Celadon

-- 从边缘到云，无所不在的安卓

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英特尔软件架构师

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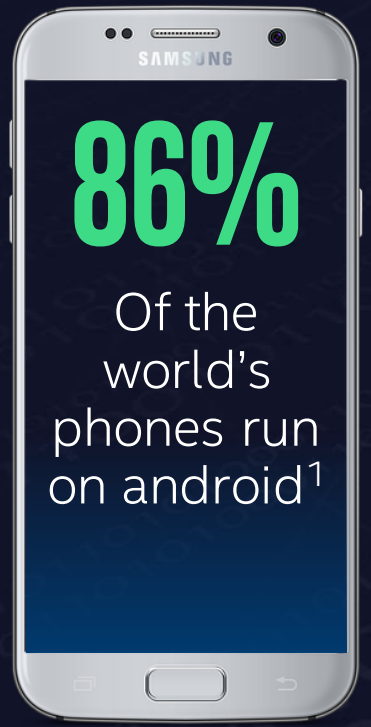
Android* Smartphones



86%

Of the world's phones run on android[1]

2.1%

Android volumes growing CAGR 2018-2023[1]

1.32B

Expected number of phones to be shipped with Android in 2023[1]

5.8%

Increase in ASP of Android based phones in 2019[1]

In the growing 5G Market, Android is Strong

1. IDC – Smartphone Market Share – 18 Jun 2019 (source)

Android Growth Outside of Mobile

78%

of business device shipments worldwide are Android[1]

68%

of new BYOD devices in 2018 were Android in enterprise market[1]

23%

growth over next 5 years of Android rugged devices[1]

5X

the rate of the rugged market overall[1]

Strong Android adoption across a range of industries

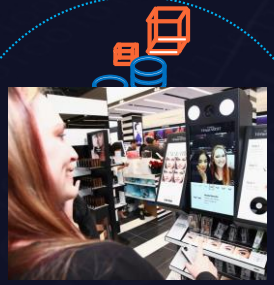
1. Google/IDC – Android Taking Off in the Enterprise – 29 May 2019 (source)

ANDROID

is more than
Smartphones

> **"Containers are the next generation of software-defined compute that enterprises will leverage to accelerate their digital transformation initiatives..."**
>
> *-- Gary Chen, Research Director at IDC*

Digital signage



Retail

Cloud gaming

Automotive

Celadon

基于英特尔架构的安卓开源平台

Smart Cities

Automotive

Retail

Smart Home

Android on IA that JUST WORKS

Celadon

An Android open source platform
for Intel® architecture.

Accelerate Development

open platform enablement
speeds build time
lowering time to market

develop on latest Android releases

Improve Efficiency

Utilize Intel® hardware acceleration

Scale Reliably

shift & evolve deployments

Accelerate Development with Celadon

IA Ready

open platform enabling extends adaptability, **helping developers speed Time to Market (TTM) across a variety of segments**

Optimized

supports a wide range of hardware components enhanced for Intel® architecture making it **easy for rapid prototyping and building new applications**

Verified

compatibility is **verified using the Android Compatibility Test Suite (CTS),** ensuring consistent experiences across application and hardware environments

Refreshed

continued upgrades & security mitigations provide opportunities to realize and scale new features when developing on the latest Android dessert

Scale Reliably across New Markets

Retail

Personalized Shopping Experiences

Inventory Management

Precision Marketing

In-store Path to Purchase

Auto

In-Vehicle Infotainment

Enhanced Diagnostics

Maintenance & Safety

Vehicular Interaction

Edge

Advanced Analytics

Workload Consolidation

Security & Manageability

Smart Cities

Safety & Security

Resident Engagement

Smart Parking

Traffic Flow Monitoring

Cloud Gaming

High Performance Gaming

Social Identity Mapping

AI & Graphics

Interactive Lobby

Project Celadon + developer community enables innovation

Scale Reliably across Varied Infrastructures

Celadon Over Virtual Machine

Highly Isolated

High Extensibility

Moderate Density

Google Apps & Services Support

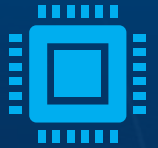
Celadon in Container

Moderately Isolated

High Extensibility

Superior Density

No Google Apps & Services Support



Celadon on Bare Metal*

Highly Isolated

Lowest Extensibility

Lowest Density

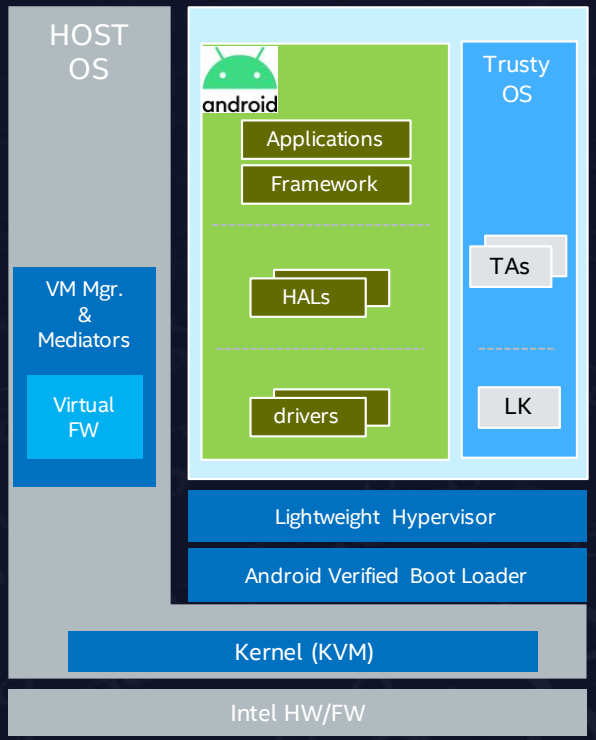
Google Apps & Services Support

Project celadon supports virtual machine & containers on Android 10

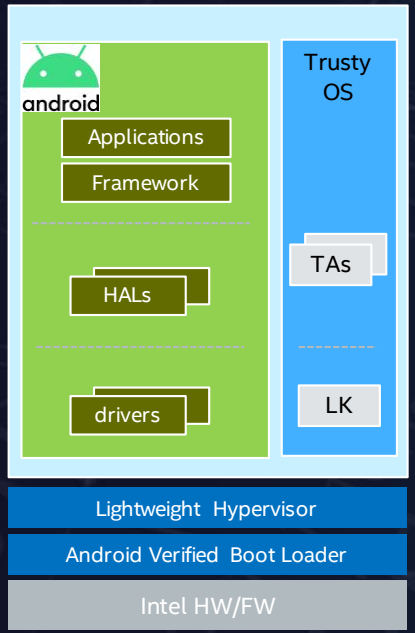
* https://01.org/projectceladon/documentation/faqs

Architectures

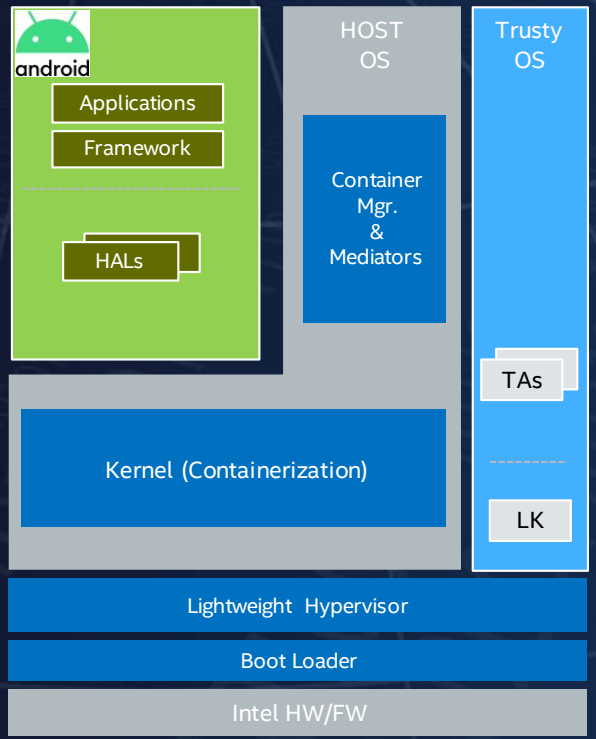
Celadon in VM
(虚拟机)



Bare Metal*
(裸机)



Celadon in Container
(容器)



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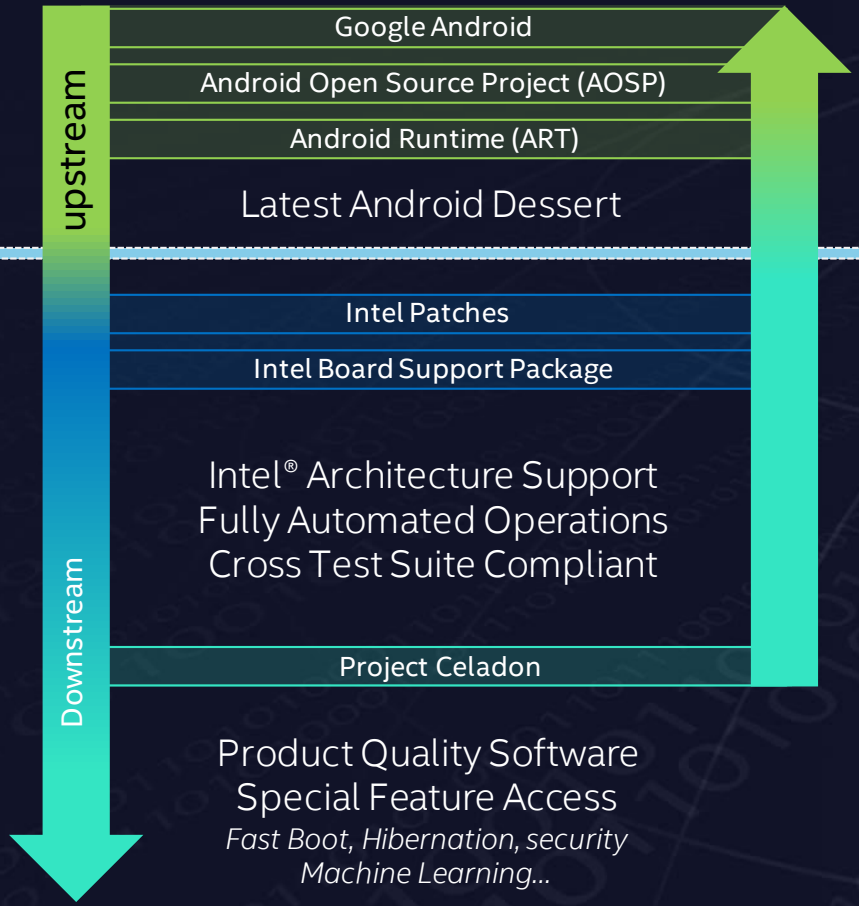
Project Celadon Delivery Model



open platform enabling
helps developers speed Time to Market (TTM) across a variety of segments

Celadon Use Cases

Celadon Usage Case - Digital Signage

Challenges:

Providing flexible Android OS implementations
on performant hardware

Bringing lower cost devices
to large digital signage applications
at rapid speeds

Providing security & support
to innovative visual messaging

Solution

Utilize Intel hardware

"Project Celadon allowed us to focus on building our portion of a solution for our customers. Previously, I would have needed a significant budget for BSP and other hardware related tasks before even being close to building a product."

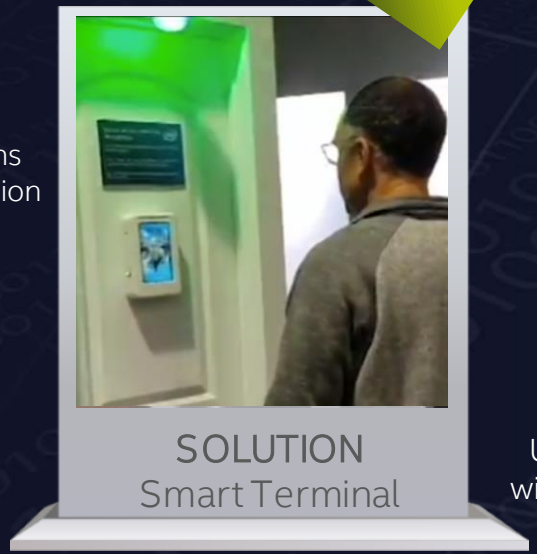
- - Bernard Carter, VP of OEM & Product Development, Now Micro

Celadon Usage Case - Smart Terminal

Challenge:

Rapid Segment Scaling

Quickly develop IoT applications for security & facial authentication at smart terminals



Solution

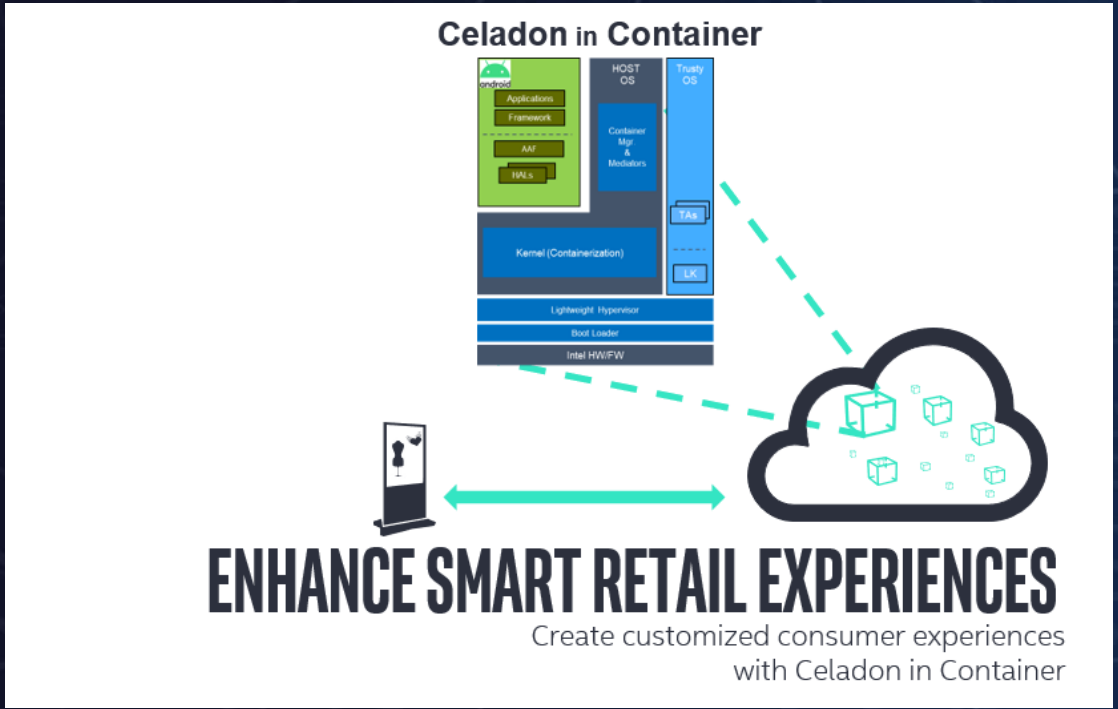
Accelerate Development

Using AI and wireless technology, achieve real time security with 99.8% accuracy in face recognition with Project Celadon

Celadon Usage Case - Smart Retail

Download Solution Brief:

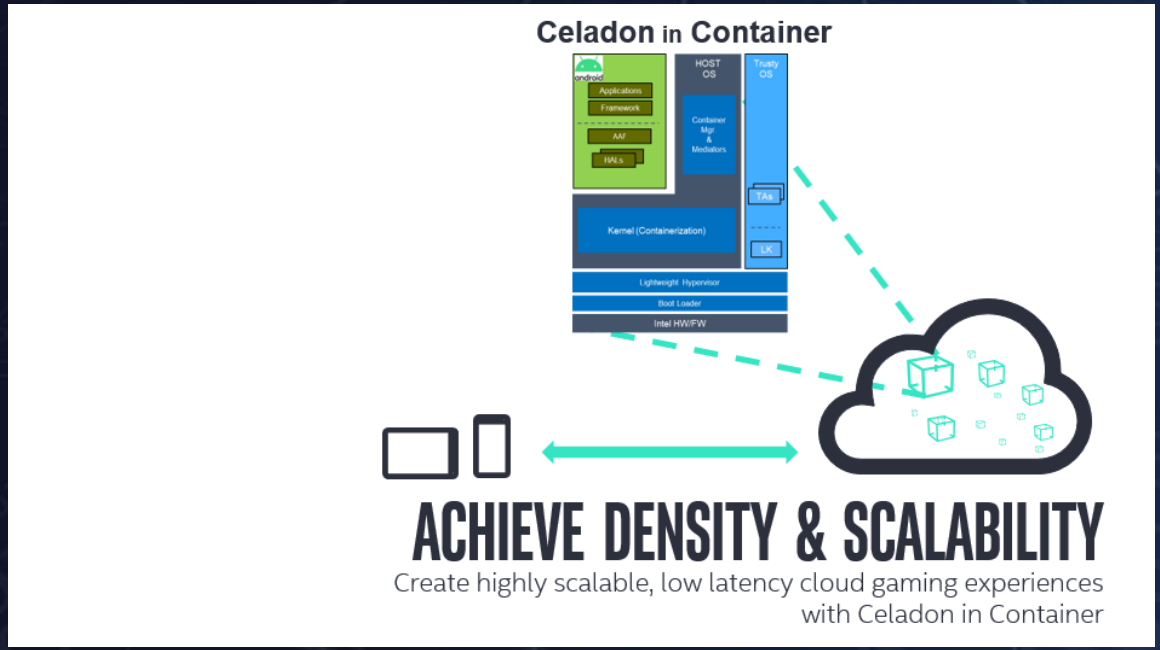
https://01.org/projectceladon/smart-retail-solutions-android-intel-architectures



Celadon Usage Case - Cloud Gaming

Download Solution Brief:

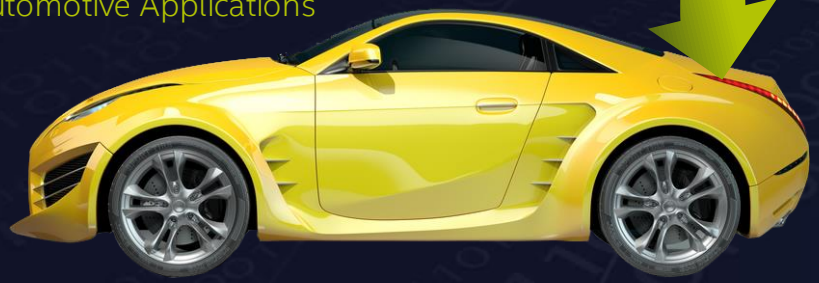
https://01.org/projectceladon/cloud-gaming-solutions-android-intel-architectures



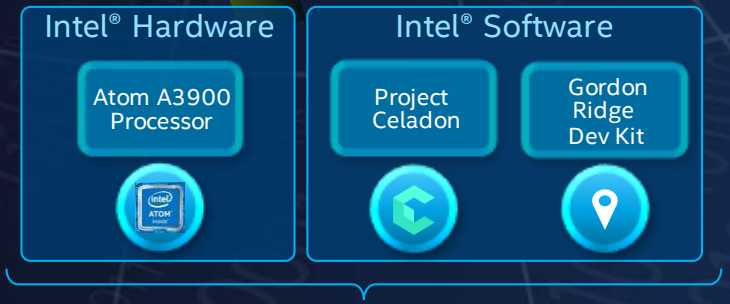
Celadon Usage Case - In-Vehicle Infotainment

Challenge:

Innovative Automotive Applications



Solution



Shift & Evolve Deployments

Tier1s and Car OEMs can start their product development with Celadon on a standard Intel NUC HW platform, then shift the SW stack to Intel's Automotive Platform, Gordon Ridge MRB developer kit.

Call to Action

Learn More

https://01.org/projectceladon

https://github.com/projectceladon

FAQ

Win Customers

Determine if Android on Intel architecture is a good fit for your customers

Suggest Project Celadon for customer product POC use

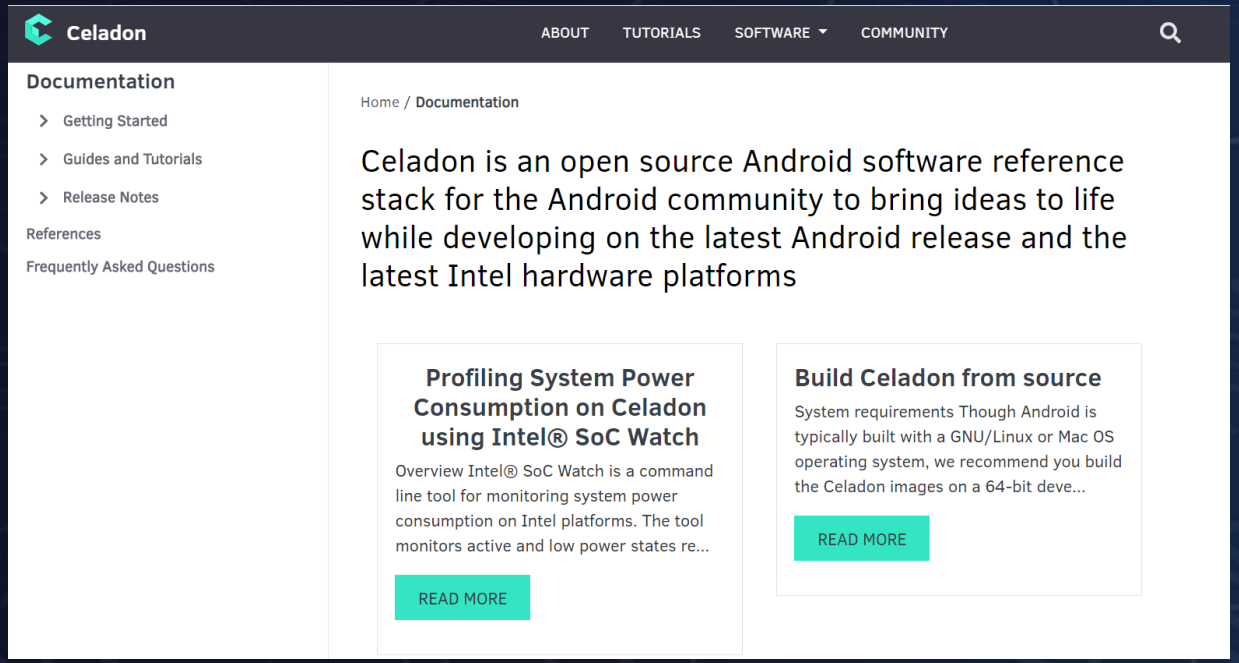
Stay Connected

Join the mailing list to stay inform on community discussions

https://lists.01.org/mailman/listinfo/celadon

How do I Contribute to the Celadon Community?

Visit our Guides and Tutorials https://01.org/projectceladon/documentation



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THANK YOU