

# MiniApp Overview

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# MiniApp Introduction

- A new format of mobile application, running on top of Native Apps or OS
- A hybrid solution which relies on Web technologies (especially CSS and Javascript)
- But also integrates with capabilities of Native Apps.

# MiniApp Landscape

Alipay Mini Program



Baidu Smart Mini Program



Quick App



...

4.5M<sub>+</sub>

MiniApps

10<sub>+</sub>

MiniApp Vendors

1.5M<sub>+</sub>

Developers

400M<sub>+</sub>

DAU

1.2T<sub>+</sub>

GMV

# MiniApp Use Cases

## Buy train tickets

1. In Baidu app
2. Search “train ticket”
3. In search result, choose destination
4. Open “Ctrip miniapp”
5. Choose and buy a train ticket



## Rent a bicycle

1. In Alipay app
2. Click “Scan”
3. Scan the QR code label attached on bicycle
4. Open “Hellobike miniapp”
5. Ask for Location permission
6. Ask for Bluetooth permission for unlocking
7. Unlock the bicycle



## Call a cab

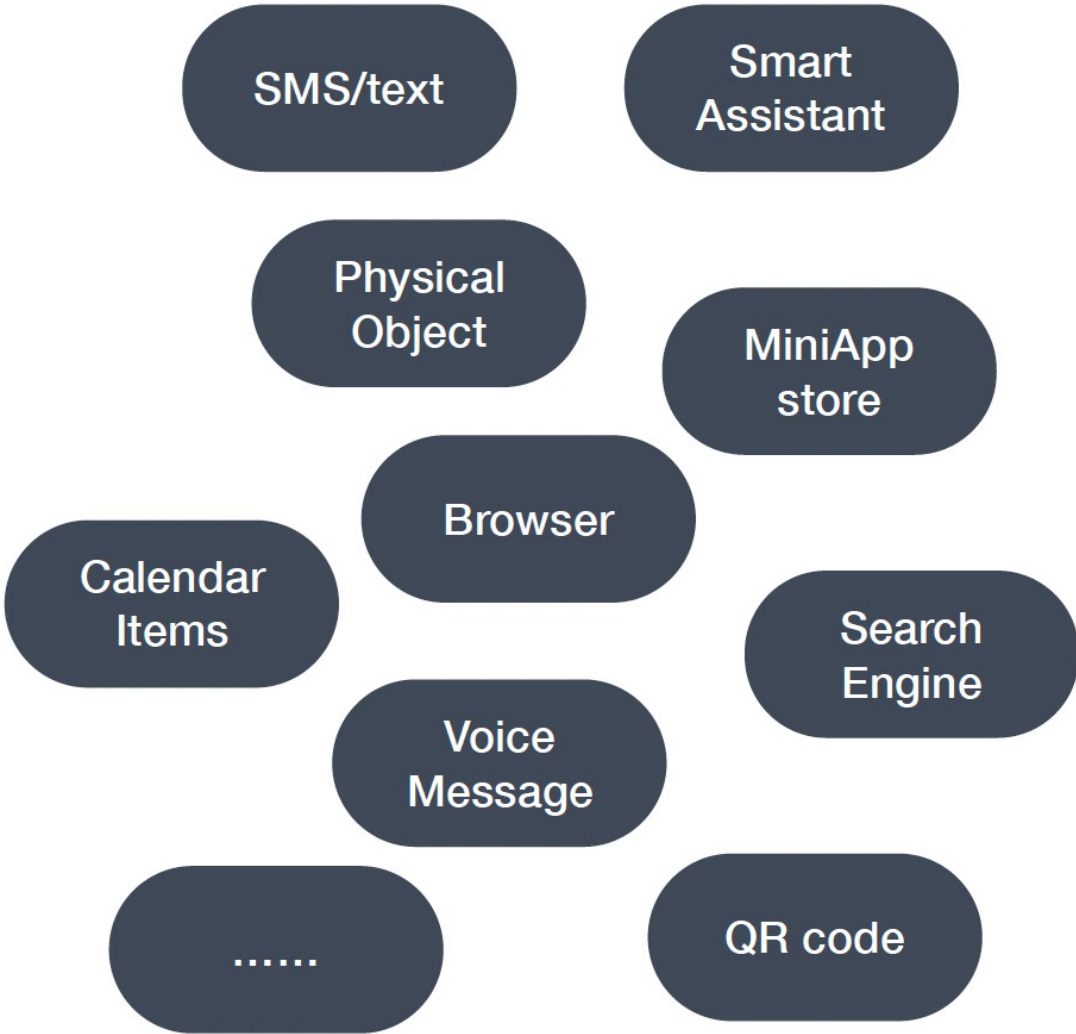
1. Time to go home
2. “Didi widget” shows on smart assistant
3. Choose type and confirm
4. Open “Didi miniapp”
5. Ask for Location permission
6. Use pre-set home address and start calling a cab



# Key features

- Web-like, free of installation
  - Small package (2M-4M)
  - Split packages
  - Streaming
- App-like experience
  - Native API/data access with permission
  - High-level components (e.g. map)
- Discoverable in multi-entries

# Multi-Entries



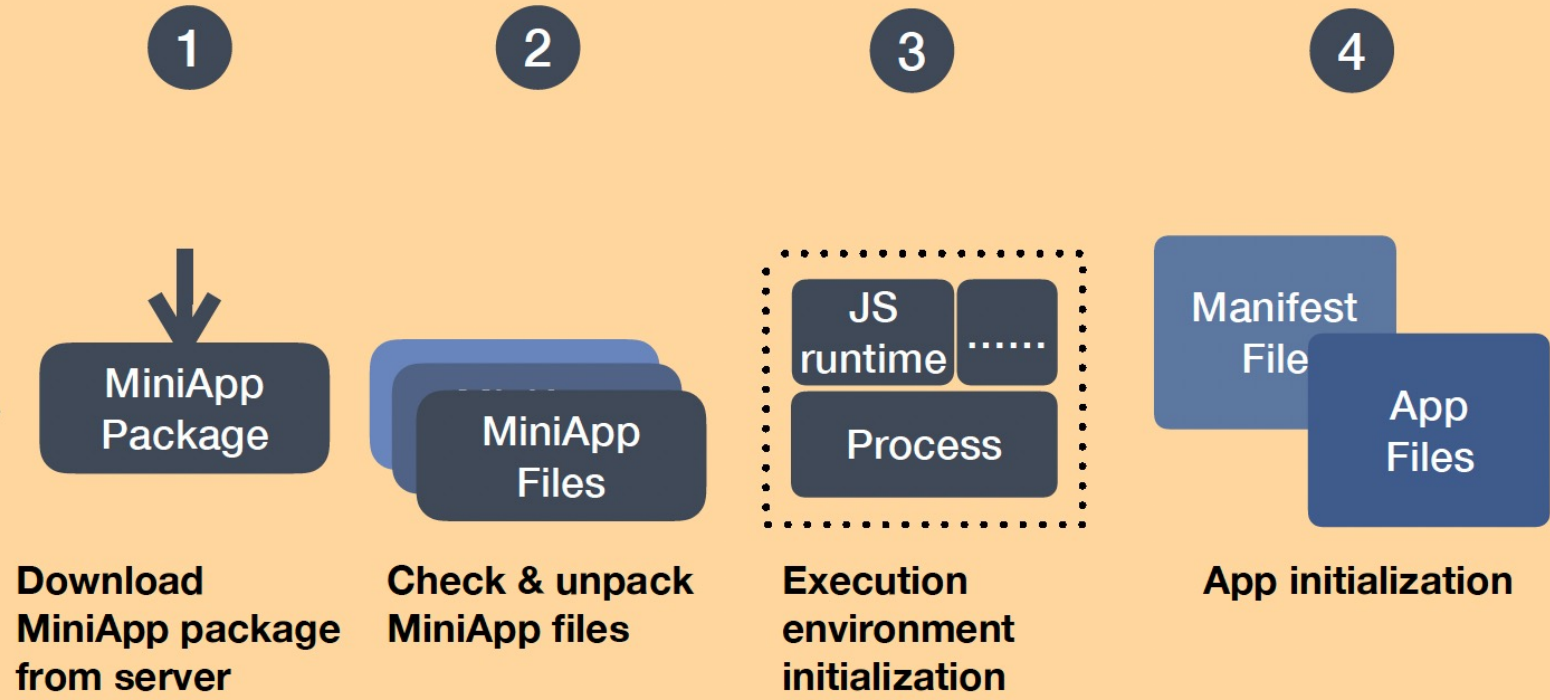
# Single-Instance



MiniApp keeps its status and data in a consistent manner globally

# Launching a MiniApp

Open With  
**MiniApp URI**



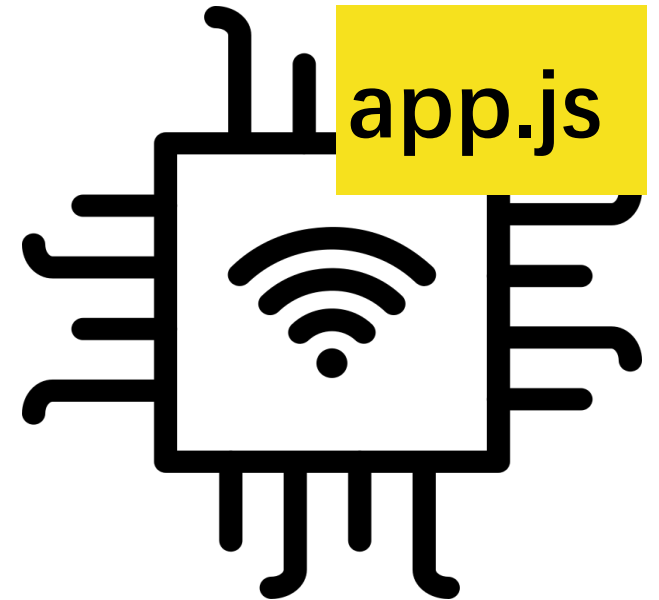
MiniApp Engine



Open & render page

# What is MiniApp for IoT

- MiniApp running on IoT devices
- Share similar architecture of MiniApp running on the cellphone and PC
- Run on top of IoT OS, rather than on Native Apps
- Has its unique features
  - Packaging
  - Lifecycle
  - Extended API for IoT





# Some use cases

Switch panel



Smart speaker



Checkout pad



Video conference terminal



Face recognition terminal

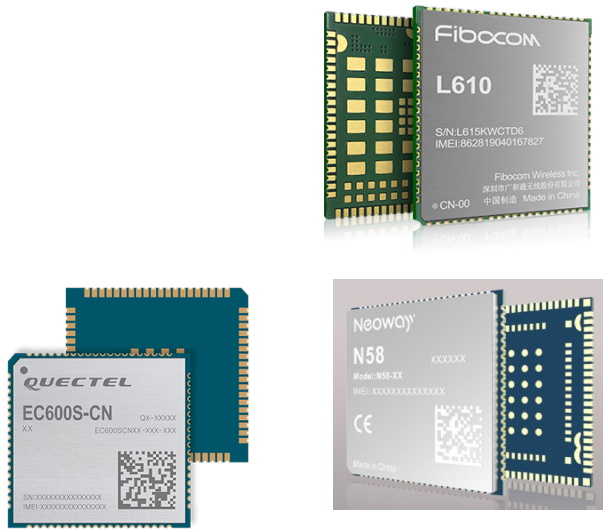


Locator



...

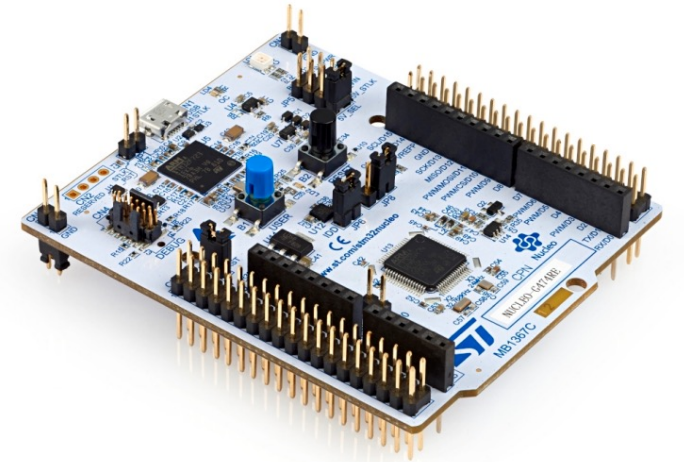
# Hardware supporting MiniApp for IoT



LTE Cat 1 Module

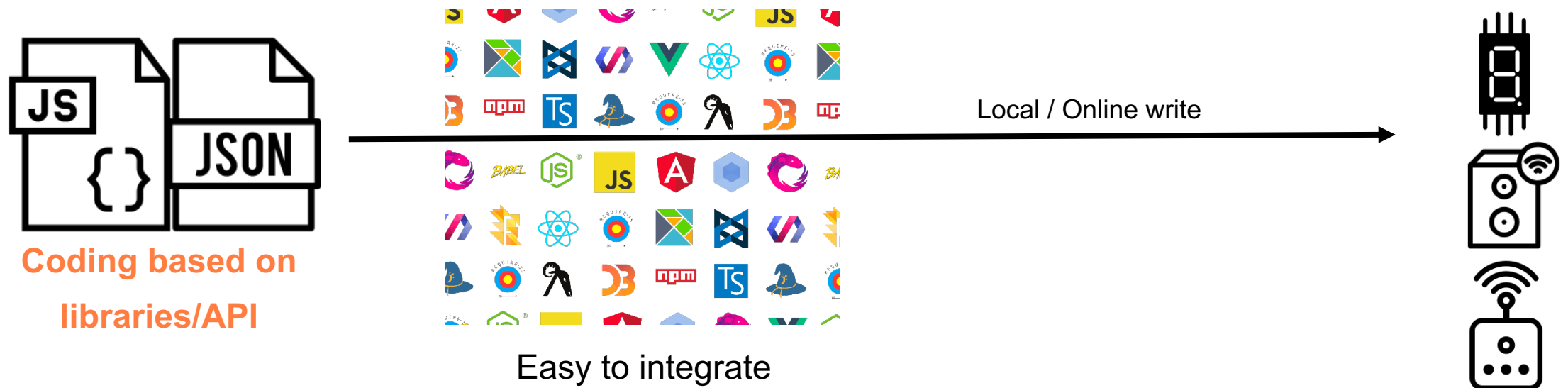
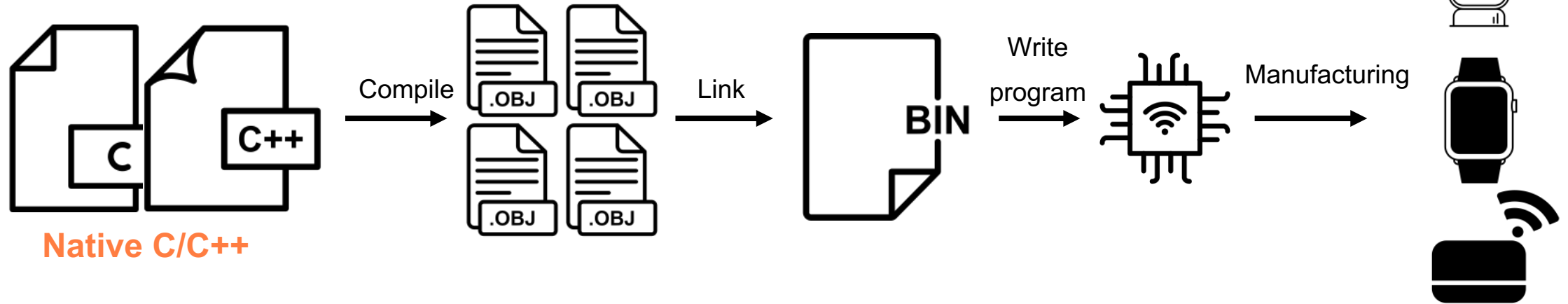


Wi-Fi Module  
(for single SoC solution)



AliOS Things integrated MCU

# Benefits of MiniApp for IoT



# MiniApp specs in development

## WG documents

- Normative specifications
  - Lifecycle, <https://w3c.github.io/miniapp-lifecycle/>
  - Manifest, <https://w3c.github.io/miniapp-manifest/>
  - Packaging, <https://w3c.github.io/miniapp-packaging/>
- Other deliverables
  - Addressing, <https://w3c.github.io/miniapp-addressing/>
  - Widget, <https://w3c.github.io/miniapp-widget/req/>

## CG documents

- UI Components, <https://w3c.github.io/miniapp-components/>
- IoT, <https://w3c.github.io/miniapp-iot/>

# What is MiniApp for TV

- MiniApp for cellphone: user interaction depends on the touch screen
- MiniApp for TV: TV remote panel keyboard plus TV screen focus
- Therefore, new standardized API requirements for TV MiniApps.
  - Specifically, the proposal is to define a tag to track the focus on TV



# Some examples

## E-commerce

otthui... 订单

### 特价抢百货好物

聪明省钱首选

今日特价抢抢抢

<b>天竹</b> 实心竹板 开裂包退换 天竹菜板家用实木切菜板砧板案板竹擀面 到手价 <b>¥12.90</b>	<b>Duby</b> 【融暗专享】 温和无味 孕婴适用 babycare婴儿电热煮 到手价 <b>¥29</b>	<b>KUMY</b> KUMY21夏男女情侣 潮牌时尚休闲宽松印 到手价 <b>¥239.00</b>	<b>天福双子</b> 另物KOILAND乡爱香 薰刘能赵四香薰礼盒 到手价 <b>¥188.00</b>	<b>良品铺子</b> “非油炸一口酥 解馋充饥” 良品铺子酥脆薄饼干 零食小吃休闲食品散 到手价 <b>¥25.8</b>	<b>舒肤佳</b> 排油净焕 舒肤佳焕肤红石榴香 皂108g*3排油高端肥 到手价 <b>¥33.9</b>
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本服务由淘宝提供 已购清单

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- 床品
- 食品
- 居家
- 全部商品

<b>心选保鲜盒套装冰箱收</b> 月销量 41179 ¥29.9	<b>淘宝心选萌趣鼓形保温</b> 月销量 5 ¥99.9
<b>淘宝心选天然鸡翅木筷</b> 月销量 1262 ¥19.9	<b>淘宝心选食品保鲜袋家</b> 月销量 1 ¥19.89
<b>【雪梨推荐】淘宝心选</b> 月销量 41 ¥49.9	<b>淘宝心选彩色食品级PP</b> 月销量 37 ¥19.9

# Some examples

Gaming



# Proposal idea

- Requirement: the user interaction of MiniApps running on TV switches to TV remote panel keyboard plus TV screen focus
- Proposal: Add a new XML tag: `<focusable-view></focusable-view>`

## Note:

- The current spec (<https://drafts.csswg.org/css-nav-1/>) adds three new attributes for TV focus, but it is a one-dimension focus track, which is based on the tab / tab+shift on PC keyboard.
- But for TV case, there is no tab button on TV remote, instead the left/right/up/down button on remote is used to control focus on TV, which is a two-dimension focus track.



Thanks