



Tinker Board 3S

Compact fanless Arm®-based SBC, seamlessly integrates into systems, with versatile software suite ensures swift market readiness, offering FOTA, advanced controls and SDKs, with comprehensive technical support.

- 64-bit, quad-core Arm Cortex-A55 processor, built on the Arm v8 architecture
- Multi-display with HDMI and MIPI DSI, 4K full HD support
- 802.11 a/b/g/n/ac wireless & BT 5.0 (2T2R) 12-19V DC power input
- Ready-to-deploy panel solution with extensive technical support
- Developer-friendly SDK for integration



Soc	Rockchip RK3566
CPU	Quad-core Arm® Cortex®-A55
GPU	Arm Mali™-G52
NPU	RockchipNPU
Display	1 x HDMI, supports up to 4096 x 2160 @ 60 Hz 1 x MIPI DSI, Supports four lanes up to 6 Gbps, 1920 x1080 @ 60 Hz (22 pin)
Memory Size	Dual-channel LPDDR4X 2GB / 4GB
Storage	16GB eMMC Micro SD(TF) card slot (push/pull)
M.2 E key 2230	1 x for WiFi 5/6 & BT module (PCIe 2.0 x1, USB 2.0)
Audio	1 x 3.5 phone jack (with mic) 1 x HDMI audio
USB	1 x USB 3.2 Gen1 Type-A 2 x USB 2.0 Type-A ports 2 x USB 2.0 Micro B, device only 1 x USB 2.0 4-pin header



Internal Headers	1 x 40-pin GPIO headers includes: - 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(master/slave) - up to 1 x S/PDIF TX - 2 x 5V power pins - 2 x 3.3V power pins - 8 x ground pins 1 x 2-pin recovery header 1 x 2-pin power-on & reset header 1 x 3-pin debug UART header 1 x 2-pin DC fan header 1 x 2-pin RTC battery header 1 x MaskromDIP switch
Power Connector 12-19V	1 x DC barrel power input jack (5.5/2.5 mm)
OS Support	Android 13, Debian 11 , Yocto 4.0
Dimension	3.37 inch x 2.125 inch (85 × 56 mm)
Operation temperature	0°C ~ 60°C
Non-operation temperature	-40°C ~ 85°C
Non-operation humidity	10%-85% (non-condensing)
Note	*Default for 1 x 802.11 a/b/g/n/ac wireless & BT 5.0 (2T2R)

