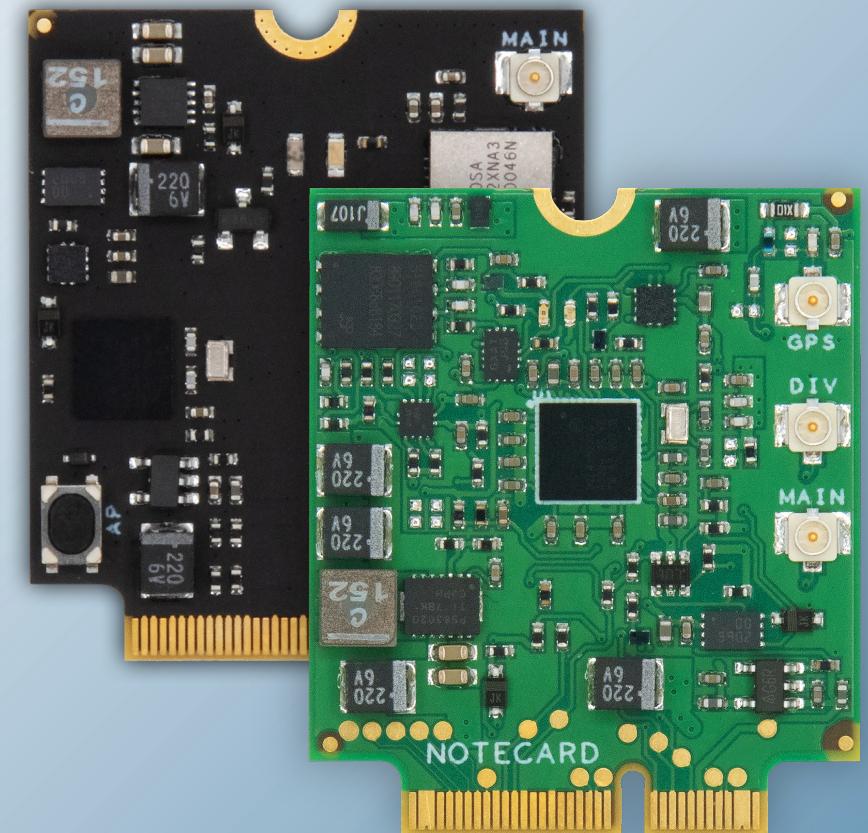


# Getting Started with Blues Wireless and the Notecard!

{name}

{title}

 blues wireless





## Rob Lauer

Director of Developer Relations

@RobLauer



## TJ VanToll

Principal Developer Advocate

@TJVanToll

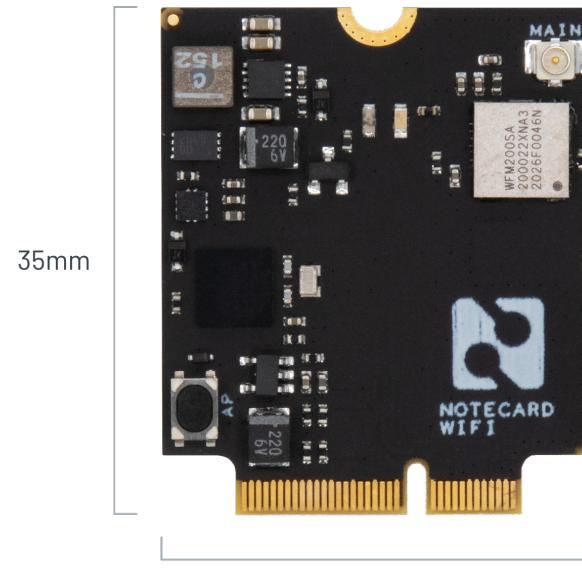
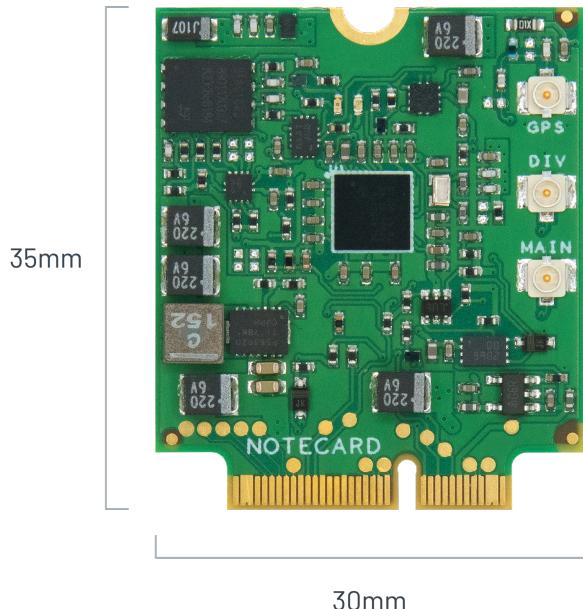
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Complexity kills. It sucks the life out of developers, it makes products difficult to plan, build, and test.

Ray Ozzie - CEO of Blues Wireless

# Today's Agenda

- Intro to the Notecard and Blues Wireless
- Hands-on Demonstration of Wireless IoT







**"Making wireless IoT easier for developers  
and more affordable for all"**

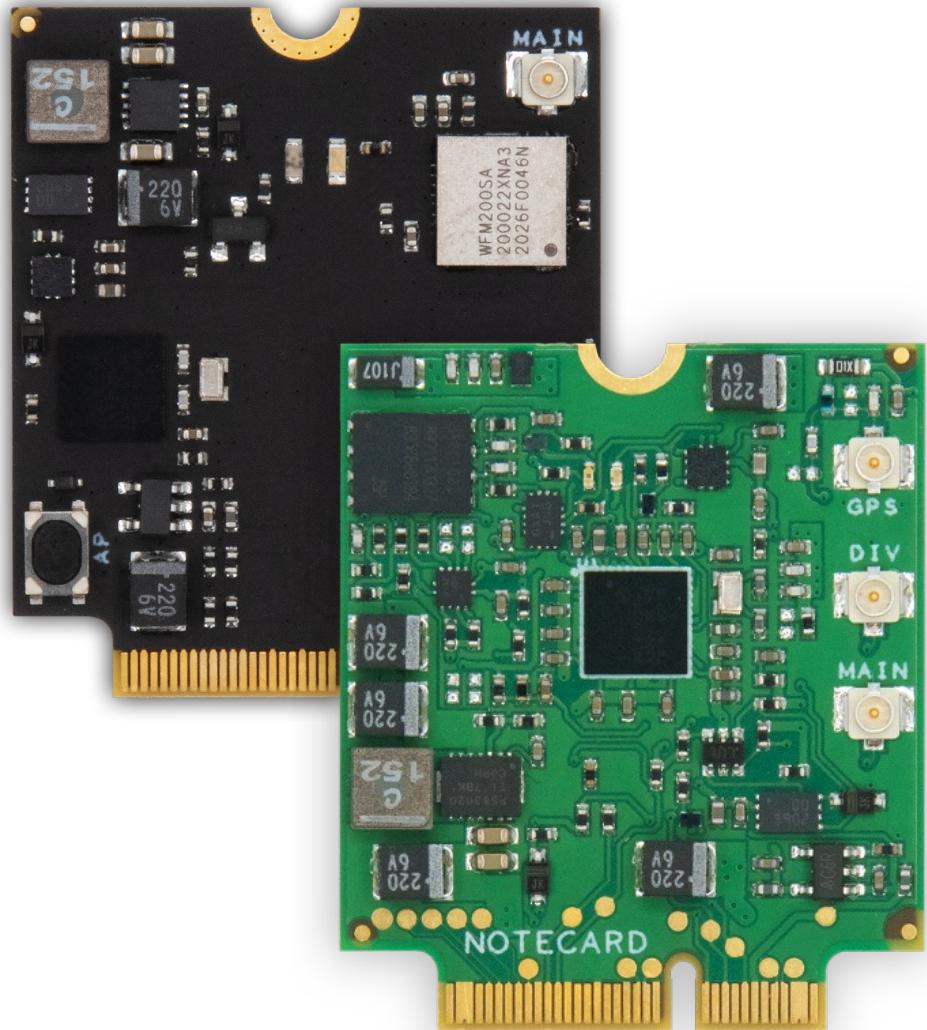


**Easy** for developers and **affordable** for all.

- 🔒 Securing your data from device to cloud
- 🔋 Building zero-config low-power hardware
- 💻 Providing an unmatched developer experience

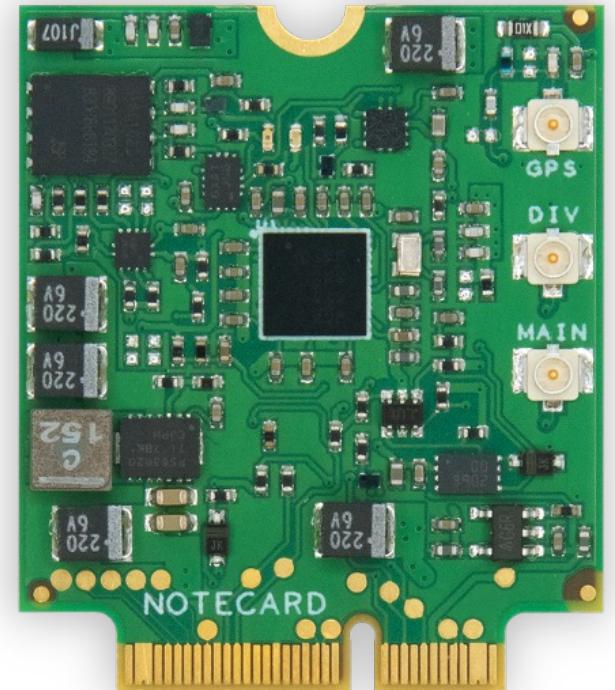
# Notecard

- Low-power system-on-module
- Global cellular/GPS or Wi-Fi
- 500MB cell data + 10 years service
- JSON-based API
- Python, Go, Arduino, C/C++
- Cellular: NB-IoT, LTE-M, Cat-1



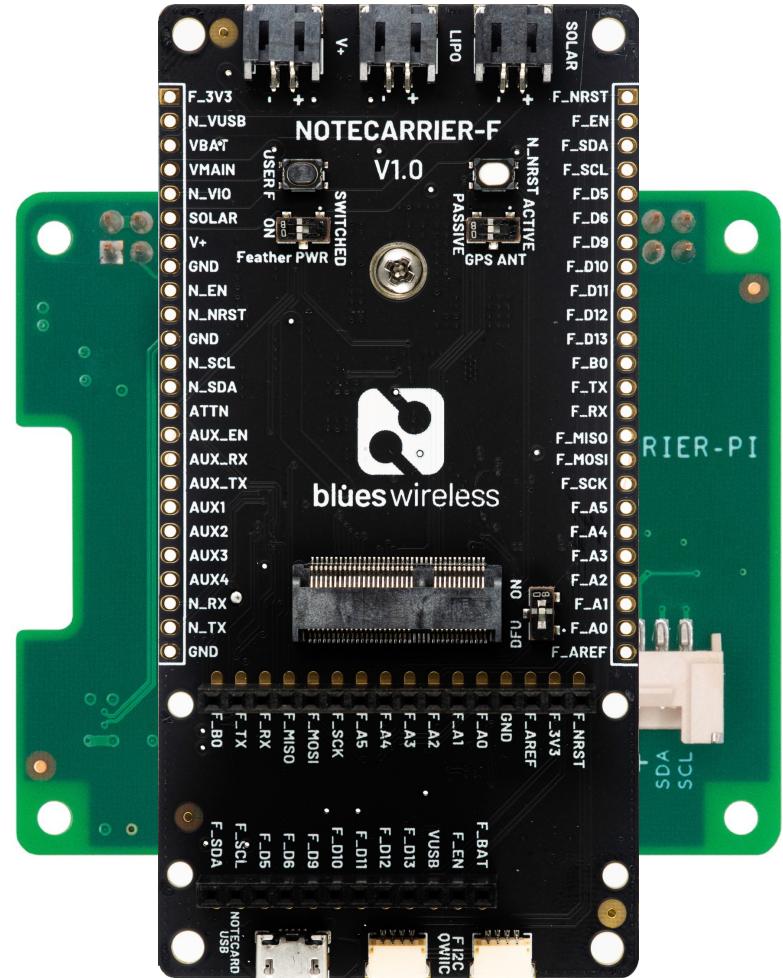
# What don't you need with the Notecard?

- SIM or Separate Mobile Plan
- AT Commands or Cellular Connection Management
- Custom Security Implementation
- OTA DFU
- Power Management
- Cloud Integration



# Notecarrier

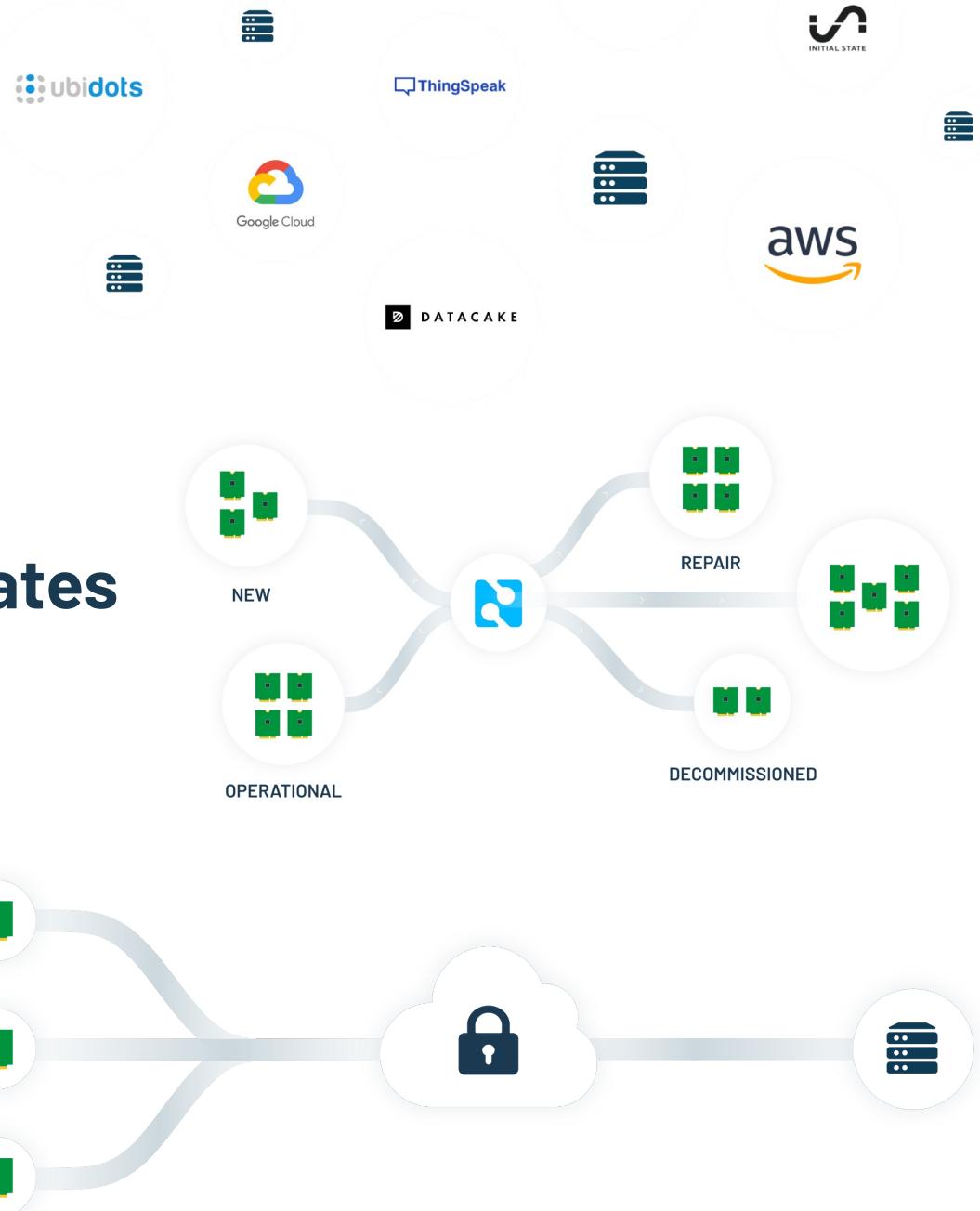
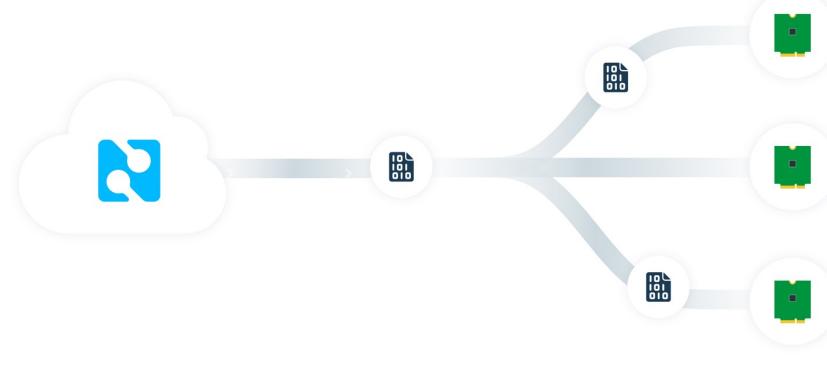
- Carrier boards for easy prototyping
- Notecarrier for every scenario:
  - **F** - Feather-compatible socket
  - **A** - Any MCU, onboard antennas
  - **B** - Small form factor
  - **Pi** - Raspberry Pi SBC



# Notehub

- Route data to **any cloud** app
- Manage **fleets** of devices
- OTA MCU/Notecard **firmware updates**
- **Secure** communications

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# Example: *card.location* API

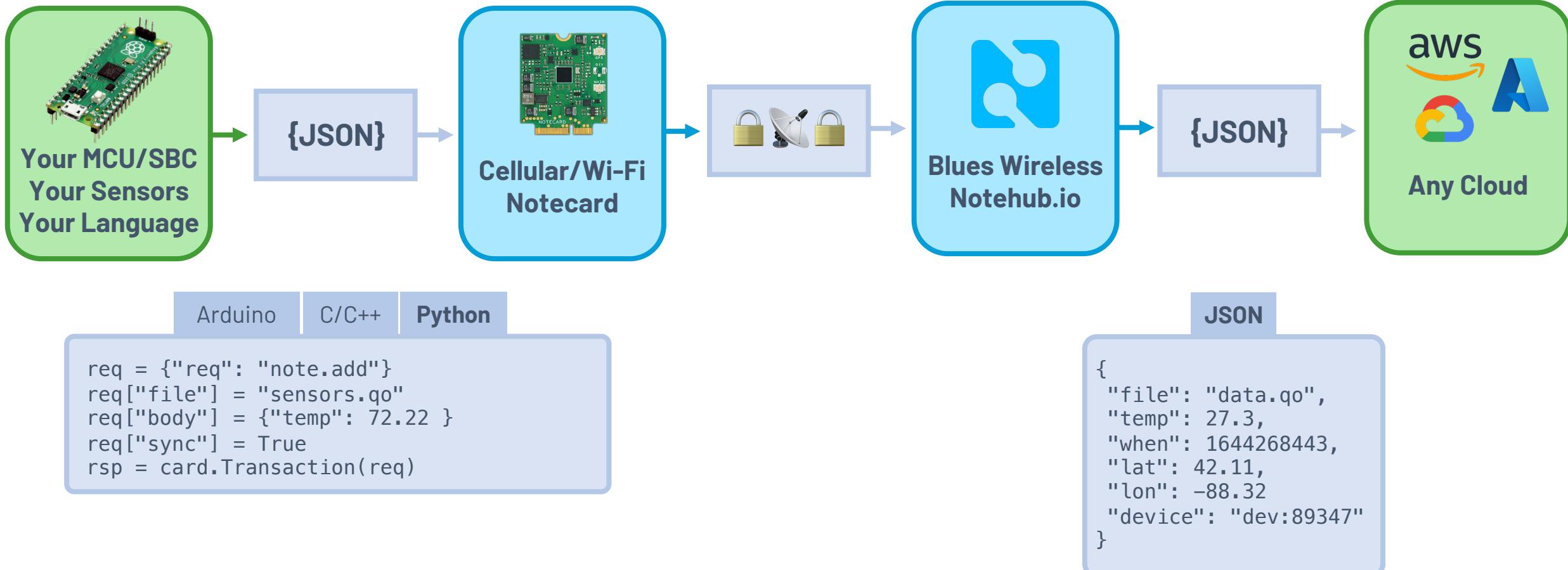
*Request*

```
{ "req": "card.location" }
```

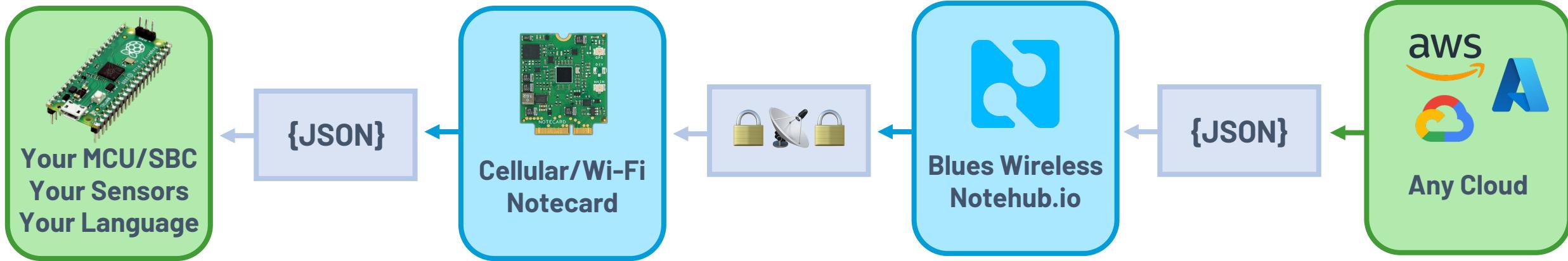
*Response*

```
{
    "status": "GPS updated (58 sec, 41dB SNR, 9 sats),
    "mode":    "periodic",
    "lat":      42.577600,
    "lon":      -70.871340,
    "time":     1598554399
}
```

# Outbound Communication (from MCU to Cloud)



# Inbound Communication (from Cloud to MCU)



Arduino   C/C++   Python

```
req = {"req": "note.get"}  
req["file"] = "data.qi"  
req["delete"] = True  
rsp = card.Transaction(req)
```

JSON

```
{  
  "file": "data.qi",  
  "sample_freq": 5,  
  "notify": true  
}
```

# When Does the Notecard Make Sense?



- Low-bandwidth cellular
- Edge computing scenarios
- Secure communications
- Turnkey cloud integrations



- Wi-Fi replacement
- Sub-millisecond latency
- Video streaming

# Thanks!

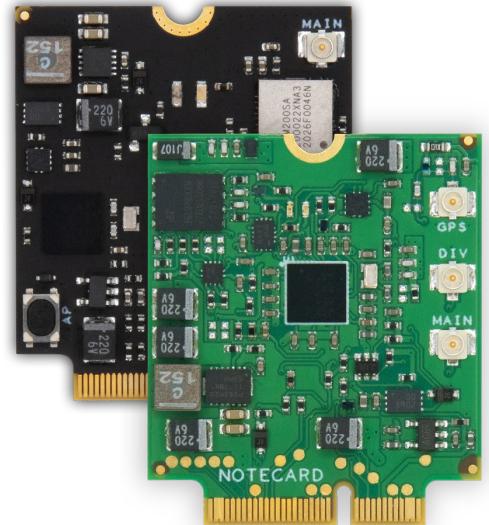
- **dev.blues.io** for Blues Wireless resources
- 15% off Starter Kits @ **bit.ly/blues-get-started**



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Principal Developer Advocate  
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“

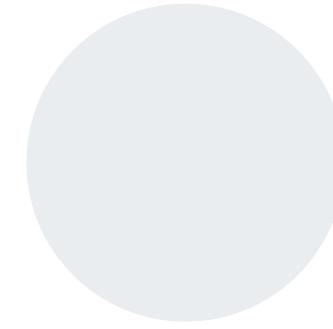
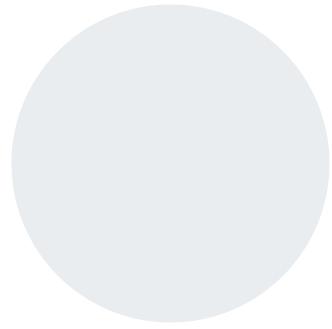
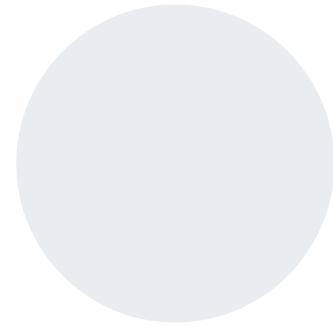
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John Doe, VP of Engineering













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06



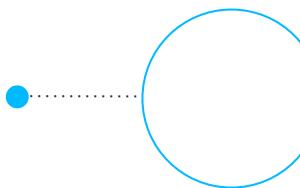


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# Demo

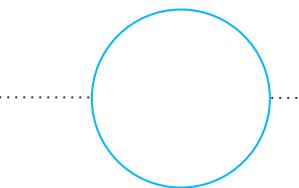


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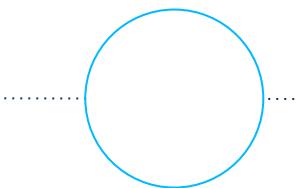


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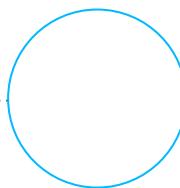
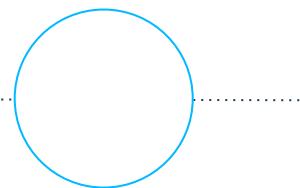
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# 01

PRESENT YOUR

**Amazing  
Story**

# 02

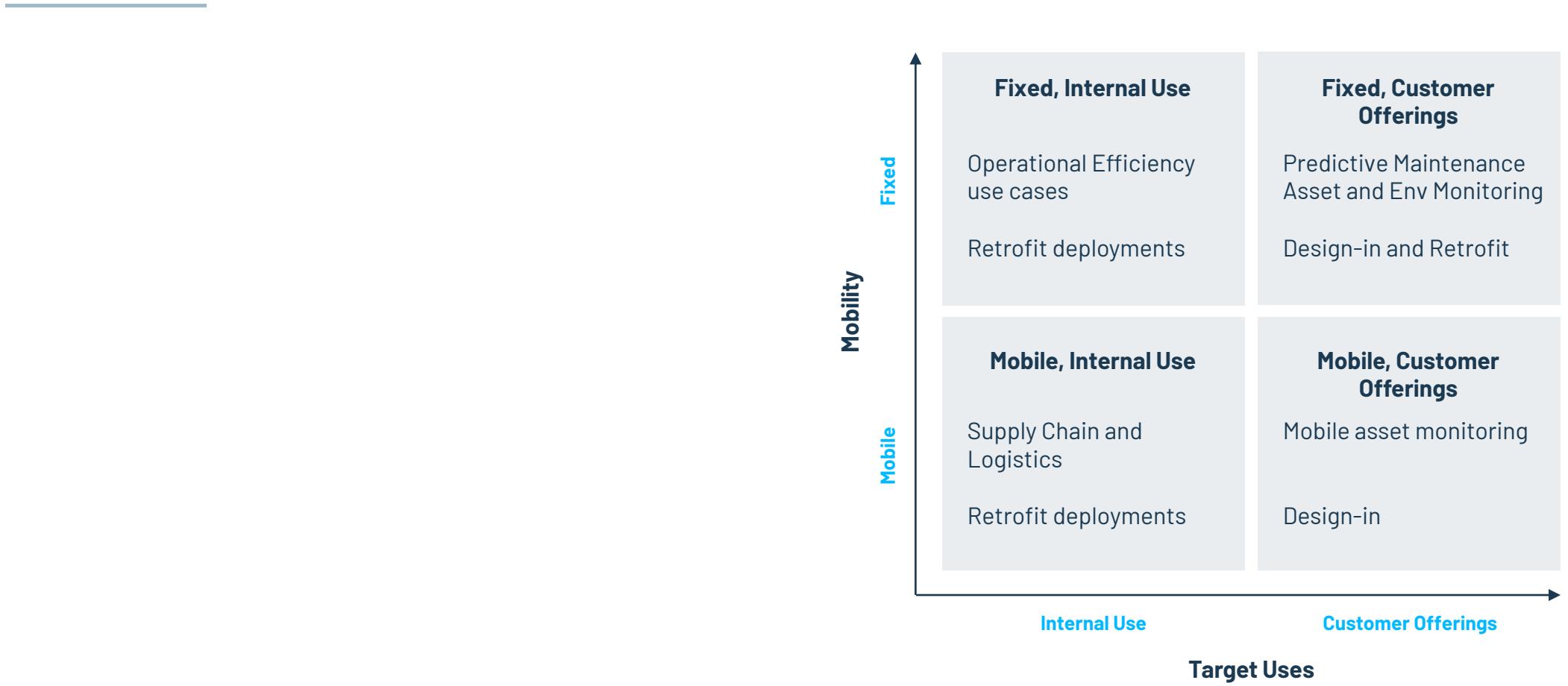
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**Amazing  
Story**

# 03

PRESENT YOUR

## Amazing Story



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