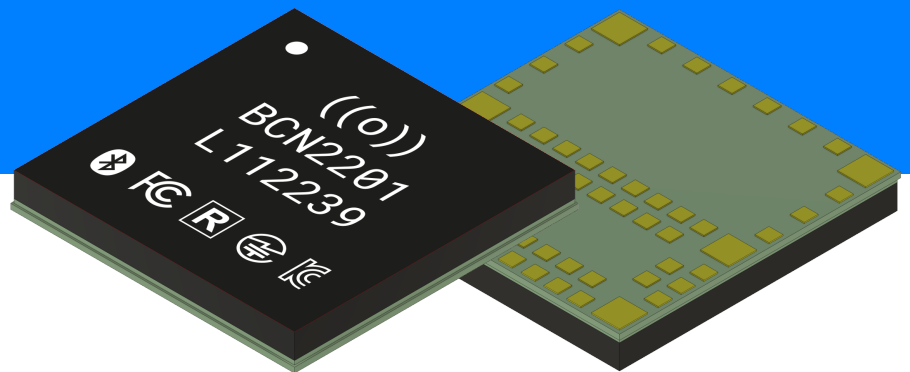




Blecon Chip

Blecon Integrated SoC



Overview

When you add Blecon support to your device, you gain access to a request/response-based communication API that operates over Bluetooth Low Energy. In addition, Blecon takes care of device identification, device connection and provisioning, time services, and secure communication with the Blecon network service.

Key features

- Fully Blecon-compliant implementation
- Data delivered through a webhook
- Integrates with any cloud, any platform, any language
- Connect with service using NFC or QR
- Network security based on public-key cryptography
- Secure device identification and connection
- Secure time service

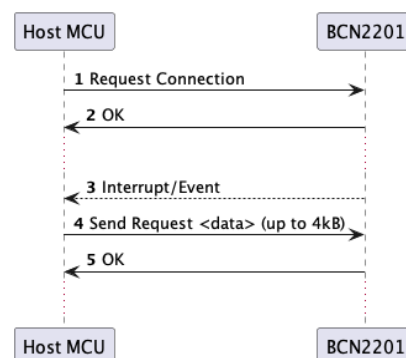
Get started quickly

- Free iOS, Android and macOS hotspot apps
- Developer documentation
- Integration examples with AirTable, AWS DynamoDB, AWS Lambda, and more
- Symbols and footprints for Eagle and Altium
- C Driver, example host MCU firmware and utility application available on GitHub

Requests



A host MCU can communicate with the BCN2201 using a command/response protocol to issue Blecon requests to your application.



Data sent to the BCN2201 is sent securely through Blecon - HTTP requests are made to an endpoint of your choice.

```
{
  "network_headers": {
    "message_type": "DEVICE_REQUEST",
    "account_id": "95Y1iRsYzZ7JBnUKDcmT9OzNed5",
    "network_id": "291HjZMKqh8nudnittKHKAgm61q",
    "device_id": "10e0864d-3700-4f84-b5a0-4c59113dbce1",
    "device_location": "52.2087655,0.0907578",
    "device_model_id": "0"
  },
  "request_data": {
    "payload": "<data>"
  }
}
```

Control interface

- Simple command protocol: Get Identity, Request Connection, Send Request, etc.
- SPI, UART, USB transports
- Event interrupt line

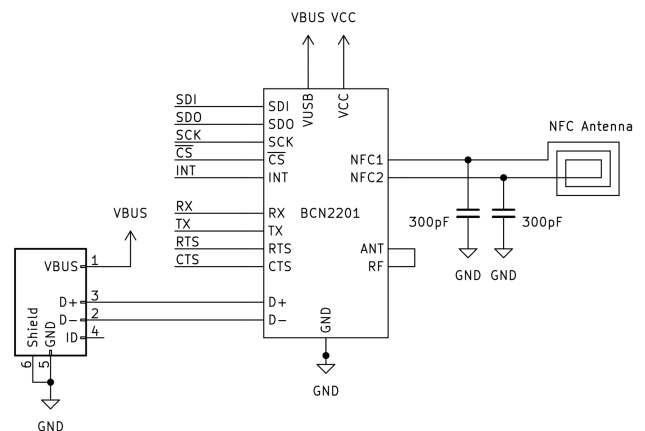
Physical characteristics

- Compact 8 x 8 x 1 mm LGA package
- Integrated antenna
- Minimal external circuitry
- 105 °C extended operating temperature
- 1.7 - 5.5 V supply voltage range
- 15 µA baseline current consumption

Certification

- Bluetooth SIG
- CE, FCC, IC, TELEC, KCC
- RoHS2, REACH, Conflict Mineral

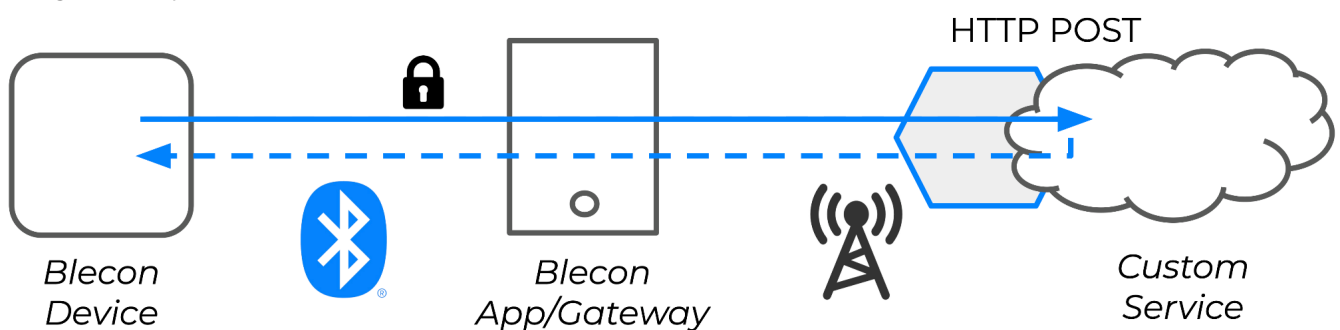
Typical Application Circuit



The BCN2201 requires a single interface (SPI, UART or USB) to be connected to a host MCU or MPU, an optional NFC antenna and power.

About Blecon

The Blecon Network Infrastructure enables use of Bluetooth Low Energy to provide secure request-response communication from devices to a web service, with smartphones and gateways acting as hotspots.



With Blecon, you can quickly integrate devices into any web service or application using standard web development tools and techniques, without having to build and maintain complex or specialist IoT architectures.