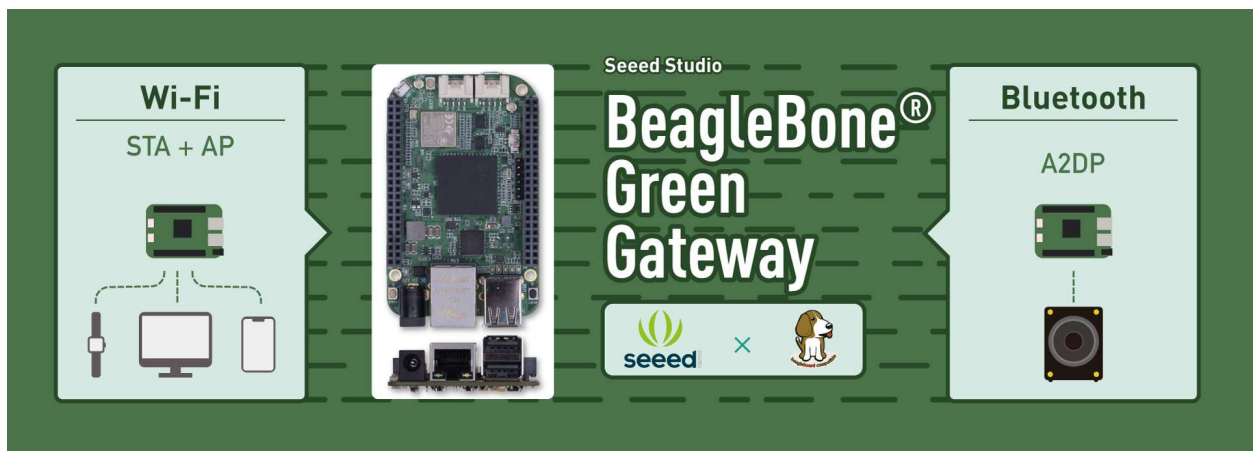# Seeed Studio BeagleBone® Green Gateway Development Board（TI AM335x WiFi+BT and Ethernet）

SKU 102110381

Seed Studio BeagleBone® Green Gateway Development Board is a commercial-grade single-board computer (SBC). It is based on the open-source hardware design of Seeed Studio BeagleBone® Green and Seeed Studio BeagleBone® Green Wireless and combined with the onboard Wi-Fi + Bluetooth Low Energy (BLE) + Ethernet features.

PRODUCT DETAILS

Note
Seed Studio BeagleBone® Green Gateway supports various BeagleBone® Cape that can perform different functions. Please visit here for more information.

Key Features

- Fully Compatible with BeagleBone® Black and Seeed Studio BeagleBone® Green
- Compact size for convenient deployment
- Powerful Sitara™ AM3358 Arm® Cortex® A8 Processor
- Rich I/O Peripherals
- PRUs for Real-TIme Capabilities
- Cape Support for Expandability
- Open-Source
- Support from the fast-growing community

Description

Seeed Studio BeagleBone® Green Gateway is a joint effort by BeagleBoard.org and Seeed Studio. Based on the open-source hardware design of BeagleBone® Black, the newest Seeed Studio BeagleBone® Green Gateway has added Ethernet connectivity to the previous design of Seeed Studio BeagleBone® Green Wireless, making it equipped with Wi-Fi + Bluetooth Low Energy (BLE) + 10/100 Ethernet connectivity.

The Seeed Studio BeagleBone® Green Gateway is fully compatible with Seeed Studio BeagleBone® Green Wireless.
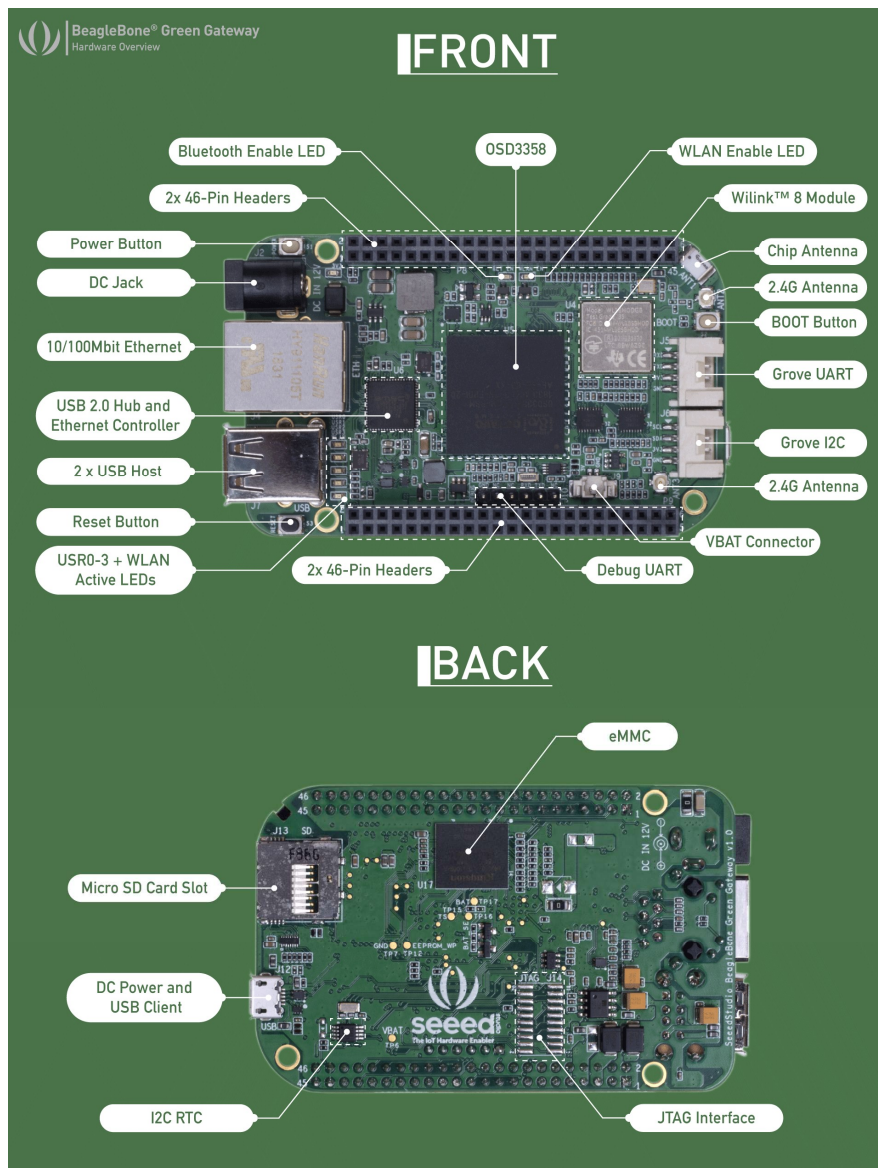
Board Comparisons

Seeed Studio BeagleBone® Green Gateway is the combination of Seeed Studio BeagleBone® Green and Seeed Studio BeagleBone® Green Wireless. The below comparison table indicates differences between different board:

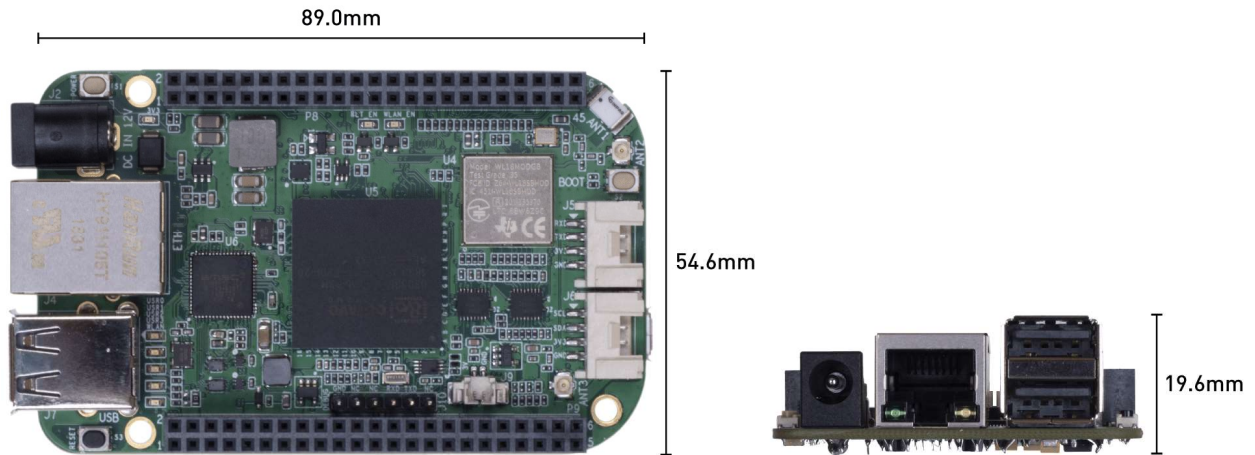| BeagleBone® Black	Seeed Studio BeagleBone® Green	Seeed Studio BeagleBone® Green Wireless	Seeed Studio BeagleBone® Green Gateway
1 x USB Host	1 x USB Host	4 x USB2.0 Host	2 x USB2.0 Host
Ethernet	Ethernet 10/100M	Wi-Fi 802.11b/g/n 2.4GHz and Bluetooth 4.1 LE	Ethernet 10/100M Bit and Wi-Fi 802.11b/g/n 2.4GHz and Bluetooth 4.1 LE
HDMI Port	2 x Grove Connectors	2 x Grove Connectors	2 x Grove Connectors

Applications

- Internet of Things
- Smart House
- Industrial
- Automation & Process Control
- Human Machine Interface
- Sensor Hub
- Robot

Hardware Overview

Dimensions

Setup, Documentation, and Support

Please visit our wiki for more information about **Seeed Studio BeagleBone® Green Gateway**:

Technical Specifications

Specifications	Value
Processor	AM3358 1GHz ARM® Cortex-A8 2×32-bit 200-MHz programmable real-time units (PRUs)
EEPROM	4KB
RAM	512MB DDR3
On-board Flash Storage	4GB eMMC
CPU Supports	NEON floating-point & 3D graphics accelerator
Micro USB Supports	Powering & Communications

USB	USB 2.0 Host x 2
Grove Connectors	2 (Grove I2C x 1and Grove UART x 1)
GPIO	2 x 46 pin headers
Ethernet	1 x 10/100M Bit
Wireless Connectivity	Wi-Fi 802.11b/g/n 2.4GHz and Bluetooth 4.1 LE
Operating Temperature	0 ~ 70°C
Buttons	3
Power	DC Jack for power, 12V
Dimensions	89.0mm x 54.6mm x 19.6mm

Part List

- Seeed Studio BeagleBone® Green Gateway x 1
- Micro USB Cable x 1
- User Manual x 1

ECCN/HTS

HSCODE	8543709990
UPC	

LEARN AND DOCUMENTS

Documentations

- **Seeed Studio BeagleBone® Green Gateway Schematic**

  https://files.seeedstudio.com/wiki/BeagleBone-Green-Gateway/SeeedStudio-BeagleBoneGreemGateway-SCH.pdf

- **AM335X Datasheet**

  https://files.seeedstudio.com/wiki/Bazaar_file/102010027/AM335x.pdf