

共筑5G-A全场景物联底座， 共赢千亿智联新空间

Building an All-Scenario 5G-A IoT Foundation, Embracing 100 Billion Intelligent Connections

曾创

华为无线FDD产品线总裁

Zeng Chuang

President of Huawei Wireless FDD Product Line

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万物互联迈向万物智联 走向全场景

Advancing from IoT to AI-IoT,
Expanding to All-Scenario Connectivity

从数据传输到智能交互，物联质量持续升级
From Data Transmission to Smart Interaction, IoT Keeps Upgrading



蜂窝物联走向全场景，物联需求呈现多样化
CIoT Expanding to All-Scenario, Driving Diversified Demands



5G-A 一网多能 解锁全场景千亿智联

5G-A One Network with
Multi-Dimensional IoT Capabilities,
Unlocking 100 Billion Connections

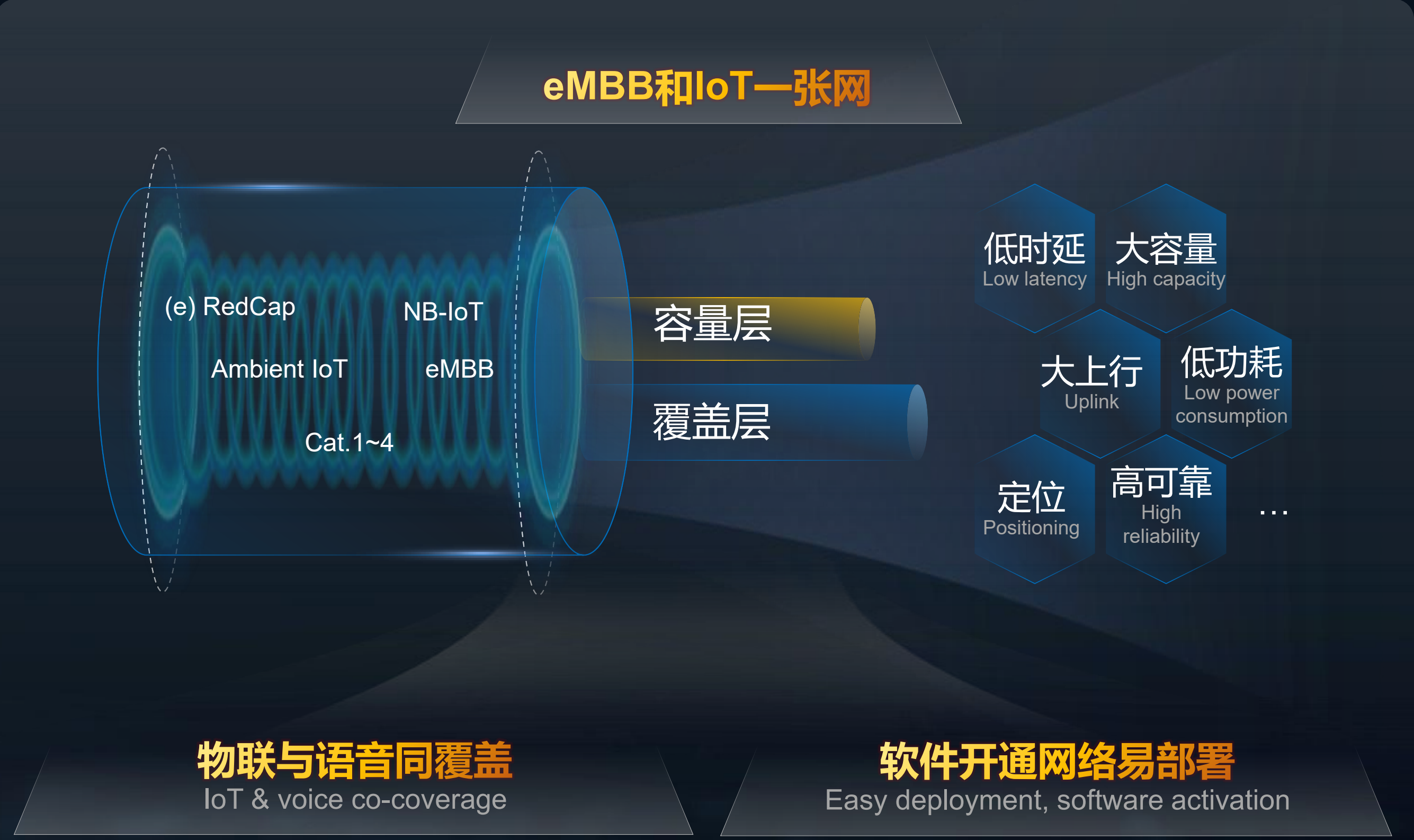
5G-A全栈物联技术，满足全场景物联需求，开拓千亿级连接空间

All-Scenario 5G-A IoT Meets Diverse Demands, Unlocking 100 Billion Connectivity Space



一张网打造差异化物联能力

One Network with Multi-Dimensional IoT Capabilities



中高速物联产业繁荣 进入规模爆发期

The Medium-to-High-Speed IoT Industry
Enters a Phase of Explosive Growth

RedCap生态繁荣，网络规模连续部署，支持中高价值连接“亿”启航

Thriving RedCap ecosystem and continuous network deployments for 100 million mid-to-high-value connections

eRedCap代际能力兑现，加速产业孵化

Deliver eRedCap capabilities, accelerate industry incubation

RedCap芯模端极大繁荣，加速迭代适配AI终端新产品

RedCap ecosystem booms bring fast iteration for new AI terminals



RedCap代际优势已赋能千万级高价值连接，规模爆发亿启航

RedCap's generational leap: driving 100 Million high-value connections



Huawei MI

网络连续开通支撑业务快速规模上量，先行者赢得市场先机

Rapid network rollout fuels scale and early-mover advantage



连接空间
Connection space

eRedCap R18标准已冻结，加速产业要素孵化

eRedCap R18 frozen, accelerating E2E industry incubation



eRedCap预计2026~2027商用，分阶段拓展高价值场景

eRedCap commercial launch (2026–2027): phased scenarios expansion



蜂窝无源物联-局域 (Ambient IoT)
高价值场景实现无人化管理
端到端要素成熟迈向商用

Ambient IoT (Local Area):
Unattended Operations for High-Value Scenarios
E2E Maturity for Commercialization

局域无源物联生态成熟走向商用
Ecosystem Maturity



局域无源物联商用解决方案端到端能力兑现
E2E Solution Capabilities



局域无源物联高价值场景完成价值验证
Value Proven in High-Value Scenarios



蜂窝无源物联-广域 (Ambient IoT)
产业要素加速成熟
进一步拓展新连接空间

Ambient IoT (Wide Area):
Accelerating Ecosystem Maturity,
Unlocking New Connectivity Frontiers

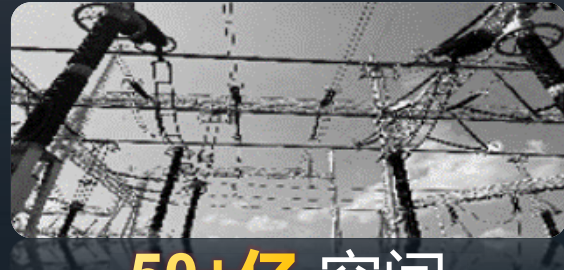
广域无源物联探索高价值场景，拓展新连接空间
Exploring High-Value Scenarios to Unlock New Connectivity

供应链物流
Supply chain logistics
运输全域可视，降低维护成本



100+亿 空间
10B+ connectivity space

资管传感
Asset sensing
实时信息上报，数字化管理

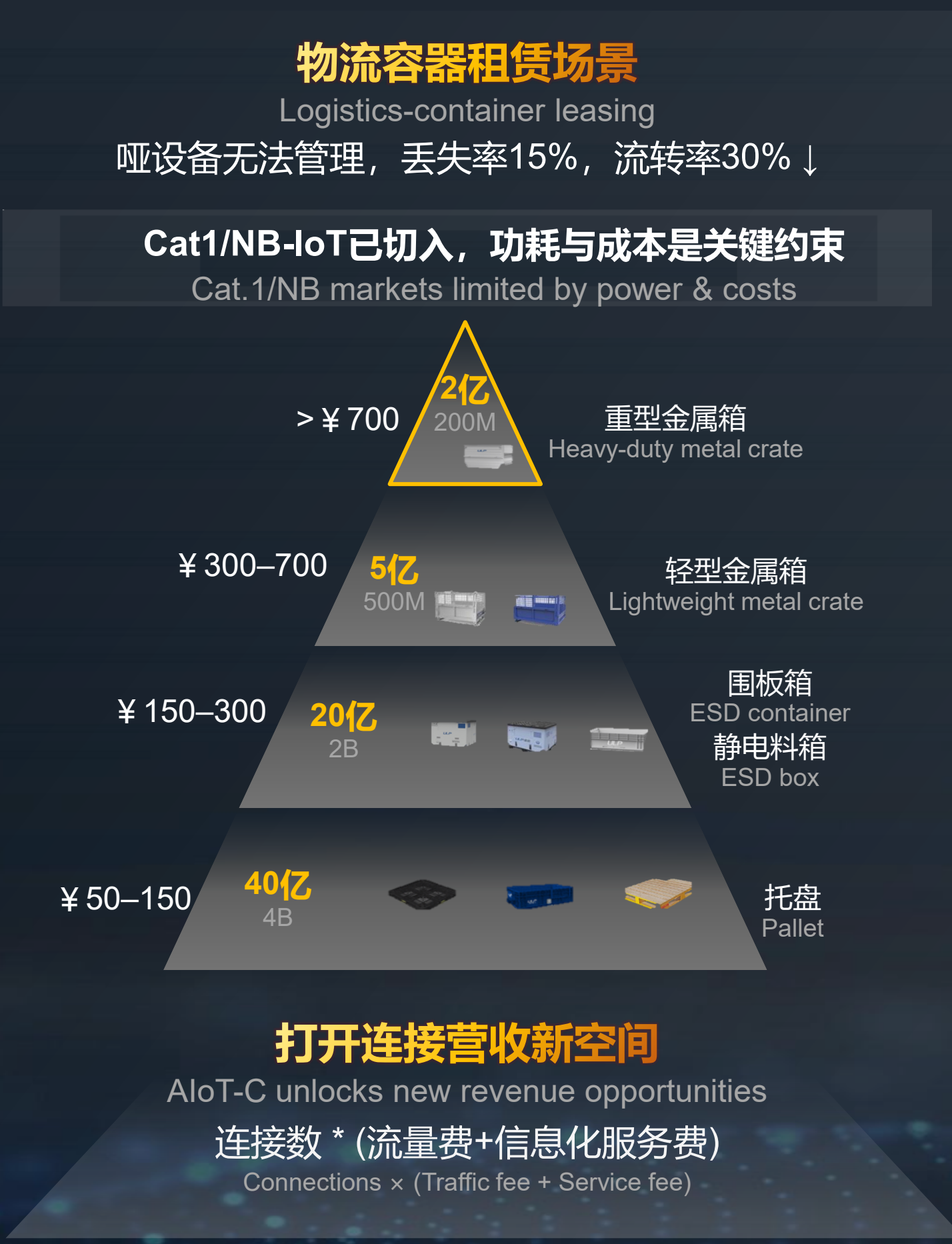


50+亿 空间
5B+ connectivity space

寻人找物
Person/Object search
高精度定位，长续航



50+亿 空间
5B+ connectivity space



广域无源物联构建代际竞争力，产业要素加速孵化，支撑首波业务切入
Generational Competitiveness | Ecosystem Incubation

标准有序推进：
R20已WI立项，预计2027H1冻结
Orderly advancement of standards



R20 WI立项
Project initiation
@2026Q1

RAN1冻结
RAN1 frozen
@2026H2

ASN.1标准冻结
ASN.1 frozen
@2027H1

广域 AIoT 构建10倍代际能力
Wide-area AIoT: Build 10x Generational Competitiveness

网络广覆盖
Wide network coverage
与蜂窝同覆盖
Cellular co-coverage

10年免维护
10 years maintenance-free
超低能耗
1/10 vs. NB-IoT

超低标签成本
Ultra-low tag cost
< 10 ¥

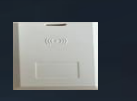
百米级定位
100-meter-level positioning
窄带智能定位

2026 端到端产业生态加速孵化
Accelerate E2E industry ecosystem incubation

孵化芯片
Chips



孵化多形态标签
Multi-form tags



弱光采能新标签

孵化行业应用
Industry applications



物流/消防...



芯模端：持续丰富产业生态

Industry ecosystem diversification

高性价比

Cost-efficient

差异化竞争力

Competitive

规模化·场景定制

Scalable · Customizable

AI eSIM

AI eSIM



网络：一网兑现差异化能力

Network capability breakthroughs

泛在覆盖

Ubiquitous coverage

差异化网络能力

Differentiated network capabilities

易部署、易开通

Easy to deploy & activate

上行/定位...

UL/Positioning



应用：持续拓展智能化场景

New Mobile AI-IoT applications

拥抱AI机遇

AI opportunities

多维增值服务

Multi-dimensional VAS

探索新智联应用

New AI-IoT applications

Byte + Token

华为愿与产业伙伴一起，共筑万物智联底座、共赢千亿智联新机遇

Building the All-Scenario 5G-A IoT Foundation and Unlocking the 100-Billion Connection Opportunity with Industry Partners

Thank You