Part Number: BBONE-AI

Description: Single Board Computer

The Fast Track for Embedded Machine Learning

Built on the proven BeagleBoard.org® open source Linux approach, BeagleBone® AI fills the gap between small SBCs and more powerful industrial computers. Based on the Texas Instruments AM5729, developers have access to the powerful SoC with the ease of BeagleBone® Black header and mechanical compatibility. BeagleBone® AI makes it easy to explore how artificial intelligence (AI) can be used in everyday life via the TI C66x digital-signal-processor (DSP) cores and embedded-vision-engine (EVE) cores supported through an optimized TIDL machine learning OpenCL API with pre-installed tools. Focused on everyday automation in industrial, commercial and home applications.

Feature highlights

- BeagleBone Black mechanical and header compatibility
- TI AM5729 processor featuring 2x A15 CPU, 2x C66 DSP, 4x M4 MCU, 2x SGX544 3D, GC320 2D, IVA-HD, 4x PRU and 4x EVE
- 1GB RAM and 16GB on-board eMMC flash with high-speed interface
- USB type-C for power and superspeed dual-role controller; and USB type-A host
- Gigabit Ethernet, 2.4/5GHz WiFi, and Bluetooth
- microHDMI
- Zero-download out-of-box software experience