

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

SKU 102110381

Seeed 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

**Seeed 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<sup>™</sup> AM3358 Arm<sup>®</sup> Cortex<sup>®</sup> 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<sup>®</sup> Green Gateway is fully compatible with Seeed Studio BeagleBone<sup>®</sup> Green Wireless.

#### **Board Comparisons**

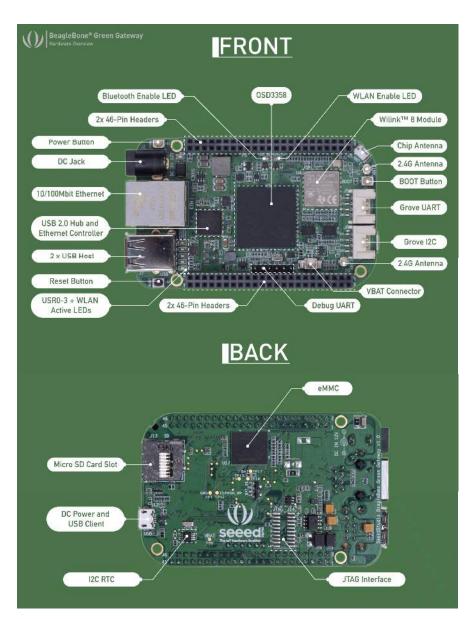
Seeed Studio BeagleBone<sup>®</sup> Green Gateway is the combination of Seeed Studio BeagleBone<sup>®</sup> Green and Seeed Studio BeagleBone<sup>®</sup> Green Wireless. The below comparison table indicates differences between different board:

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

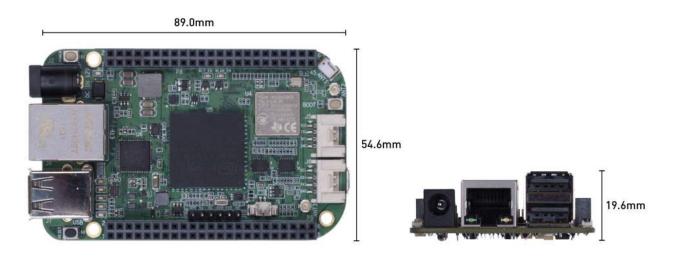
## Applications

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

#### **Hardware Overview**



#### Dimensions



### Setup, Documentation, and Support

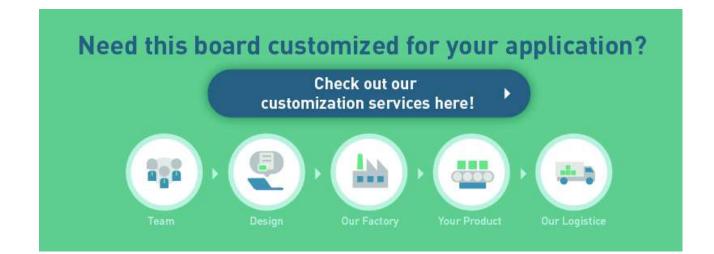
Please visit our wiki for more information about **Seeed Studio BeagleBone® Green Gateway**:

Technical Specifications			
Specifications	Value		
Processor	AM3358 1GHz ARM <sup>®</sup> Cortex-A8 2×32-bit 200-MHz programmable real-time units (PRUs)		
EEPROM	4КВ		
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