BeagleV® - Ahead

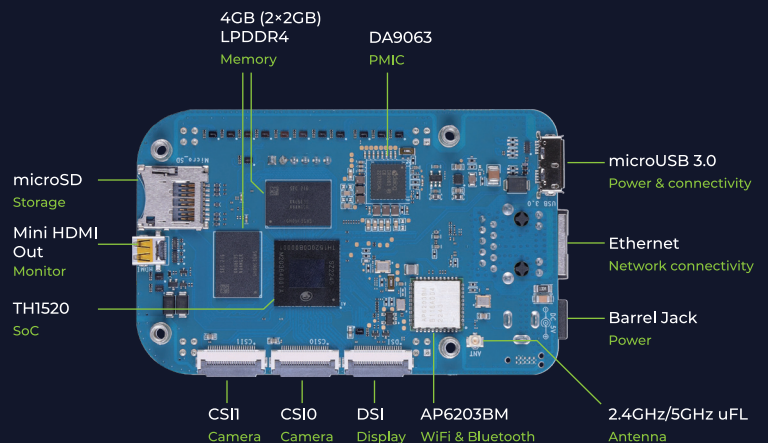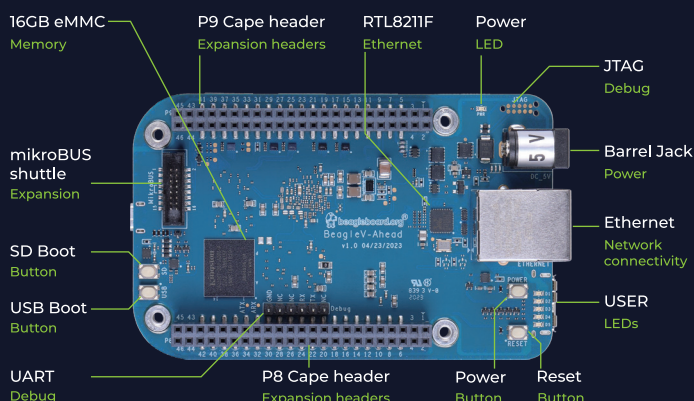Join the RISC-V Revolution: Accelerate Your Development with Advanced BeagleV®-Ahead

Features

- Most Advanced RISC-V Processor IP: Powered by T-Head TH1520 RISC-V quad-core Xuantie C910 processor clocked at up to 1.85GHz

- Support AI Acceleration: 4TOPS NPU @ INT8 1GHz for AI, support Tensorflow, ONNX, Caffe

- Rich Multimedia Interface: 2*CSI; 1*HDMI; 1*DSI

- Speed up PoC Process: MIKROE's mikroBUS™ uniform connection interface, enabling instant connection of 1000+ click boards to the main development board

- Multiple OS Support: Support Yocto, and Linux distribution such as Ubuntu and Fedora (in development)

Applications

RISC-V Dev Kit

AI Box for Video Analytics

Education Tablet/PC

Digital Signage

Processor: TH1520, Quad-core RISC-V 64GCV C910 up to 1.85GHz

16GB eMMC — Memory
P9 Cape header — Expansion headers
RTL8211F — Ethernet
Power — LED
JTAG — Debug
Barrel Jack — Power
Ethernet — Network connectivity
USER — LEDs
mikroBUS shuttle — Expansion
SD Boot — Button
USB Boot — Button
UART — Debug
P8 Cape header — Expansion headers
Power — Button
Reset — Button

4GB (2×2GB) LPDDR4 — Memory
DA9063 — PMIC
microUSB 3.0 — Power & connectivity
microSD — Storage
Mini HDMI Out — Monitor
TH1520 — SoC
Ethernet — Network connectivity
Barrel Jack — Power
CSI1 — Camera
CSI0 — Camera
DSI — Display
AP6203BM — WiFi & Bluetooth
2.4GHz/5GHz uFL — Antenna

Feature	Description
CPU	TH1520, Quad-core RISC-V 64GCV C910 up to 1.85GHz
LAN	1 x Gagabit Ethernet
WiFi/BT	Integrated Wi-Fi 2.4G + BT 5.2
Multimedia	2 x CSI
	1 x DSI
	1 x micro HDMI
RAM	2 x 2GB LPDDR4X
eMMC	16GB
EEPROM	16KB
SD card	1 x Micro Slot
LEDs	1 x Power LED
	5 x User LEDs
Buttons	1 x Power Button
	1 x Reset Button
	1 x USB Boot
mikroBUS	mikroBUS shuttle
USB port	USB 3.0 Micro-B OTG
Power	5V Barrel Jack
GPIO	2 x 46pin BeagleBone® header
Debug	6 pins UART debug connector
	10-pin TAG-Connector JTAG Port
Certification	CE, FCC, RoHS, UKCA, REACH
Accessories	1 x MicroB USB cable
	1 x Antenna
Working Temperature	0℃ ~ 60℃
Bare Board Dimension	96.5×60.5×21.1mm

Seeed Studio Service for BeagleBone® Series:

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Mass Production Service

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