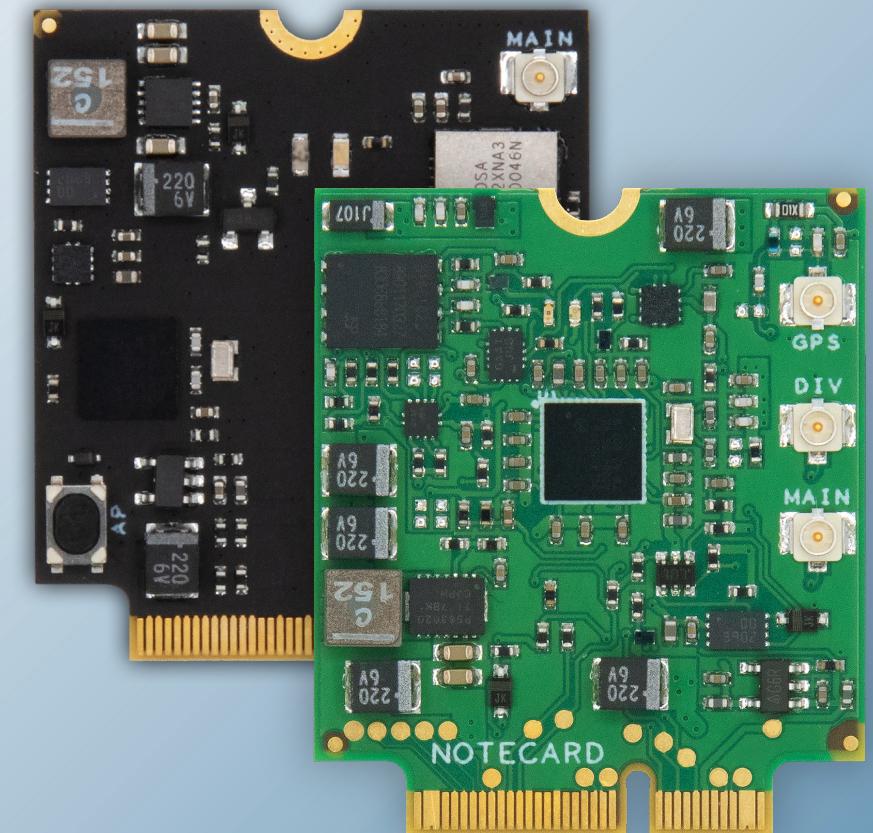


Introducing Simplified Cellular IoT with Blues Wireless and the Notecard

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 blues wireless





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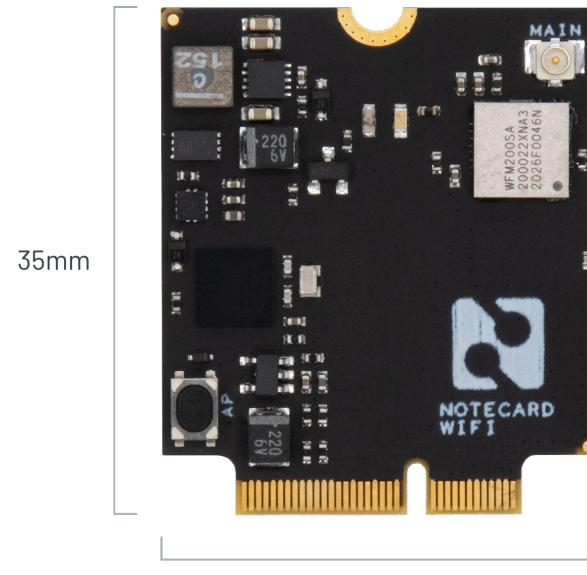
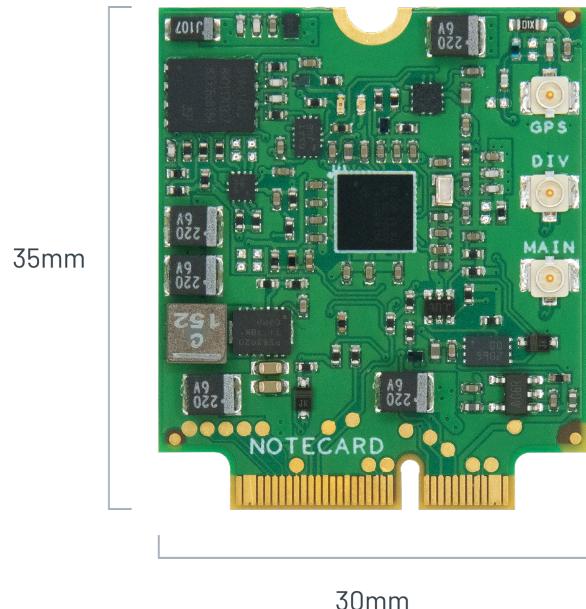
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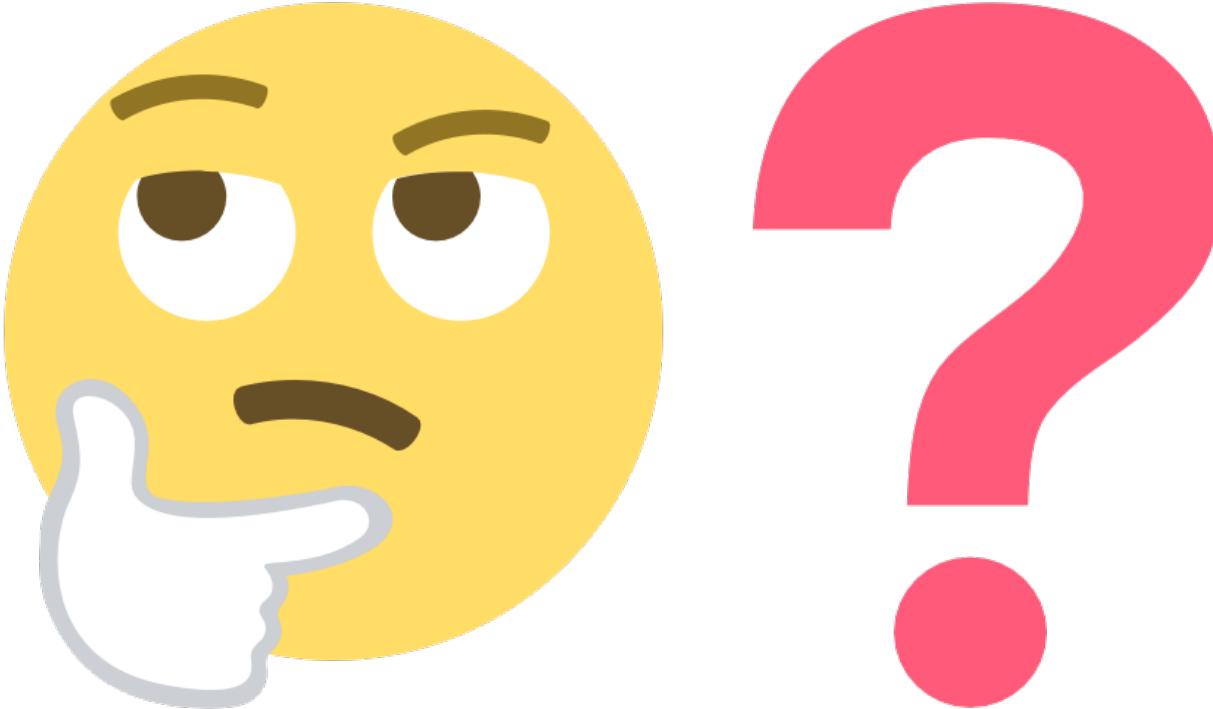
Complexity kills. It sucks the life out of developers, it makes products difficult to plan, build, and test.

Ray Ozzie - CEO of Blues Wireless

Today's Agenda

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





 blues wireless



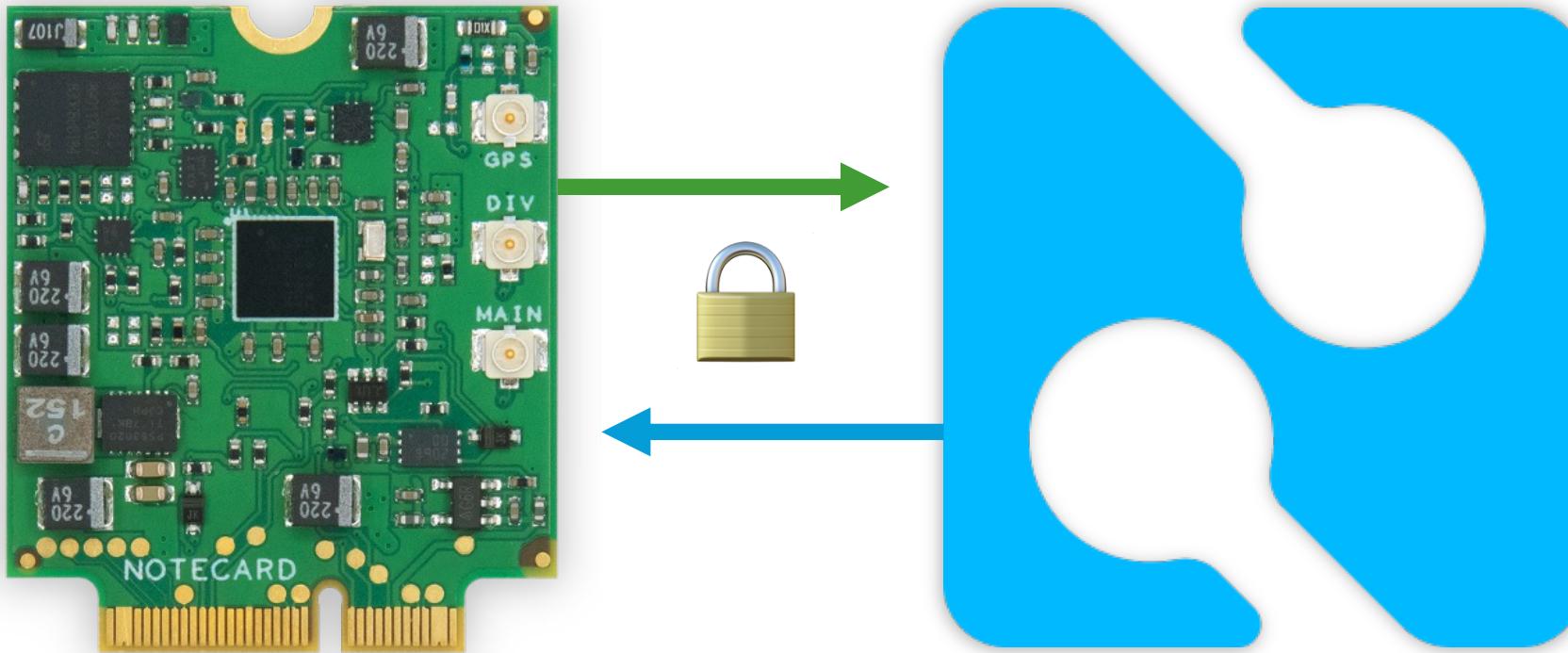
**"Making wireless IoT easier for developers
and more affordable for all"**



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

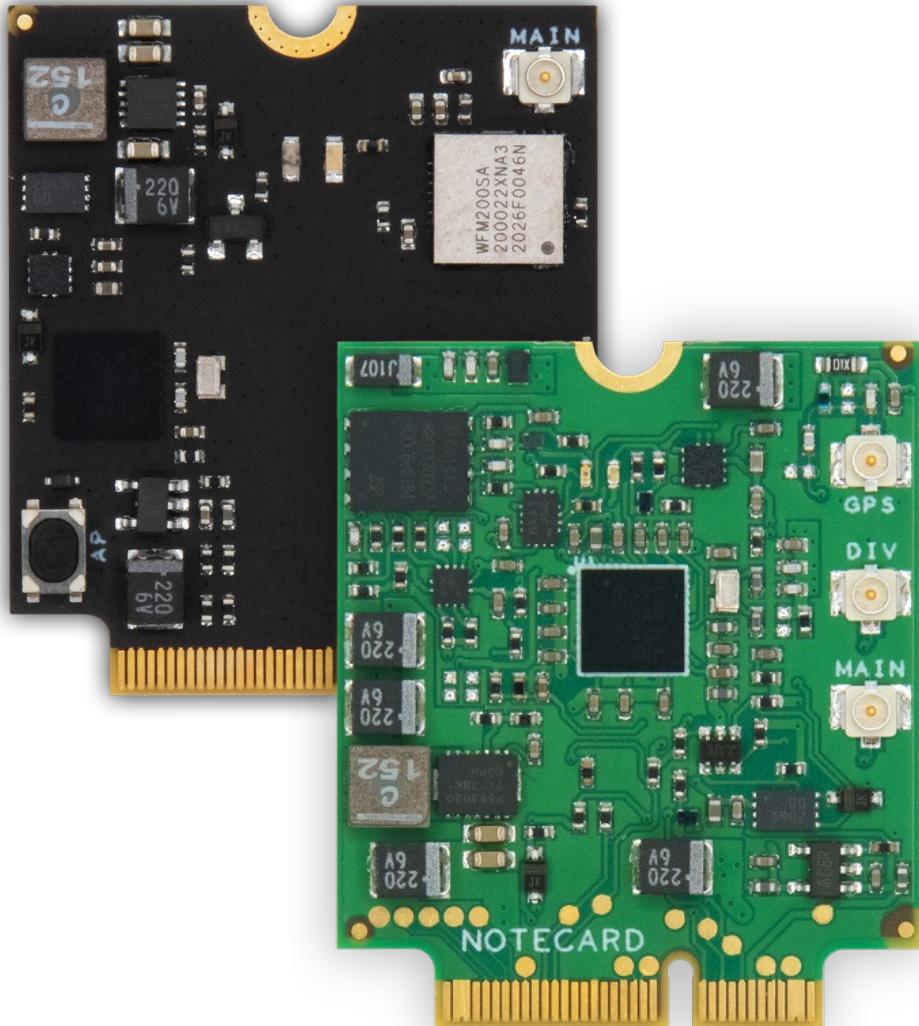
- 🔒 Securing your data from device to cloud
- 🔋 Building zero-config low-power hardware
- 💻 Providing an unmatched developer experience

“Device-to-Cloud Data Pump”



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



Example: *card.location* API

Request

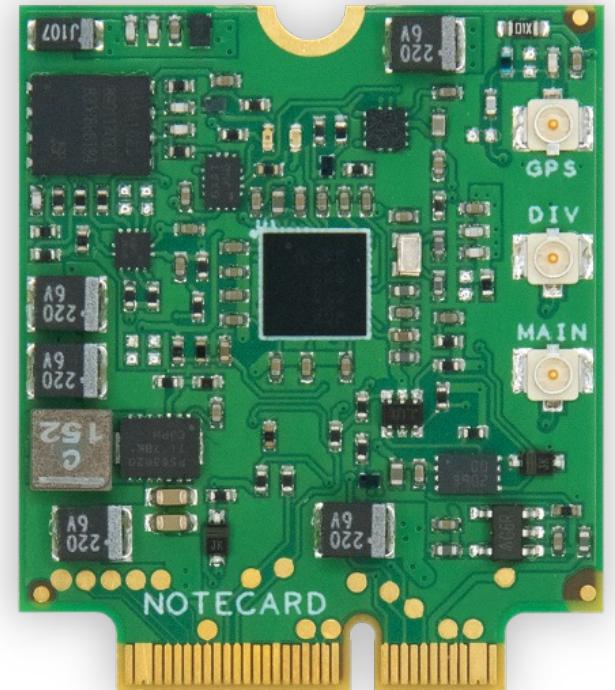
```
{ "req": "card.location" }
```

Response

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

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

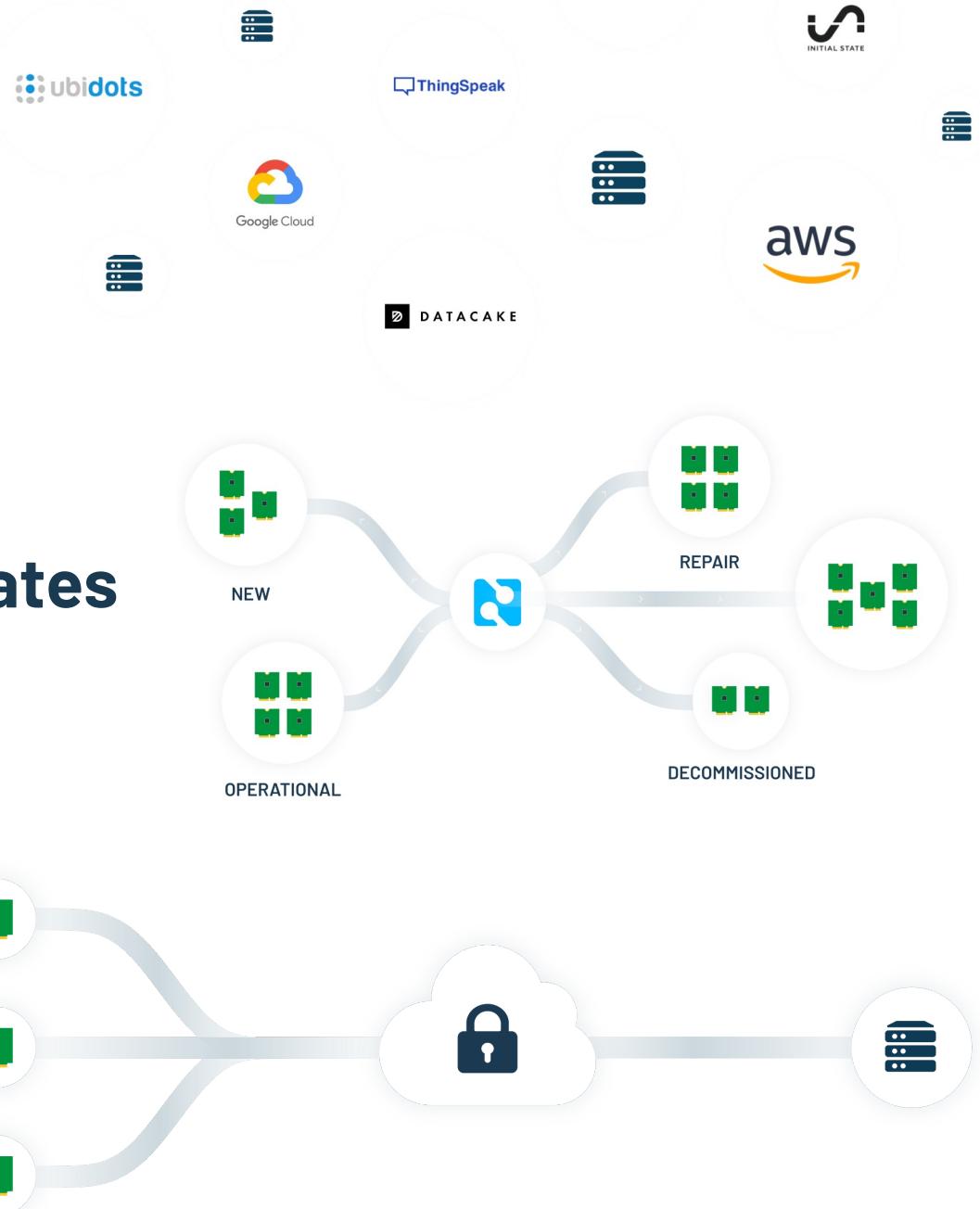
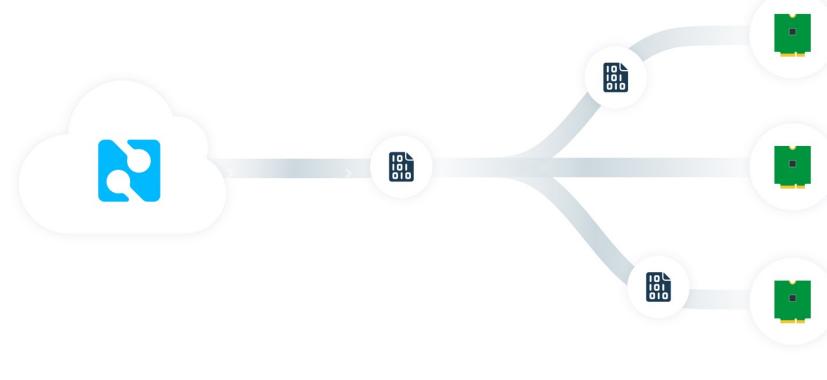
- Carrier boards for easy prototyping
- Notecarrier for every scenario:
 - **F** - Feather-compatible socket
 - **A** - Any MCU, onboard antennas
 - **B** - Small form factor
 - **Pi** - Raspberry Pi SBC
 - SparkFun MicroMod Cellular Function



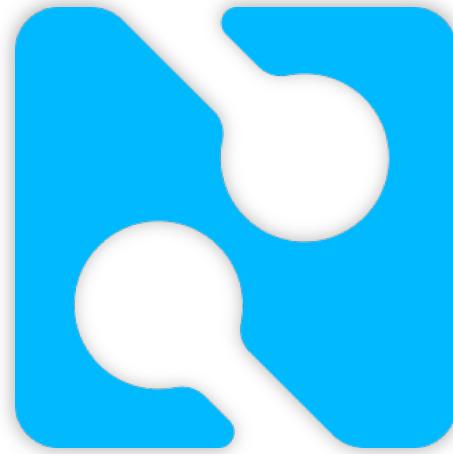
Notehub

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

blues wireless

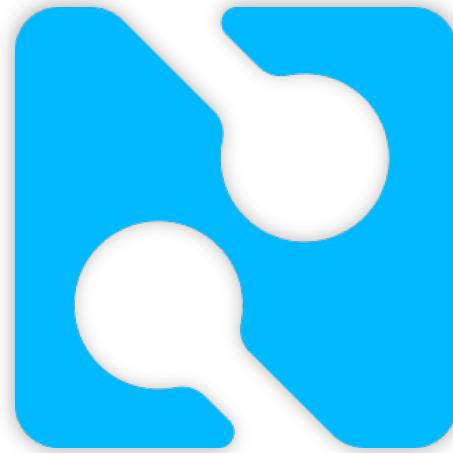


Notehub “Consumption Credits”



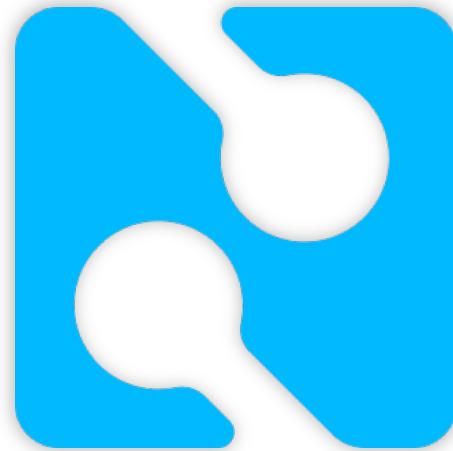
- Only Pay for What You Use!
- Billing Account “Topped Up” to 5,000 CCs Monthly
- Notecard Purchase → 5,000 CCs

Notehub “Consumption Credits”



- **Send an Event to Notehub? FREE**
- **Route an Event from Notehub to Cloud? 1 CC**
- **Pull an Event via API? 1 CC**
- **All other API requests? 0.001 CC**

Notehub “Consumption Credits”



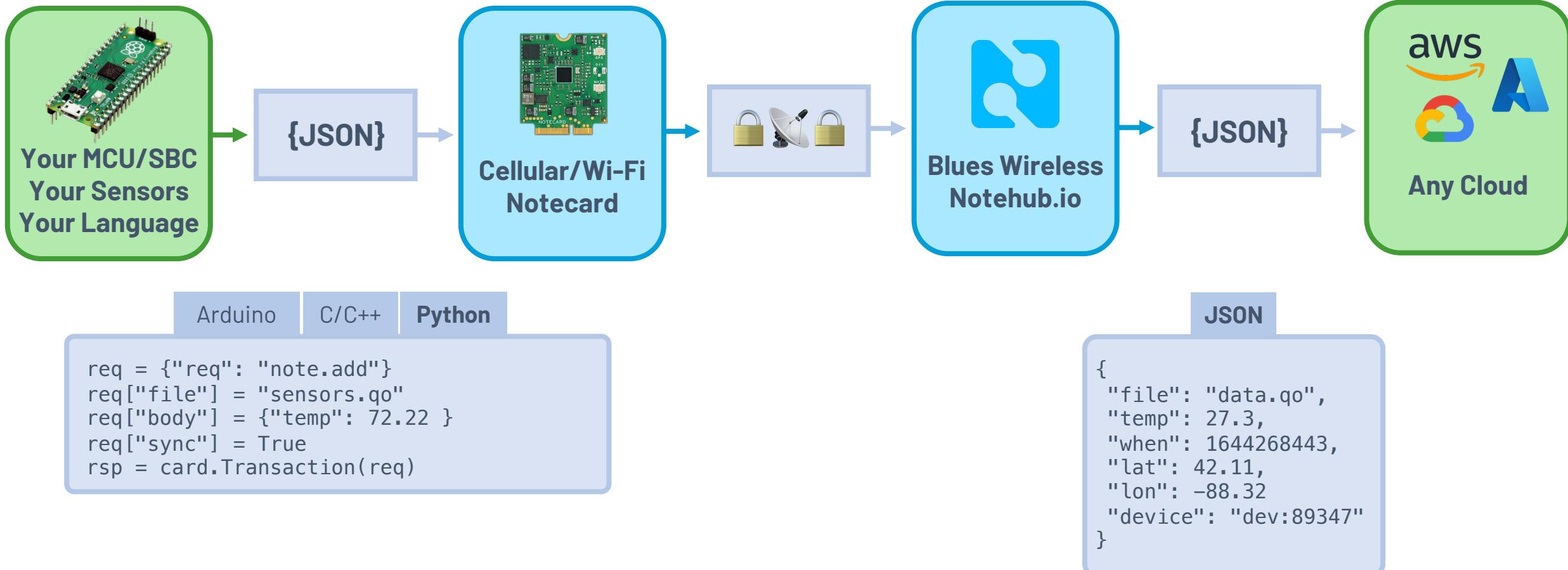
Volume Discounting

If you require more Consumption Credits, you can purchase more with volume discounts.

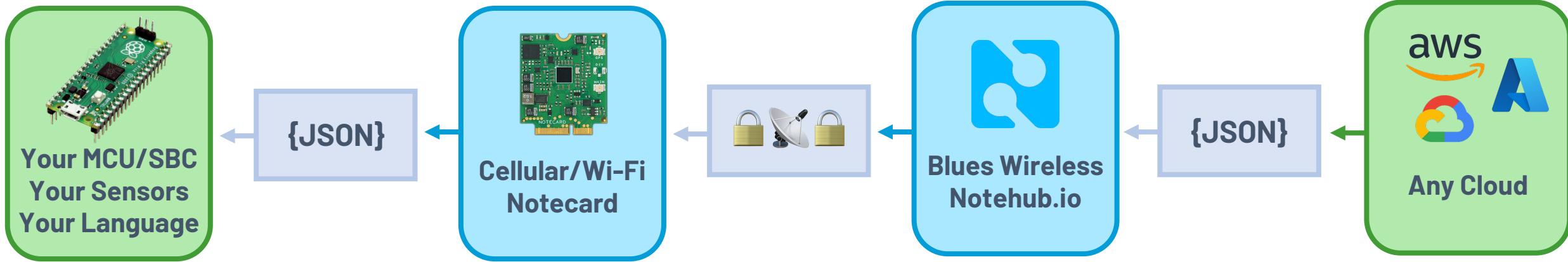
Base Unit Price \$0.000750

Quantities Starting From	Cost	Discount	Unit Price
15,000	\$11	0%	\$0.000750
1,000,000	\$563	25%	\$0.000563
10,000,000	\$3,750	50%	\$0.000375
20,000,000	\$4,500	70%	\$0.000225
50,000,000	\$9,375	75%	\$0.000188
100,000,000	\$15,000	80%	\$0.000150

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!

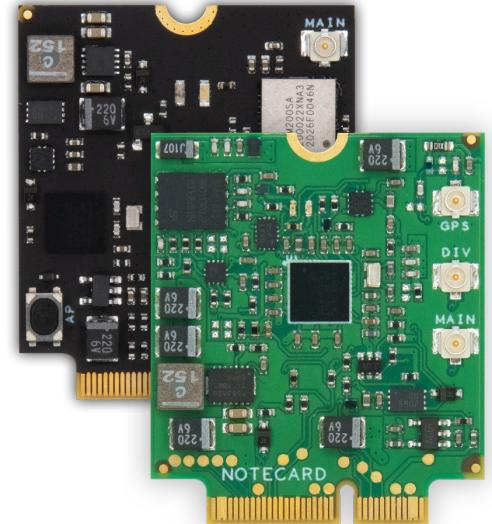
- **dev.blues.io** for Blues Wireless resources
- 15% off Starter Kits @ **bit.ly/blues-get-started**



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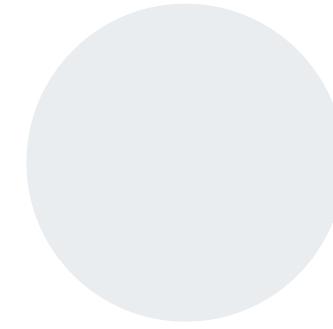
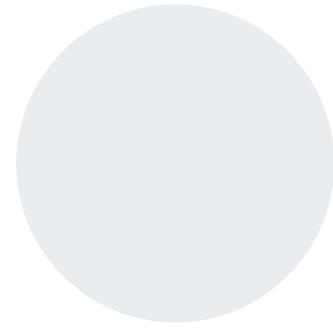


 blues wireless

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John Doe, VP of Engineering





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03



04



05



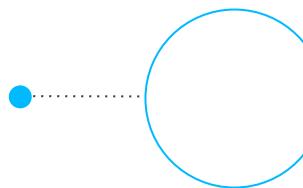
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Demo

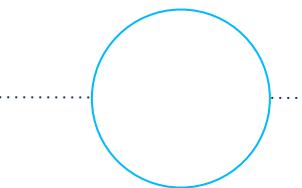


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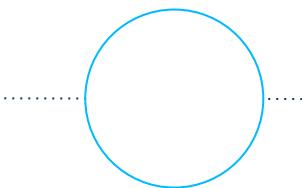


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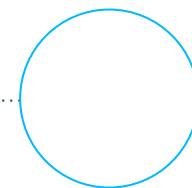
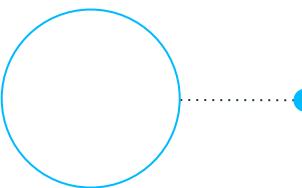
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01

PRESENT YOUR

**Amazing
Story**

02

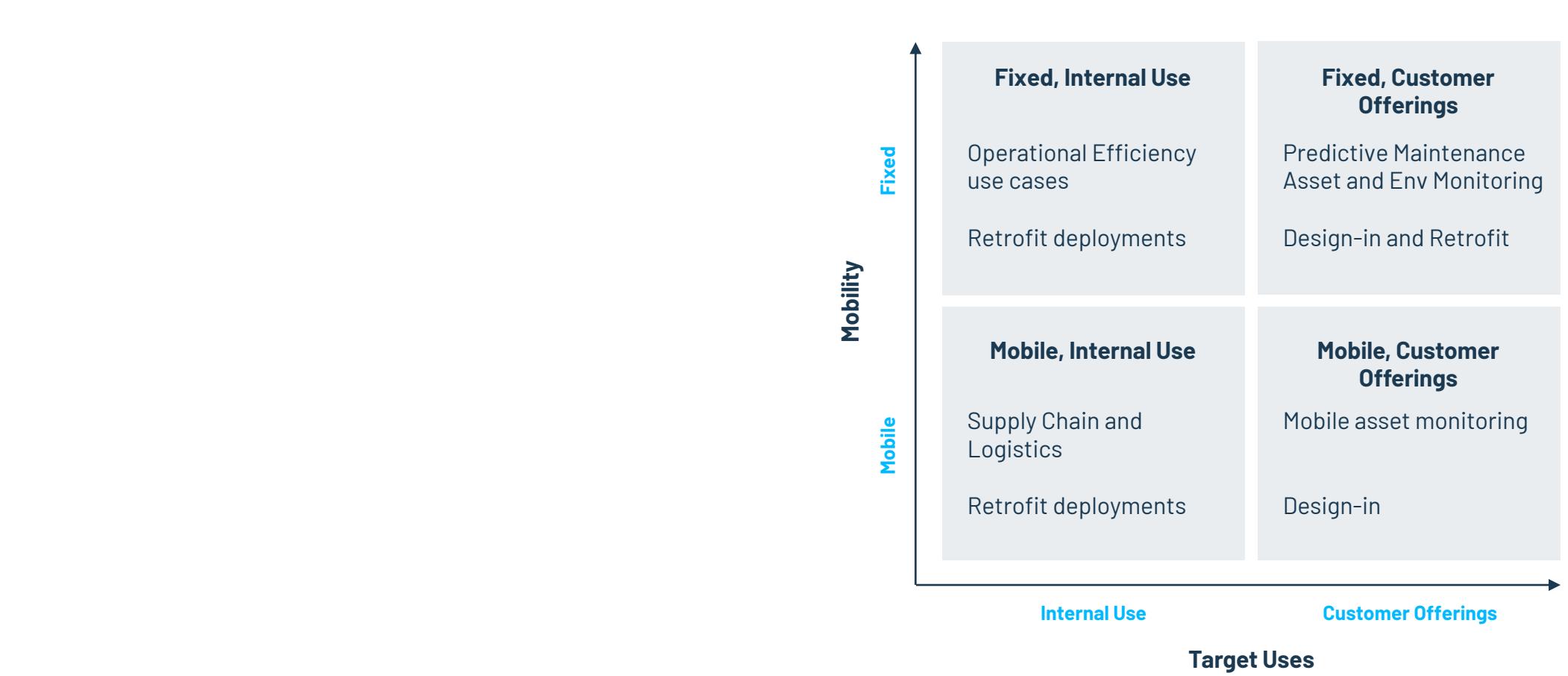
PRESENT YOUR

**Amazing
Story**

03

PRESENT YOUR

Amazing Story



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