

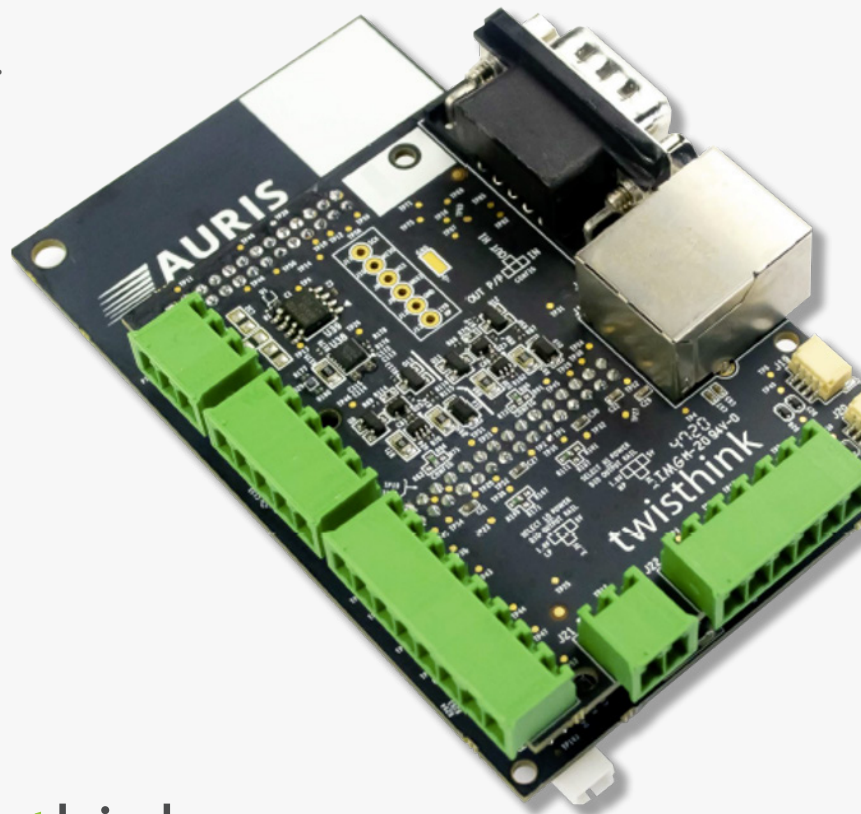
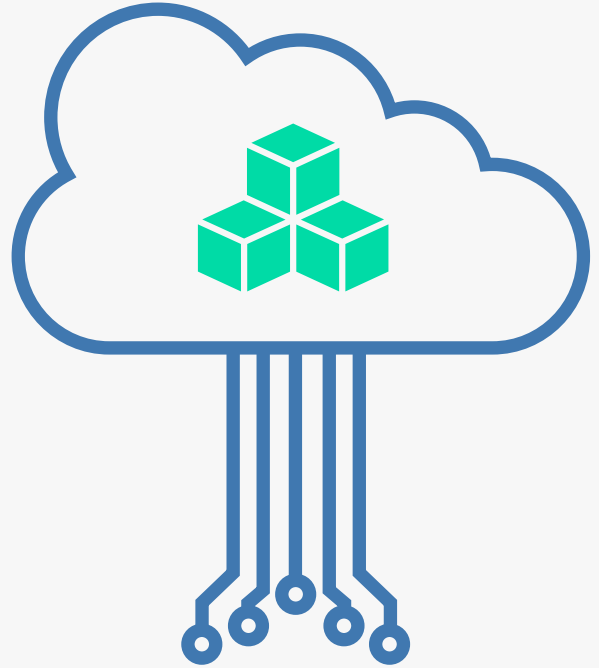
# BUILD CUSTOM CONNECTED DEVICES FASTER

(Without all the risk)

Auris is a pre-built cloud & edge solution that allows you to build custom connected solutions faster while reducing many of the major headaches associated with building from scratch.

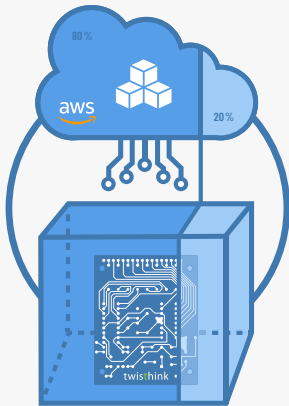
Think of it like purchasing a pre-built foundation for a house. These aren't assets that you rent or lease. They become your property and you can finish the construction based on your specific needs.

If you're designing or building a connected solution, start with Auris.



## How You Can Benefit from Auris

Auris is modular, meaning you can leverage and pay for the assets you need and leave the ones you don't. No long-term commitments or fees needed. The benefits of Auris are unlocked with a one-time IP transfer cost.



1

### AURIS IOT

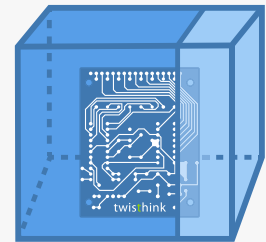
You have a business case and you need a connected device plus cloud solution to make it real



2

### AURIS CLOUD

You have a device and you want to connect it to complete your offering



3

### AURIS EDGE

You want to add a connected custom device to your existing cloud solution

## A better way to build custom IoT devices

FULL CUSTOM /  
REFERENCE DESIGNS



OFF THE SHELF /  
SAAS & PAAS

Highly Customizable

Full Ownership

Highly Scalable

Unproven Assets

Long Lead Times

Limited Capability

Vendor Lock-in

Limited Scalability

Stable operation

Quick Speed to Market

## The best of both worlds



Fully Custom

Makes IoT  
Ownership Possible

Adapts To Your  
Application

Faster Time  
To Market

Lowers Development  
Cost & Risk

Off the Shelf



## Pre-built features for your next solution



**PROVEN** Every new technology has inherent risks. Our device platform significantly lowers risks by following best in class design patterns based on a decade of IOT experience and by reusing components our team has successfully deployed at scale.



**SCALABLE** With IOT Workflows aligned with global cloud providers, a dedicated production intent device and optimized data flow from device to cloud, the economics and management of our platform ensure scalability.



**CUSTOMIZABLE** While the core platform utilizes many proven components, flexibility to customize it to your application is accomplished by a modular software design and a full featured hardware core which supports easy expansion.



**AI READY** With the core compute platform “on the shelf”, data collection and proof of concept trials can be initiated early, leading to smart design choices. Once deployed the extra compute and memory space afford powerful ML algorithms.



**SECURE** A full stack security strategy leverages best practices ensures the privacy and control of the data on each device, in transit and in the cloud without over burdening the commissioning process.



**BATTERY OPERATED** Many IOT device are deployed in places where getting power is either difficult to access or not available at all. Our ultra-low power management system allows devices to operate remotely on batteries for extended periods of time. In some cases, beyond 10 years.

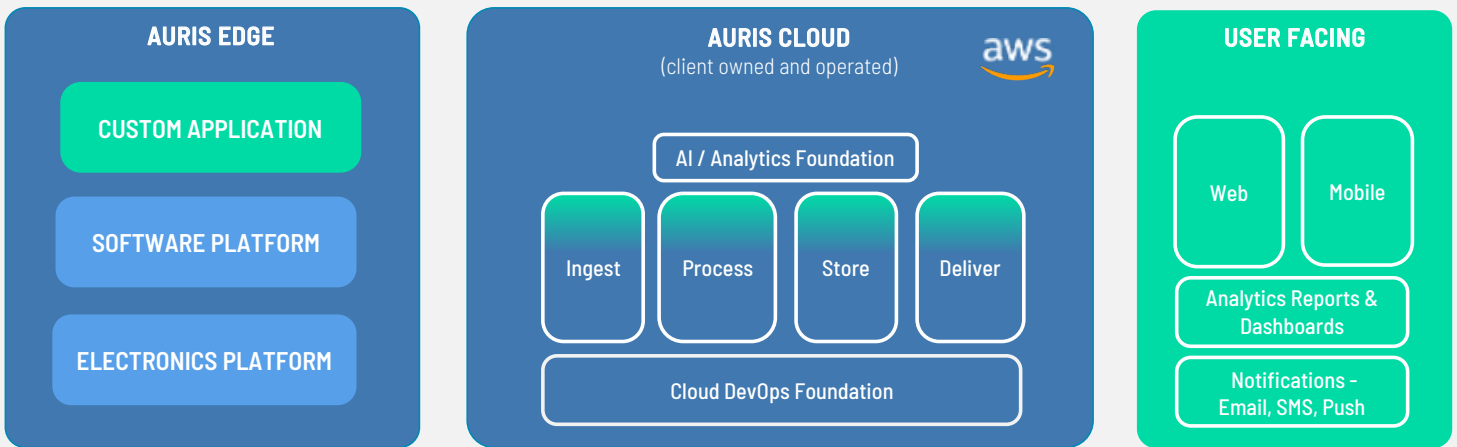


**CELLULAR CAPABILITY** Common connectivity protocols are provided in the base platform, including RS232, CAN, Ethernet, Bluetooth. Most importantly, on-board cellular connectivity enables quick deployment during and after development by bypassing many of the challenges associated with local IT based options.



**EMBEDDED SENSORS** The base platform provides common sensors like accelerometer, gyro, and temperature. More conditioned interfaces to the processor are provided, allowing for the addition of application specific sensing devices.

## Technical Details. Top Level Architecture.

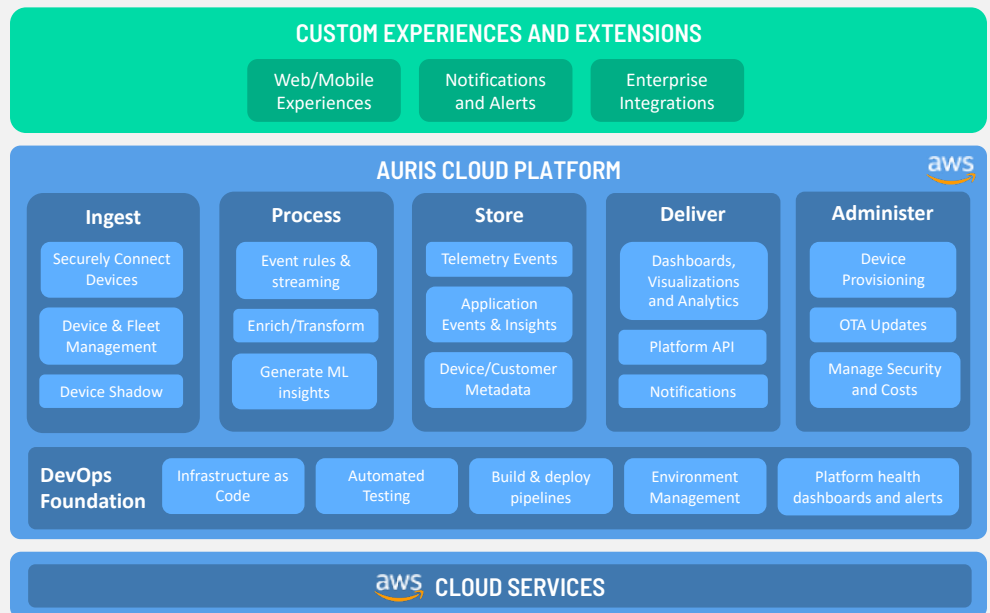


● CUSTOM ● PRE-BUILT ASSETS

Out of the box support for native AWS services leverages scale and economy of the Amazon platform

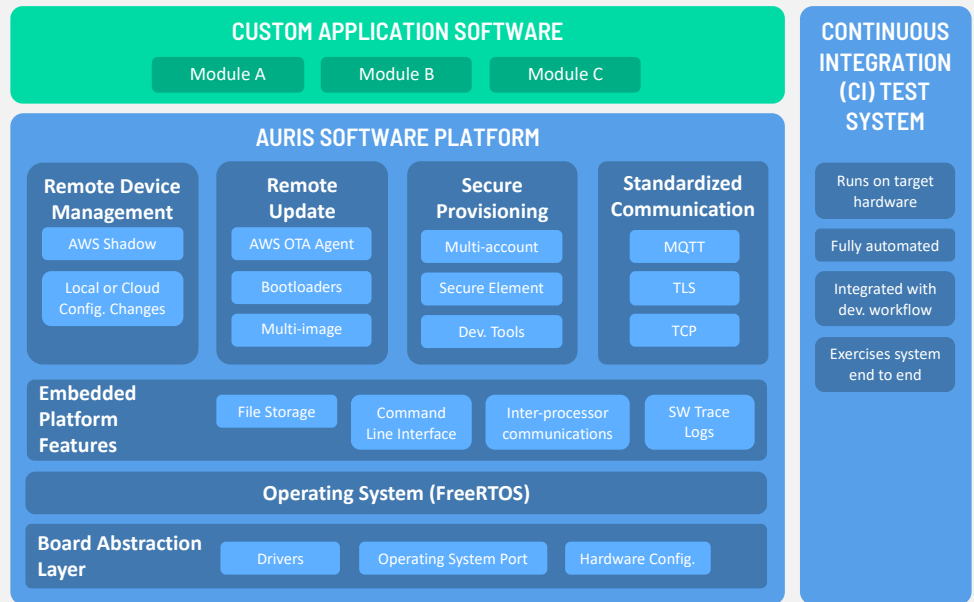
### CLOUD STACK

- Serverless architecture delivers the scale and power of AWS with services such as IoT Core.
- Enables client ownership for best-in-class cost and scalability.
- Modular approach provides flexibility and easy customization.
- The DevOps foundation ensures that the solution can effectively mature and scale.



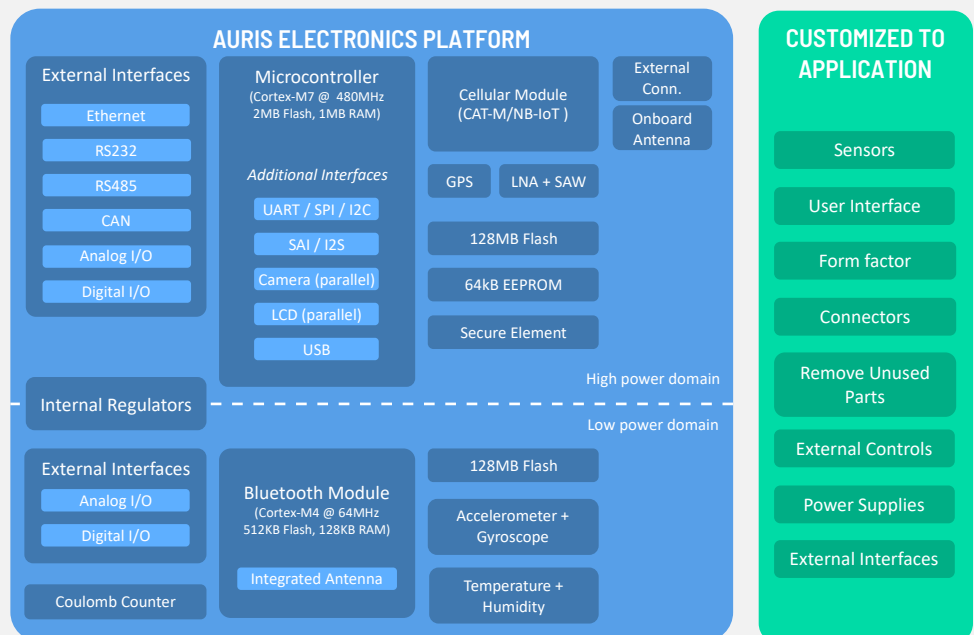
## FIRMWARE STACK

- FreeRTOS and AWS libraries create a seamless integration with IoT Core and the AWS cloud.
- The integrated security solution follows industry best practices and enables devices to connect out of the box.
- Board abstraction layer supports porting to alternate processors.
- Local data capture to support connectivity outages without data loss.
- CI/CD framework integrates with cloud for automated end-to-end testing.



## HARDWARE PLATFORM

- Delivers quick proofs-of-concept based on a production-intent foundation.
- Includes the compute needed for AI/ML processing of data right on the device.
- Supports a wide range of use cases with the mix of on-board sensors and external interfaces.
- Hardware-based security credential storage establishes a strong root of trust.
- All high-risk hardware blocks have been hardened and tested for 100% functionality.





## Jumpstart your custom IoT solution with Auris.

Connect with Twisthink to learn how you can apply the benefits of Auris by emailing us at [hello@twisthink.com](mailto:hello@twisthink.com).

**LET'S CONNECT**

