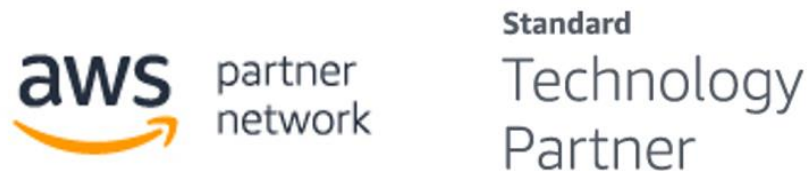


neoOBD2 & AWS IoT Low-cost Data Capture

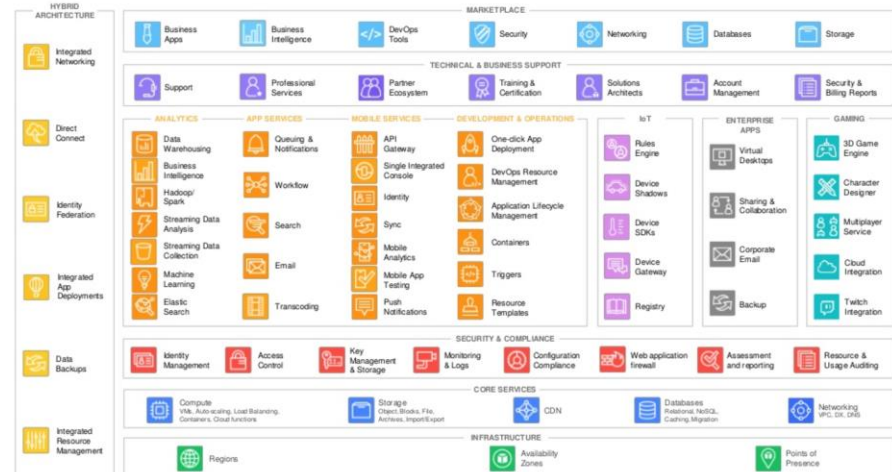
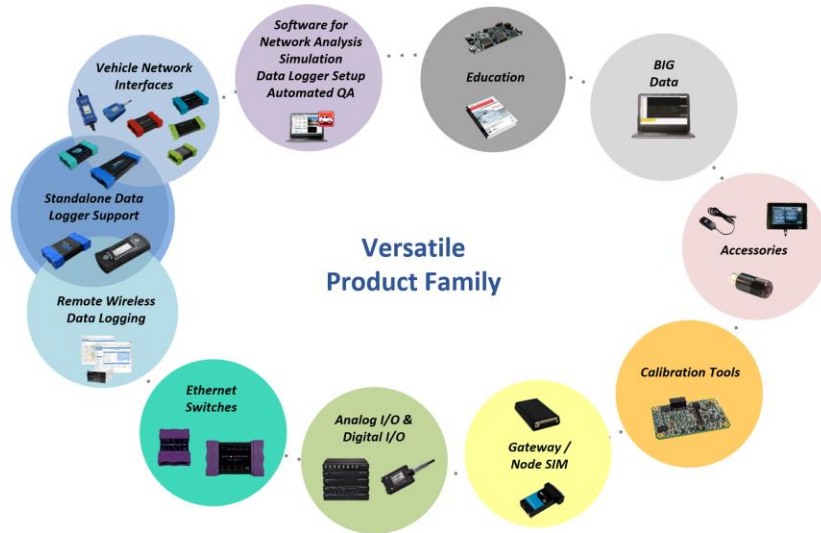
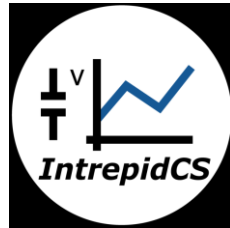
Jay Chung

Product & Applications Manager



1

The Intrepid & AWS Partnership



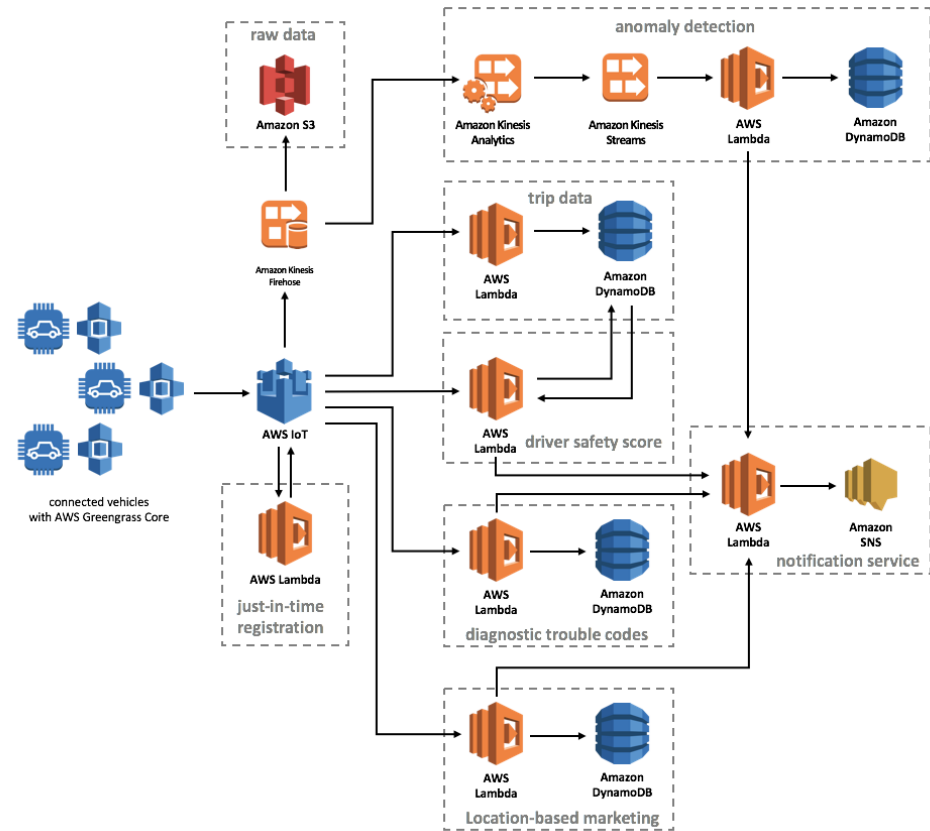
25+ Years of Experiences in
Providing Vehicle Network Tools

The World's Largest On-demand
Cloud Computing Platform Provider

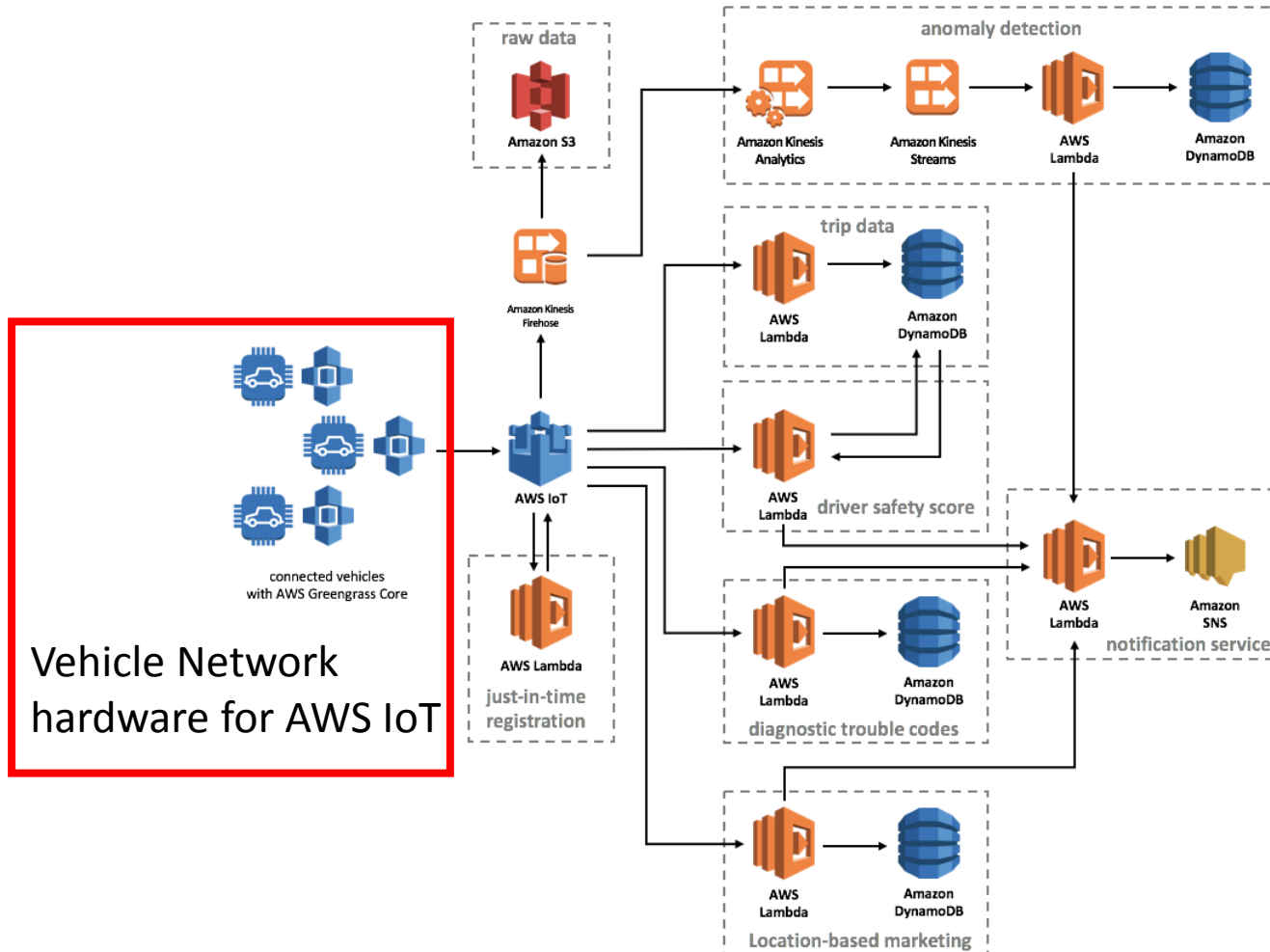
2

AWS Connected Vehicle Solution

- Enables customers to build serverless IoT applications that gather, process, analyze, and act on connected vehicle data, without having to manage any infrastructure.
- Connect vehicles and devices to the AWS Cloud securely with AWS IoT
- Combine AWS IoT with other AWS services to build applications
- Framework for connected vehicle services: focus on extending the solution's functionality rather than managing the underlying infrastructure operations.



AWS Connected Vehicle Solution



neoOB2: Automotive IoT Reference Kit

Development / Prototyping

Production / Deployment



neoOB2 PRO

- Development kit in dongle form
- 4x CANFD / 2x LIN / 1x Ethernet
- Programmable WiFi ARM SoC
- Programmable BLE ARM SoC
- Onboard USB JTAG debugger
- Amazon freeRTOS certified interface for AWS IoT
- Available Today



neoOB2 LC BADGE

- Development kit in board form
- 4x CANFD / 1x LIN
- Programmable WiFi ARM SoC
- Programmable BLE ARM SoC
- LTE M1 / NB1 modem with GPS
- Onboard USB JTAG debugger
- Late 2019 Early 2020

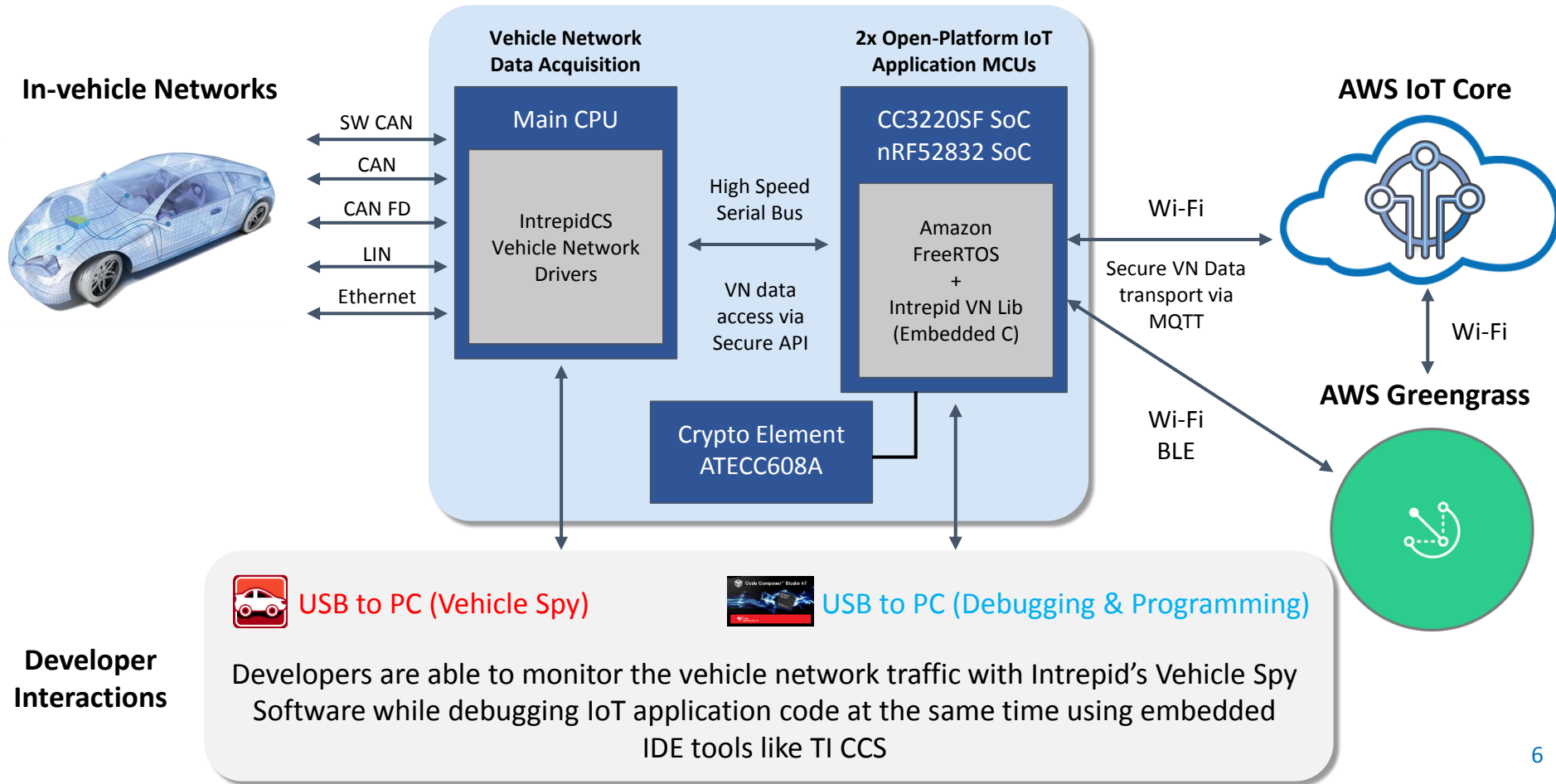


neoOB2 LC DONGLE

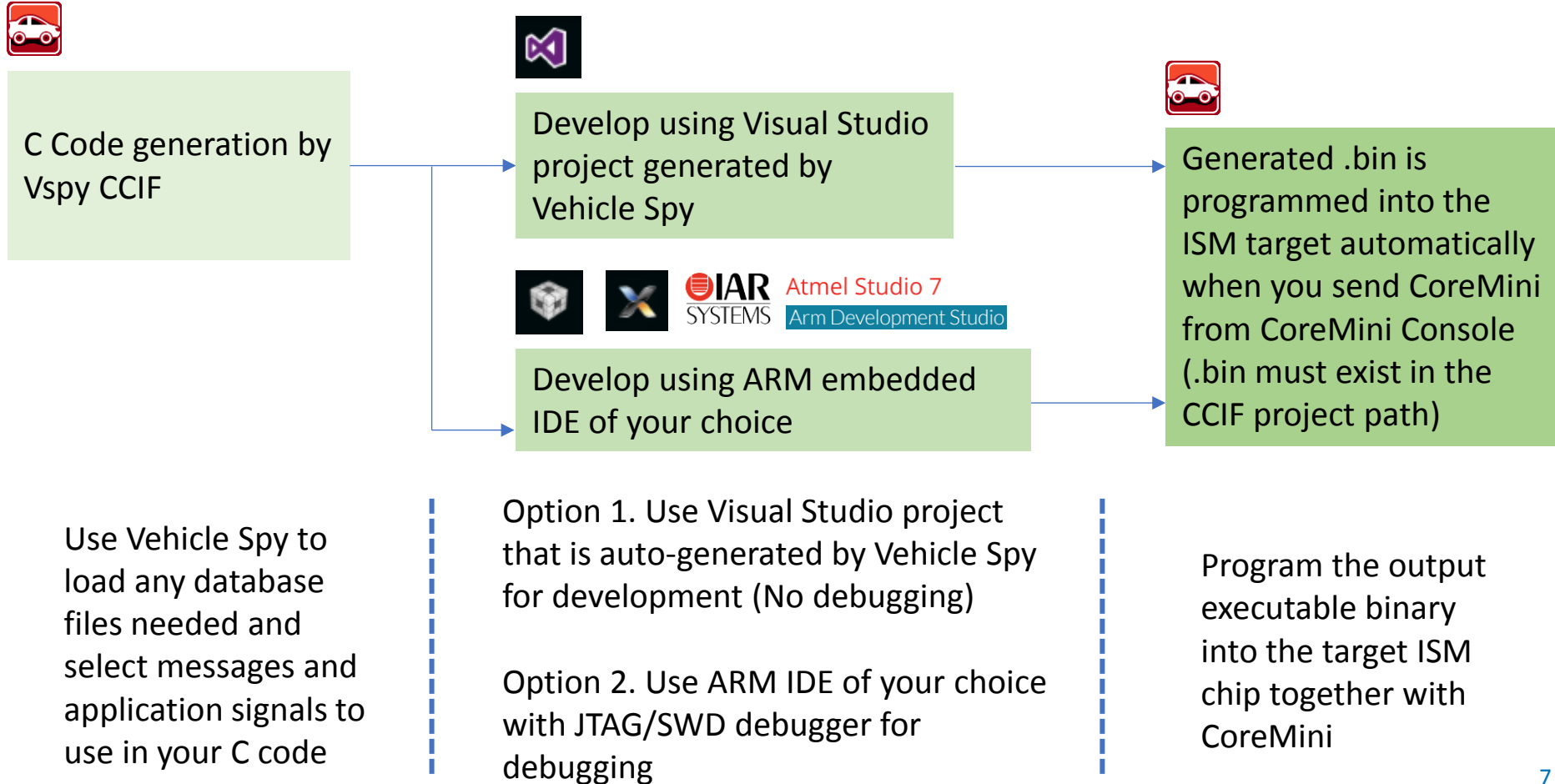
- Mass deployment dongle form
- Low cost with modular design
- Up to 4x CANFD / 1x LIN
- Programmable WiFi ARM SoC
- Programmable BLE ARM SoC
- LTE M1 / NB1 modem with GPS
- Late 2019 Early 2020

Reference Kit for Automotive IoT

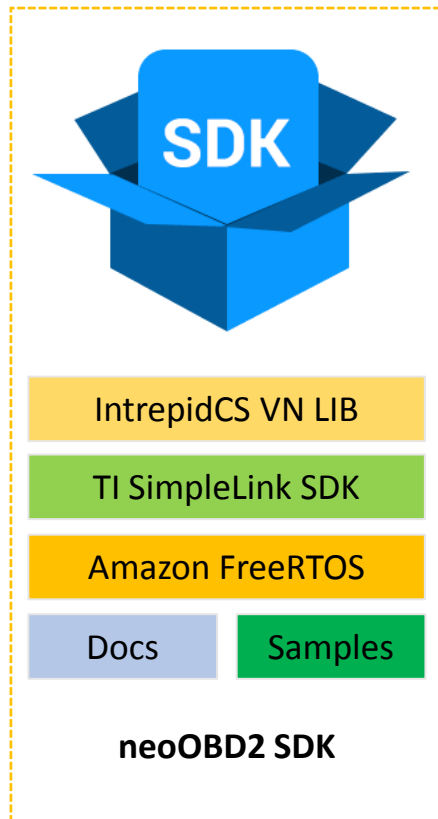
neoOBD2 PRO



Development Process



Development Process



1. Download sample / skeleton projects from neoOBD2 SDK GitHub



2. Focus on building your application logic with vehicle network data



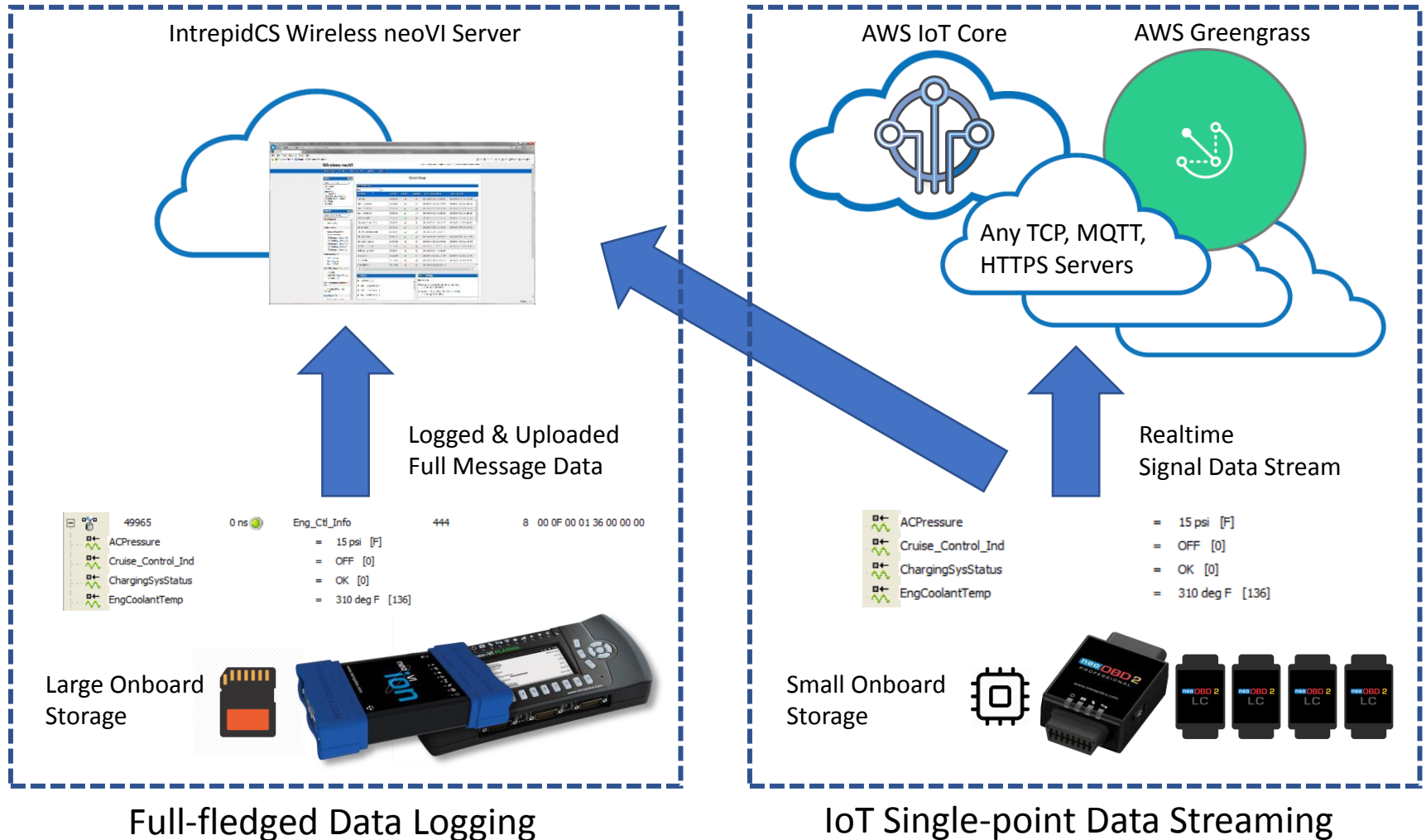
3. Test and debug via onboard USB debugger with neoOBD2 PRO / neoOBD2 LC BADGE



4. Build output and program via Vehicle Spy



neoOBD2 & neoVI ION / PLASMA



9

Development & Deployment Model



neoOBD2 SIM
CAN Simulator



neoOBD2 PRO
neoOBD2 LC BADGE
Full featured model for
development



IntrepidCS ISM LIB

nRF52 SDK

TI SimpleLink SDK

Amazon FreeRTOS

Docs

Samples

neoOBD2 SDK



neoOBD2 LC DONGLE
Lower cost reduced function
model for mass deployment

Development, Debugging, Deployment

Mass Deployment

12

Application: Amazon Echo Companion for Cars



Vehicle Operator

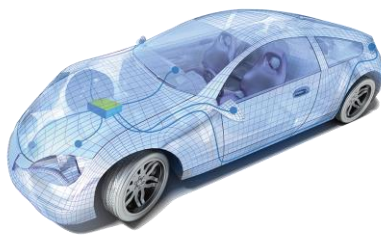
Alexa, why is the check engine light on?
Alexa, how long has it been since my last oil change?
Alexa, read the VIN number.



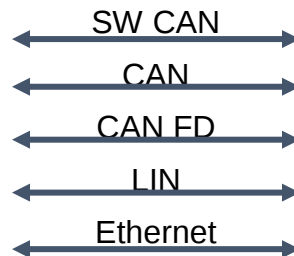
Alexa, roll the windows down.
Alexa, clear trouble codes.

Report requested vehicle data via BLE or through AWS IoT via Wi-Fi

Instruct vehicle to perform desired actions



In-vehicle Networks



Thank You!

Sales:

icssales@intrepidcs.com
+1 (586) 731-7950 x 2

Technical Support:

icssupport@intrepidcs.com
www.intrepidcs.com/support
+1 (586) 731-7950 x 1