



Karen Yang

Director of IoT Ecosystem
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Huawei IoT Ecosystem

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Huawei “GLocal” IoT Ecosystem



NB-IoT Forum

67 Members

Industrial Internet Consortium

工业互联网产业联盟

ZigBee Alliance

OSGi Alliance

OSGi Alliance

WAVE ALLIANCE

SCAA

3GPP

OPEN CONNECTIVITY FOUNDATION

边缘计算

Edge Computing Consortium

INDUSTRIE 4.0

边缘计算

Edge Computing Consortium

INDUSTRIE 4.0

vodafone

etisalat

TIM

中国联通

中国移动

中国电信

China Unicom

Telefonica

Online and Offline OpenLabs
8+14

Developer Enablement Plan

1 Billion in 5 years

Innovation Fund Marketing Fund

Huawei Certification













Talent Training Development Support

5 Major Technologies Where Huawei Works with IoT Partners





























50 NB-IoT Applications in 40 Industries...

12 in operation, ready to replicate

											
Water meters	Parking	Lighting	Gas meters	Bike sharing	Smoke detectors	Internet of cows	Manhole covers	Fire hydrants	Post boxes	Smart locks	Air conditioners

35+ applications in development

												
Electricity meters	Cold chain	Pipeline monitoring	Grid monitoring	Pet tracking	Vending machines	Shelves	Heart rate monitoring	Milk tank	Blood pressure	Blood glucose	Connected cheep	Air quality monitoring
												
Thermometers	Trash cans	Washing machines	Railway monitoring	Smart insoles	Bee hives	Agriculture	Luggage	Surveillance	Asset tracking	Child tracking	Call buttons	Connected cars



Building the IoT Ecosystem: Alliances, Standards, Developers & Partners

Alliances and Standards



- Launched **NB-IoT forum** to promote the industry
- Active member and major contributor to **5GAA**, **oneM2M**, **Edge Computing** and other alliances
- Exploring intelligent manufacturing as part of **Industry 4.0** and **IIC**

NB-IoT Forum

67

Members

Developers



- Online community for developers
- Huawei's ICT capabilities made accessible with APIs and open source
- Supporting partner innovation with remote labs and online & offline development support
- US\$1 billion **Developer Enablement Plan**



- | | |
|---|--|
| <ul style="list-style-type: none">• 6500+ Registered Users• 420K Clicks• 5,000+ Downloads | <ul style="list-style-type: none">• Huawei LiteOS open source• 255 open APIs• References, Demos & Examples |
|---|--|

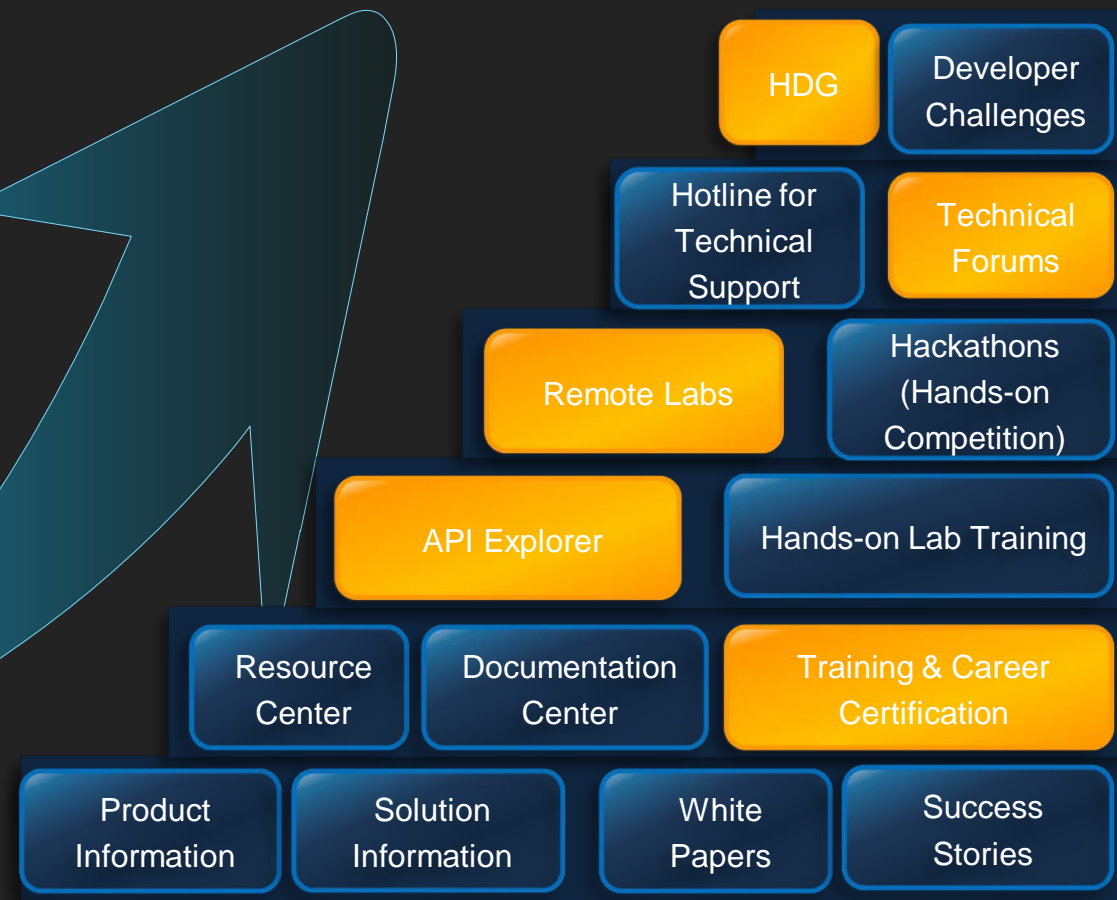
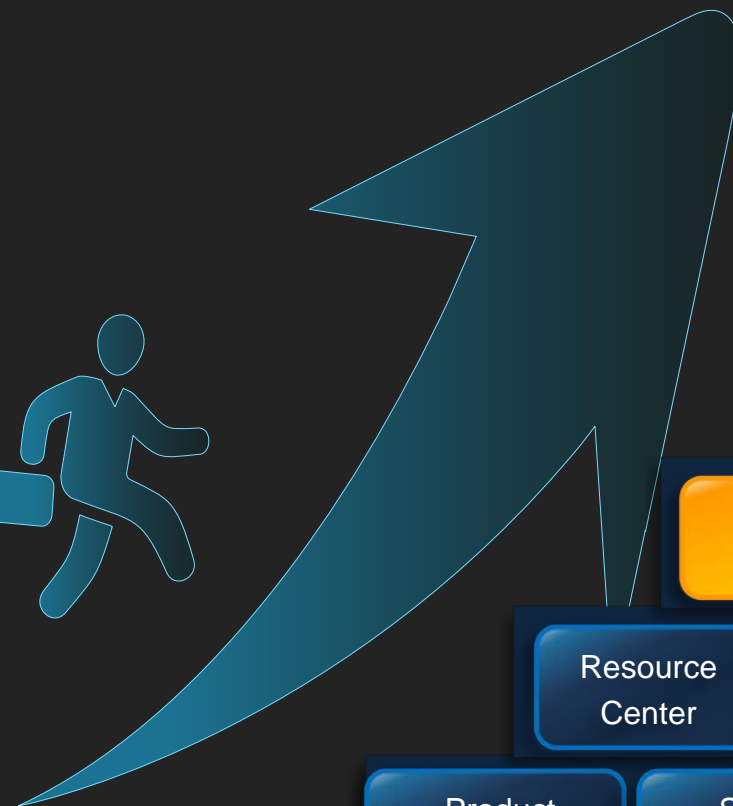
IoT Partner Program



- **Partner program** to recruit and manage ecosystem partners
- **8 OpenLabs** with operator partners for joint innovation and faster I&V
- **14** general OpenLabs open to all partners



Developer Community: Helping Developers Grow into IoT Experts

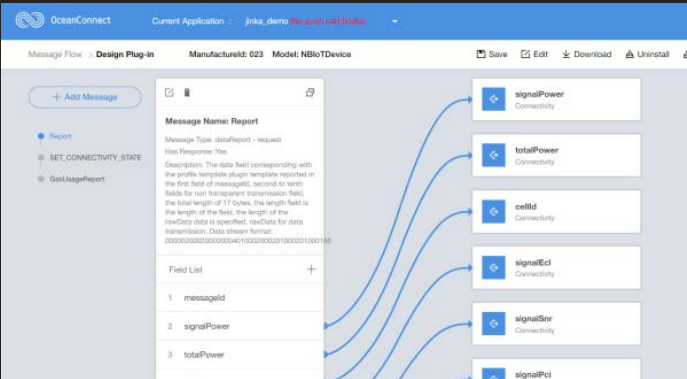


Developer Community:
<http://developer.huawei.com/ict/en/site-iot>

Developer Community: Accelerating Developers' Growth

Developer Portal

Codeless development for device profiles
Currently covering 4 areas: water meters, street lamps, parking, smoke sensors



Application

SoftRadio cellular network simulator



Time for integration testing	Travel costs	Cost of building IDE
↓ 50%	↓ 80%	↓ 90%

Network

IoT module/MCU+LiteOS

20+ MCU/IoT module partners:
ST, NXP, Amtel, MediaTek, Texas Instruments...



Idea -> Demo
in weeks, not months

Device

Joining the Huawei Ecosystem via MAR Process

Join IoT Partner Program

Submit Solutions & Certification

Product Launch



www.huawei.com/en/partner/solution-partner



Device



Application



Device or App

MarketPlace

OpenLab: Sharing Huawei's Resources to Bring Solutions to Market Fast

Testing Equipment

VAM

Power Consumption Analyzer

SoftRadio

NB Simulator

Screening Box

Wave Filter

Plug-in Detector

Comprehensive hardware

10+ exclusive Huawei tools

Specialist Testing Services

Function

Security

Reliability

Creating perfect products quickly for commercial use



Radio Frequency

Sequential Design



Communication System Design

Device Power Consumption

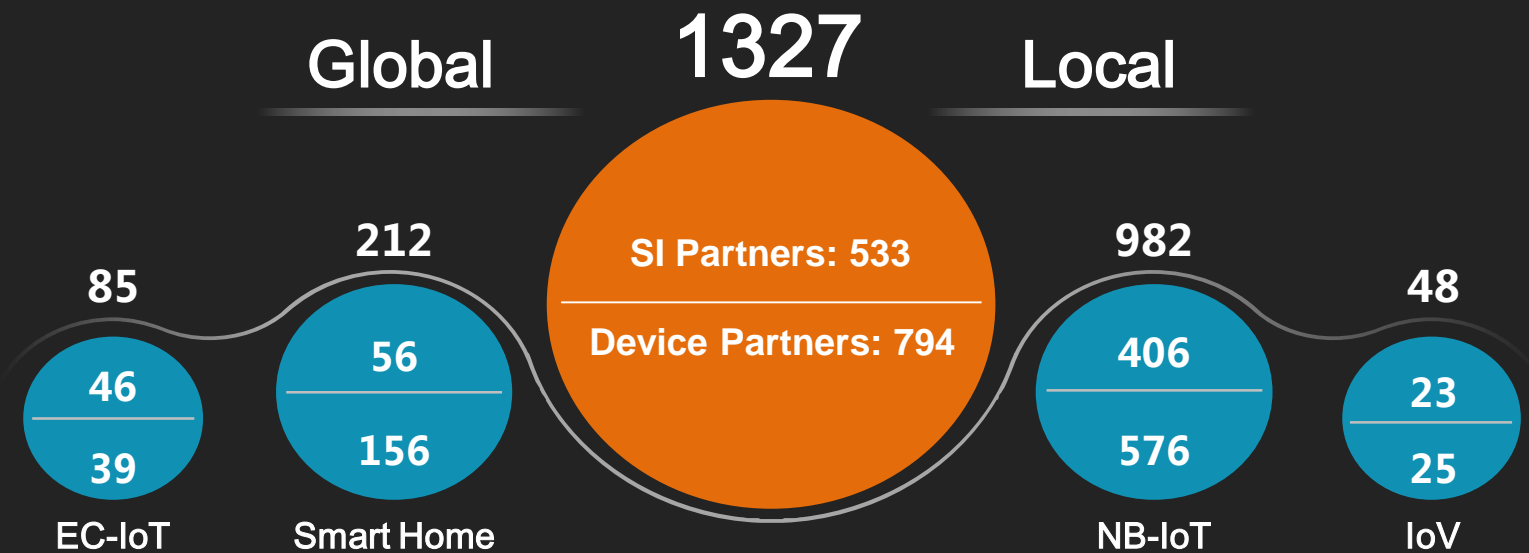


"0" device connection problems in real-world use



Join Huawei IoT Ecosystem

Global Partners



Local Partners



150+ IoT partners in over 30 industries



NB-IoT
IoV and other

Water				Gas		Electricity		Parking	
Kamstrup	三川智慧 SANCHUAN	汇中 HUIZHONG	威星仪表 WEIXING INSTRUMENT	PRMT	GoldCard	JANZ	HOLLEY	创泰科技 InnoTek	方格尔科技 FANGGE
汇中 HUIZHONG	NWM	威星仪表 WEIXING INSTRUMENT	Pietro Fiorentini	TATUNG	HOLLEY	创泰科技 InnoTek	方格尔科技 FANGGE	创泰科技 InnoTek	方格尔科技 FANGGE
汇中 HUIZHONG	VEOLIA	威星仪表 WEIXING INSTRUMENT	HOLLEY	威胜集团 WEISHENG GROUP	HOLLEY	创泰科技 InnoTek	方格尔科技 FANGGE	创泰科技 InnoTek	方格尔科技 FANGGE
IoV				Industrial		AMI		Solutions	
CHAINWAY TSP	gemalto	汇中 HUIZHONG	HOLLEY	ADLINK	Lon5Shine	SAP	iSOFTSTONE	GENJIN	SANSI
ROADDEFEND	汇中 HUIZHONG	汇中 HUIZHONG	Johnson Controls		汇中 HUIZHONG				

Thank you

