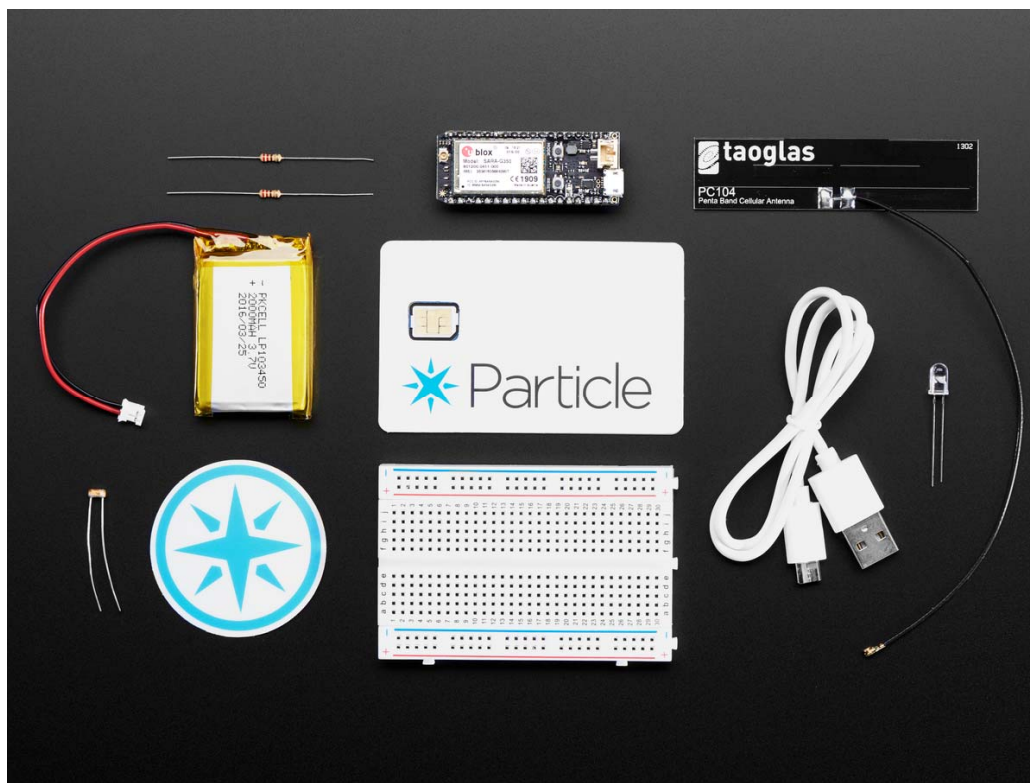




# Electron Cellular IoT Kit - 3G Americas/Aus

PRODUCT ID: 3234



## . Description

**The Electron** is a small cellular IoT board made by Particle. This tiny development kit has everything you need for creating **3G** cellular connected products. Includes a prepaid, no contract data plan and instant web access to your Electron with wireless programming.

**Kit includes:**

- o Microcontroller
- o Particle SIM card with service in more than 100 countries worldwide
- o 3 months of Particle's 1MB monthly data plan (delivered by email)
- o Antenna x 1
- o 2000mAh battery x 1
- o USB cable x 1
- o Half-size breadboard x 1

The Electron kit also includes Particle's development tools and cloud platform for managing and updating your new connected hardware.

GSM 850/1900 MHz for use in North & South America, and Australia.

**Please note** that the Electron is a GSM-only device, and does not support CDMA networks. For a full list of compatible countries, please visit the link here and see "Compatible Countries".

<https://s3.amazonaws.com/particle-marketing-assets/CountryListings.png>

| Electron 3G Type                                       | Compatible Countries (Listed Alphabetically)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Electron 3G (Americas)</b><br>850/1900 MHz          | United States, <b>Argentina</b> , Australia, Canada, Chile, Colombia, Costa Rica, <b>Dominican Republic</b> , Ecuador, El Salvador, Guatemala, <b>Honduras</b> , <b>Mexico</b> , <b>Nicaragua</b> , Panama, Paraguay, Peru, Puerto Rico, <b>Venezuela</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Electron 3G (Eur/Asia/Afr)</b><br>900/1800/2100 MHz | <b>Austria</b> , Bahrain, Belarus, Belgium, Botswana, Brazil, Bulgaria, <b>China</b> , Congo, Croatia, Cyprus, Czech Republic, <b>Denmark</b> , <b>Egypt</b> , Estonia, Finland, France, <b>Germany</b> , Ghana, Gibraltar, Greece, <b>Hong Kong</b> , Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Jersey, <b>Kenya</b> , Republic of Korea, Latvia, Liechtenstein, Lithuania, Luxembourg, Republic of <b>Macedonia</b> , Malawi, Malaysia, Republic of Moldova, Republic of Montenegro, <b>Netherlands</b> , New Zealand, Nigeria, Norway, <b>Pakistan</b> , Philippines, Poland, Portugal, <b>Qatar</b> , <b>Reunion</b> , Romania, Russian Federation, Rwanda, <b>Saudi Arabia</b> , Republic of Serbia, Seychelles, Sierra Leone, Singapore, Slovakia, Solvenia, South Africa, Spain, Sri Lanka, Swaziland, Sweden, Switzerland, <b>Taiwan</b> , United Republic of Tanzania, Thailand, <b>Uganda</b> , Ukraine, United Arab Emirates, United Kingdom, Uruguay, <b>Zambia</b> |

# . Technical Details

## Specs:

- o STM32F205 ARM Cortex M3 microcontroller
- o 1MB Flash, 128K RAM
- o Cellular modem: U-Blox SARA U-series (3G)
- o 36 pins total: 28 GPIOs (D0-D13, A0-A13), plus TX/RX, 2 GNDs, VIN, VBAT, WKP, 3V3, RST
- o Board dimensions: 2.0" x 0.8" x 0.3" (0.5" including headers)

- **These links for all Particle product Troubleshooting:**

- o **Common Issues**
- o <https://docs.particle.io/support/troubleshooting/common-issues/photon/>
- o **Device LED Codes**
- o <https://docs.particle.io/support/troubleshooting/troubleshooting-support/photon/>
- o **Device Ownership**
- o <https://docs.particle.io/support/troubleshooting/device-management/photon/>
- o **Cloud Solutions**
- o <https://docs.particle.io/support/troubleshooting/cloud-solutions/photon/>
- o **Common Questions**
- o <https://docs.particle.io/support/troubleshooting/common-questions/photon/>
- o **System Modes**
- o <https://docs.particle.io/support/troubleshooting/mode-switching/photon/>
- o **Device Keys**
- o <https://docs.particle.io/support/troubleshooting/key-management/photon/>
- o **Connectivity Help**
- o <https://docs.particle.io/support/troubleshooting/connection-help/photon/>
- o **Troubleshooting Tools**
- o <https://docs.particle.io/support/troubleshooting/troubleshooting-tools/photon/>