITTLE™ technology's 64-bits processor offers enhanced computing performance with low power consumption.



- **Outstanding performance for IoT devices:** Powered by 6-core Rockchip RK3399 system on a chip (SoC) with the new 64-bit Arm® v8 architecture, plus multi-core Mali-T860
- **Easy setup tool:** Intuitive software for performance tweaking, with simple three-step initial configuration
- **Pro-grade admin:** ASUS IoT Cloud console for data management and analysis, plus support for firmware over-the-air (FOTA) roll-out
- **Android 10 support:** Benefit from better 3D computing performance, support for the Android Neural Networks API 1.2 and Adiantum encryption with 5X better efficiency

## Specifications

<b>SoC</b>	Rockchip RK3399
<b>CPU</b>	Dual-core Arm® Cortex®-A72 @ 2.0 GHz Quad-core Arm® Cortex®-A53 @ 1.5 GHz
<b>GPU</b>	Arm® Mali™-T860 MP4 GPU @ 800 MHz
<b>Display</b>	1 x HDMI™ with CEC hardware ready 1 x USB Type-C® (DP Alt Mode) 1 x 22-pin MIPI DSI (4 lane)
<b>Memory Size</b>	Dual-CH LPDDR4 2 GB/4 GB
<b>Storage</b>	16 GB eMMC Micro SD (TF) card slot (push/pull)
<b>Connectivity</b>	1 x RTL8211F-CG GbE LAN 1 x M.2 - 802.11 a/b/g/n/ac wireless & BT 5.0 (2T2R)
<b>Audio</b>	1 x HDMI™ audio output 1 x S/PDIF TX pin (from GPIO) 1 x PCM/I2S pins (from GPIO)
<b>USB</b>	3 x USB 3.2 Gen1 Type-A ports 1 x USB 3.2 Gen1 Type-C® OTG port
<b>Camera Interface</b>	1 x 15-pin MIPI CSI-2 (2 lane)
<b>Internal Headers</b>	1 x 40-pin headers includes: – up to 28 x GPIO pins – up to 2 x SPI bus – up to 2 x I2C bus – up to 2 x UART – up to 3 x PWM – up to 1 x PCM/I2S – up to 1 x S/PDIF TX – 2 x 5 V power pins – 2 x 3.3 V power pins – 8 x ground pins 1 x 2-pin Recovery header 1 x 2-pin Power-on header 1 x 2-pin Reset header 1 x 2-pin Debug UART header 1 x 2-pin DC Fan header 1 x 2-pin RTC Battery header
<b>Power Connector (up to 45 W)</b>	1 x 12~19 V DC Power Input Jack (5.5/2.5 mm)
<b>OS Support</b>	Debian 9/Android 10
<b>Dimension</b>	3.37 inch x 2.125 inch (85 x 56 mm)
<b>Environment</b>	Operation temperature: 0°C ~ 60°C Non-operation temperature: -40°C ~ 85°C Non-operation humidity: 0% ~ 85% (Non-condensing)

## Arrow Offers a Comprehensive Range of Lifecycle Services for Your ASUS Tinker Boards

From hardware to software, integration, and systems, Arrow's Intelligent Solutions help to embed it, connect it, and bring it all together. We offer a full suite of services from design engineering to integration, manufacturing, and fulfillment, enabling you to deliver the latest technologies to market – quickly and efficiently.

### System and Design Engineering

Leverage our expertise to design solutions, select the right components, and optimize for performance and cost.

### Supply Chain Management

Minimize supply disruptions with best-in-class processes, world-class systems, and infrastructure, extensive global footprint, and reach.

### Global Integration Services

Streamline production with services that span from basic kitting to hardware configuration, to complete rack enclosure set-up and cabling.

### Product Fulfillment

Improve order on-time delivery and enhance your customer service levels. Reduce overhead costs and streamline operations.

### Support and Installation

Tailored programs to meet your needs including call support, forward-stocking locations, and onsite service.

### Financial Services

Offerings include a mix of operational expense, capital expense, and outcome-based models to meet key financial metrics.

### About ASUS IoT

ASUS IoT is a sub-brand of ASUS dedicated to the creation of incredible solutions in the fields of AI and IoT with the mission to become a trusted provider of embedded systems and partner to the wider AIoT solutions ecosystem. ASUS IoT strives to deliver best-in-class products and services across diverse vertical markets, and to partner with customers in the development of fully integrated and rapid time-to-market applications that drive efficiency – providing convenient, efficient, and secure living and working environments for people everywhere.

In partnership with:

**ASUS IoT**

**tinker board** 

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