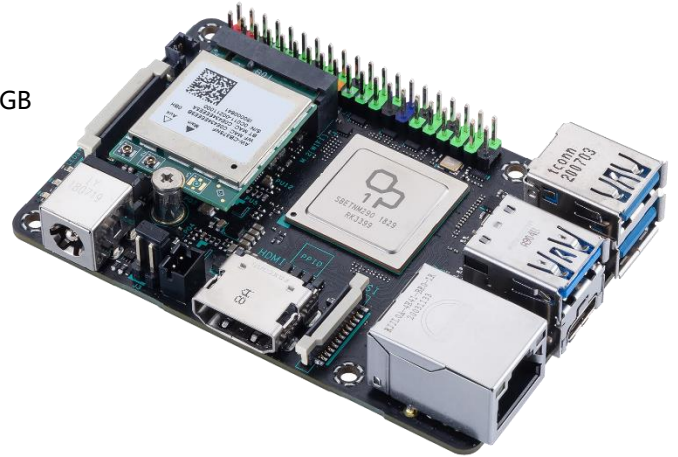


TINKER EDGE R

Pico-ITX, Rockchip RK3399Pro Hexa-core, NPU for AI, 4GB SYS & 2GB NPU RAM, 16GB eMMC, HDMI, MIPI-DSI, MIPI-CSI, 12-19V DC in

Features

- Arm® big.LITTLE™ A72+A53 Hexa-core SoC
- ML capability with Rockchip NPU
- Multiple MIPI-CSI & DSI / HDMI / Type-C (DP)
- 40-PIN GPIOs & mPCIe for multiple expansions
- 12V~19V DC-in offers stable power delivery
- Linux & Android supported

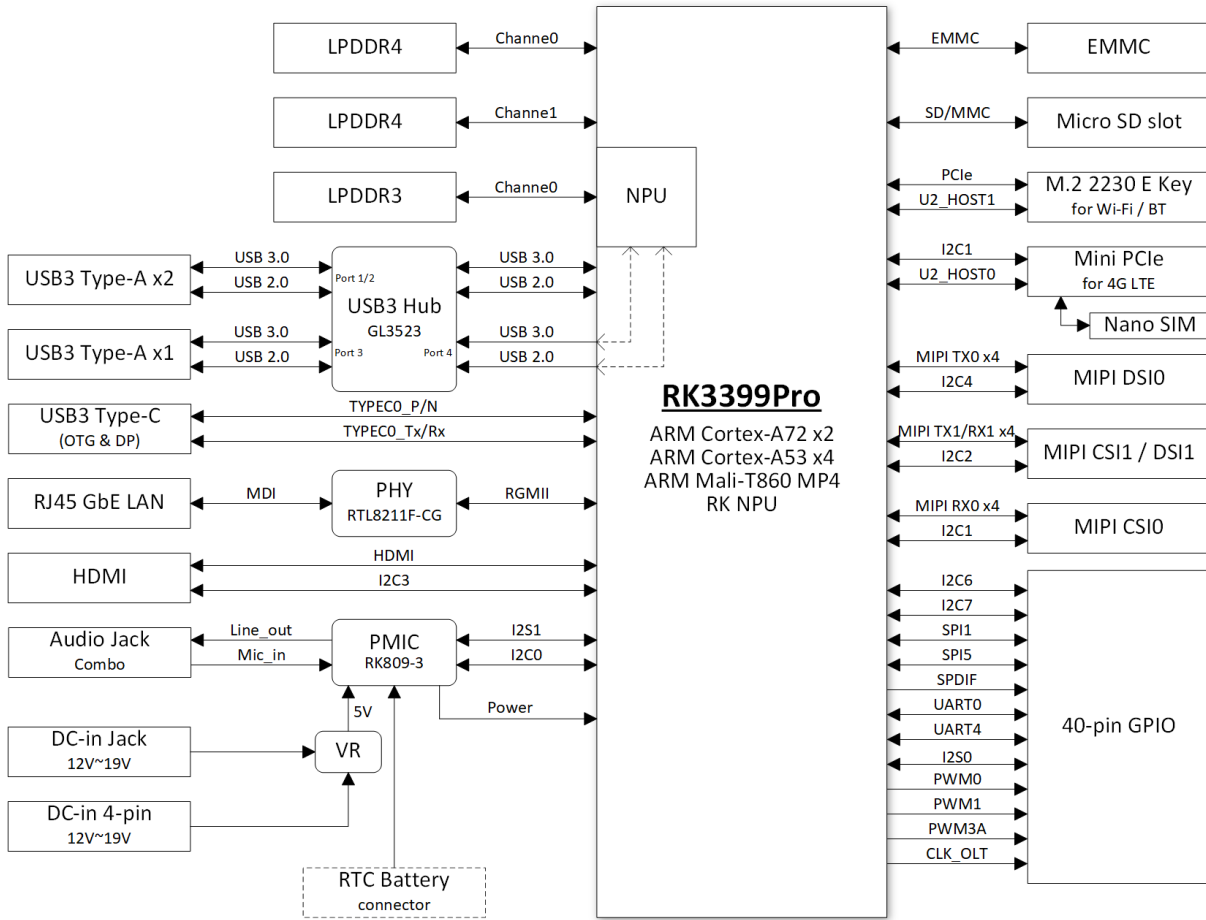


Specifications

Processor	SoC	Rockchip RK3399Pro
	CPU	Dual-core Arm® Cortex®-A72 @ 1.8 GHz + Quad-core Arm® Cortex®-A53 @ 1.4 GHz
	GPU	Arm® Mali™-T860 MP4 GPU @ 800 MHz
	NN Processor	Rockchip NPU
Memory	Technology	Dual-CH LPDDR4 (SYSTEM) + LPDDR3 (NPU) On-board
	Size	4GB (SYSTEM) + 2GB (NPU)
Storage	eMMC	16GB On-board
	Memory Card	1 x Micro SD (TF) card slot (push & pull)
Ethernet	Speed	10/100/1000Mbps
	Controller	1 x Realtek RTL8211F-CG
Wireless	Speed	802.11 a/b/g/n/ac & Bluetooth 5.0
	Module	1 x Realtek RTL8822CE (M.2 Socket 1 with E key, type 2230)
	Antenna Connector	2 x I-PEX MHF® 4 (extendable, 2T2R)
Display	HDMI	1 x Supports up to 4096 x 2160 @ 60 Hz
	Type-C (DP)	1 x Supports DP 1.2 up to 4096 x 2160 @ 60 Hz
	MIPI DSI	1 x 22-pin DSI (4 lane), Supports up to 6 Gbps, 1920 x 1080 @ 60 Hz
	Multi Display	HDMI+Type-C, HDMI+MIPI DSI, Type-C+MIPI DSI
Camera	MIPI CSI-2	1 x 22-pin CSI-2 (4 lane), Supports up to 6 Gbps 1 x 22-pin CSI-2/DSI (4 lane), Supports up to 6 Gbps
Audio	3.5 Audio Jack	1 x with Mic & plug-in detection
	I2S	1 x in 40-pin header
	S/PDIF	1 x in 40-pin header
Expansions	Mini PCIe	1 x Full-Length with nano-SIM socket, for 4G/LTE
Rear I/O	Ethernet	1
	3.5 Audio Jack	1
	USB 3.2 Gen1 Type-A	3
	USB 3.2 Gen1 Type-C OTG	1
	HDMI	1
Internal I/O	40-pin GPIO Header	- up to 28 x GPIO pins - up to 2 x UART - up to 1 x S/PDIF TX - 2 x 5V Power pins - 2 x 3.3V Power pins - 8 x Ground pins
	Power-on Header	1 (2-pin)
	Reset Header	1 (2-pin)
	Recovery Header	1 (2-pin)
	Debug UART Header	1 (2-pin)
	DC Fan Header	1 (2-pin)
	RTC Battery Header	1 (2-pin)
Power	Power Input	1 x 12 to 19 VDC, Barrel jack (5.5/2.5 mm) 1 x 12 to 19 VDC, Input 4-pin header
Environment	Operating Temperature	0~60°C
	Storage Temperature	-40~85°C
	Relative Humidity	0 to 85% (non-condensing)
Others	Operating System	Linux Debian 9, Android (AOSP) 9
	Dimensions	Pico-ITX, 3.9" x 2.8" (100 x 72 mm)

*Spec by SKU

Block Diagram



Ordering Information

PN	Model Name	Description
90ME00M0-*	TINKER EDGE R	Pico-ITX, Rockchip RK3399Pro Hexa-core, NPU for AI, 4GB SYS & 2GB NPU RAM, 16GB eMMC, HDMI, MIPI-DSI, MIPI-CSI, 12-19V DC in

Packing List

Item#	Description
1.	2 x Wi-Fi/BT antenna cable
2.	1 x Standoff set (4 x Screw + 4 x Hex)
3.	2 x Camera MIPI Convert cable (22P to 15P)
4.	1 x Quick Start Guide

Optional Accessories

Item#	Description
Power Adapter 45W	DC 19V/2.37A or 19.5V/3.33A (5.5/2.5mm)
Power Adapter 65W	DC 19V/3.42A or 19.5V/2.31A (5.5/2.5mm)

*Accessories will be shipped separately

Power Adapter 45W

DC 19V/2.37A or 19.5V/3.33A (5.5/2.5mm)

Ordering Information

PN	Model Name	Description
90AN00D0-M0AAY0	45W ADAPTER/US	United States
90AN00D0-M0BAY0	45W ADAPTER/BR	Brazil
90AN00D0-M0CAY0	45W ADAPTER/CN	China
90AN00D0-M0EAY0	45W ADAPTER/EU	European Union
90AN00D0-M0EAY1	45W ADAPTER/UK	United Kingdom
90AN00D0-M0EAY2	45W ADAPTER/CH	Switzerland
90AN00D0-M0EAY3	45W ADAPTER/ZA	South Africa
90AN00D0-M0EAY4	45W ADAPTER/IL	Israel
90AN00D0-M0IAY0	45W ADAPTER/IN	India
90AN00D0-M0JAY0	45W ADAPTER/JP	Japan
90AN00D0-M0SAY0	45W ADAPTER/AR	Argentina
90AN00D0-M0TAY0	45W ADAPTER/TW	Taiwan
90AN00D0-M0UAY0	45W ADAPTER/HK	Hong Kong
90AN00D0-M0UAY1	45W ADAPTER/AU	Australia
90AN00D0-M0UAY2	45W ADAPTER/KR	Korea

Power Adapter 65W

DC 19V/2.37A or 19.5V/3.33A (5.5/2.5mm)

Ordering Information

PN	Model Name	Description
90AN00C0-M0AAY0	65W ADAPTER/US	United States
90AN00C0-M0BAY0	65W ADAPTER/BR	Brazil
90AN00C0-M0CAY0	65W ADAPTER/CN	China
90AN00C0-M0EAY0	65W ADAPTER/EU	European Union
90AN00C0-M0EAY1	65W ADAPTER/UK	United Kingdom
90AN00C0-M0EAY2	65W ADAPTER/CH	Switzerland
90AN00C0-M0EAY3	65W ADAPTER/ZA	South Africa
90AN00C0-M0EAY4	65W ADAPTER/IL	Israel
90AN00C0-M0IAY0	65W ADAPTER/IN	India
90AN00C0-M0JAY0	65W ADAPTER/JP	Japan
90AN00C0-M0SAY0	65W ADAPTER/AR	Argentina
90AN00C0-M0TAY0	65W ADAPTER/TW	Taiwan
90AN00C0-M0UAY0	65W ADAPTER/HK	Hong Kong
90AN00C0-M0UAY1	65W ADAPTER/AU	Australia
90AN00C0-M0UAY2	65W ADAPTER/KR	Korea