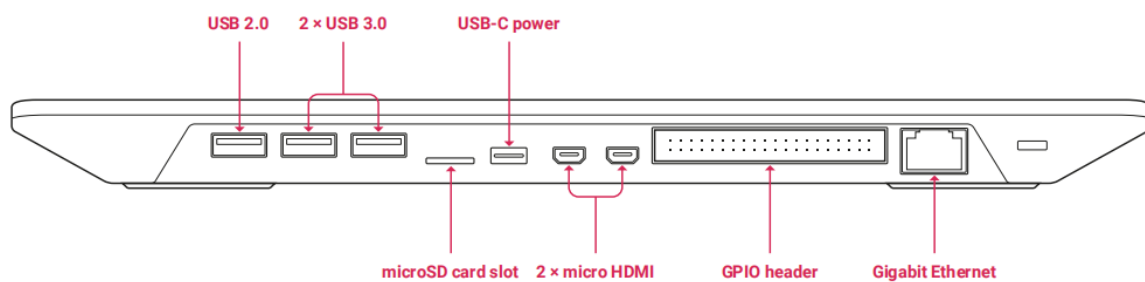# ntroduction to Raspberry PI 500

Raspberry Pi 500 is a fast and powerful computer integrated into a high-quality keyboard, providing the ultimate compact PC experience. It uses the same 2.4GHz quad-core 64-bit Arm Cortex-A76 processor and RP1 I/O controller as the Raspberry Pi 5, equipped with 8GB RAM memory, and built-in integrated aluminum heat sink to improve heat dissipation performance, so it can keep running fast and smooth even under heavy load. Raspberry Pi 500 supports dual-band Wi-Fi (2.4GHz and 5.0GHz), Bluetooth 5.0 and Gigabit Ethernet, provides 2 USB 3.0 interfaces, 1 USB 2.0 interface, and 2 micro HDMI interfaces that support 4Kp60 output, while retaining a 40-pin GPIO interface, providing users with powerful connectivity and expansion capabilities.

Functional interface

Dimensions

Product parameters (compared with Raspberry Pi 400)

Model	SoC	Memory	GPIO	Connectivity
Raspberry Pi 400	BCM2711	4GB	40-pin GPIO header	- 2× micro HDMI - USB 2.0 - 2× USB 3.0 - Gigabit (1Gb/s) Ethernet RJ45 - 2.4/5GHz dual-band 802.11ac Wi-Fi (120Mb/s) - Bluetooth 5, Bluetooth Low Energy (BLE) - microSD card slot - USB-C power (5V 3A (15W))
Raspberry Pi 500	BCM2712	8GB	40-pin GPIO header	- 2× micro HDMI - USB 2.0 - 2× USB 3.0 - Gigabit (1Gb/s) Ethernet RJ45 - 2.4/5GHz dual-band 802.11ac Wi-Fi 5 (300Mb/s) - Bluetooth 5, Bluetooth Low Energy (BLE) - microSD card slot - USB-C power (5V 5A (25W), or 5V 3A (15W) with a 600mA peripheral limit)