ASUS Tinker Board series

The small, powerful way to unleash IoT performance

ASUS Tinker Board series is an ultrasmall, single-board computer (SBC) that offers class-leading performance, outstanding mechanical compatibility and superb reliability – making it the perfect platform for diverse commercial, industrial and IoT applications.

01 Superior performance powered by ARM processor

Embedded with powerful and modern multi-core ARM-based processor, Tinker Board series offers significantly improved performance with saving energy versus other popular SBC boards. And powered by an ARM-based Mali GPU, Tinker Board series processors allow for a wide range of visual and audio uses, including digital signage, self-service kiosk, gaming machine, AI vision computing, object and face recognition and more.

arm SystemReady

02 Industry-leading operating system support

Engineered to run on Debian, Yocto and Android, Tinker Board series ensures powerful performance, system stability and trusted security.
ASUS IoT also offers customized operating system services for flexible project deployment.

android Linux

03 Accessories for easy expandability

Designed with expandability in mind, Tinker Board series opens the door for embedded solutions. With accessories that include ASUS Tinker 2 Fanless Aluminum Case, ASUS IoT MIPI Converter Board and ASUS PoE Splitter Board, plus more besides, the Tinker Board platform offers ready-made solutions for enhanced convenience and functionality.

Tinker 2 Fanless Aluminum Case

MIPI Converter

POE Splitter Board

04 Comprehensive documentation and vibrant support community

As a platform, Tinker Board series benefits from an abundance of tried, tested and trusted resources, from detailed documentation and open-source code to a thriving user community. All this and more is ready and waiting to accelerate the development of any project.

User Guide

Tinker Forum

Developer Guide

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Primed for Industrial Applications

Smart City

- Surveillance
- Public security
- Air-quality monitoring

Retail

- Facial recognition
- Audience analysis
- Object recognition
- Cyber security

Industrial Automation

- HMI
- Machine Vision
- Gateway
- AOI device

Transportation

- Automatic License Plate Recognition (ALPR)
- Parking management
- Public transport payment

Product Selection





Product Name	Tinker Board R2.0 Tinker Board S R2.0	Tinker Board 2 Tinker Board 2S	Tinker Edge T	Tinker Edge R	Tinker Board 3 N
SoC	Rockchip RK3288-CG.W	Rockchip RK3399	NXP i.MX 8M	Rockchip RK3399Pro	Rockchip RK3568
GPU	Arm® Mali™-T860 MP4 GPU @ 800 MHz	Arm® Mali™-T860 MP4 GPU @ 800 MHz	GC7000 Lite	Arm® Mali™-T860 MP4 GPU @ 800 MHz	Arm® Mali™-G52 GPU
Memory	Dual-CH LPDDR3 2/4GB	Dual-CH LPDDR4 2/4GB	LPDDR4 1GB	Dual-CH LPDDR4 4GB (SYSTEM) + LDPPR3 2GB (NPU) or Dual-CH LPDDR4 2GB (SYSTEM) + LDPPR3 1GB (NPU)Memory	Dual-CH LPDDR4X On-board
Storage	16/32GB eMMC* (*Only available on S model)	16/32GB eMMC* (*Only available on S model)	8GB eMMC	16GB eMMC	32/64GB eMMC
	1 x Micro SD (TF) card slot (push & pull)	1 x Micro SD (TF) card slot (push & push)	1 x Micro SD (TF) card slot (push & pull)	1 x Micro SD (TF) card slot (push & pull)	1 x Micro SD (TF) card slot (push & pull)
Operation Temperature	0~60°C	0~60°C	0~50°C	0~60°C	0~60°C
Relative Humidity	0%~85%	0%~85%	0%~85%	0%~85%	0%~85%
Operating System	Debian, Android	Debian, Android, Yocto	Mendel	Debian, Android	Debian, Android, Yocto
Form Factor	85 × 56 mm	85 × 56 mm	85 × 56 mm	100 × 72 mm	100 × 100 mm


Product Name	All-in-One ARM-Based Panel PC 3399 Series	All-in-One ARM-Based Panel PC 3568 Series
SoC	Rockchip RK3399	Rockchip RK3568
Screen Size	10.1" & 15.6"	10.1" & 15.6"
Resolution	1280x 800 (10.1") & 1920 × 1080 (15.6")	1280x 800 (10.1") & 1920 × 1080 (15.6")
Operating System	Debian, Android, Yocto	Debian, Android, Yocto
Enclosure	Steel Housing, Fan-less design	Steel Housing, Fan-less design
Mounting	VESA Mount 100 x 100, Panel, Stand	VESA Mount 100 x 100, Panel, Stand
Weight	1.4 kg (10.1") & 2.5 kg (15.6")	1.4 kg (10.1") & 2.5 kg (15.6")
Dimensions	249.66 x 168.3 x 52.9 mm (10.1") 383.56 x 232.99 x 52.9 mm (15.6")	249.66 x 168.3 x 52.9 mm (10.1") 383.56 x 232.99 x 52.9 mm (15.6")
Operating Temperature	0~50°C	0~50°C

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Tinkerboard Website

ASUS IoT