

**ALPHA**

**明泰科技**  
**Alpha Networks Inc.**

**Investor Conference**

**2017/3/21**

# Safe Harbor Statement

Except for the statements in respect of historical matters, the statements contained in this release are “forward-looking statements” subject to risks and uncertainties which may make actual performances and results differ materially from those contained in the forward-looking statements, including the financial stability of international market, demand in end market, supply chain management, impact of competitive products and pricing, exchange rate fluctuations, and other risks beyond the control of the company.

# Agenda

- **4Q16 & 2016 Financial Reviews**
- **Growth Drivers**
- **Q&A**

# 4Q16 & 2016 Financial Reviews

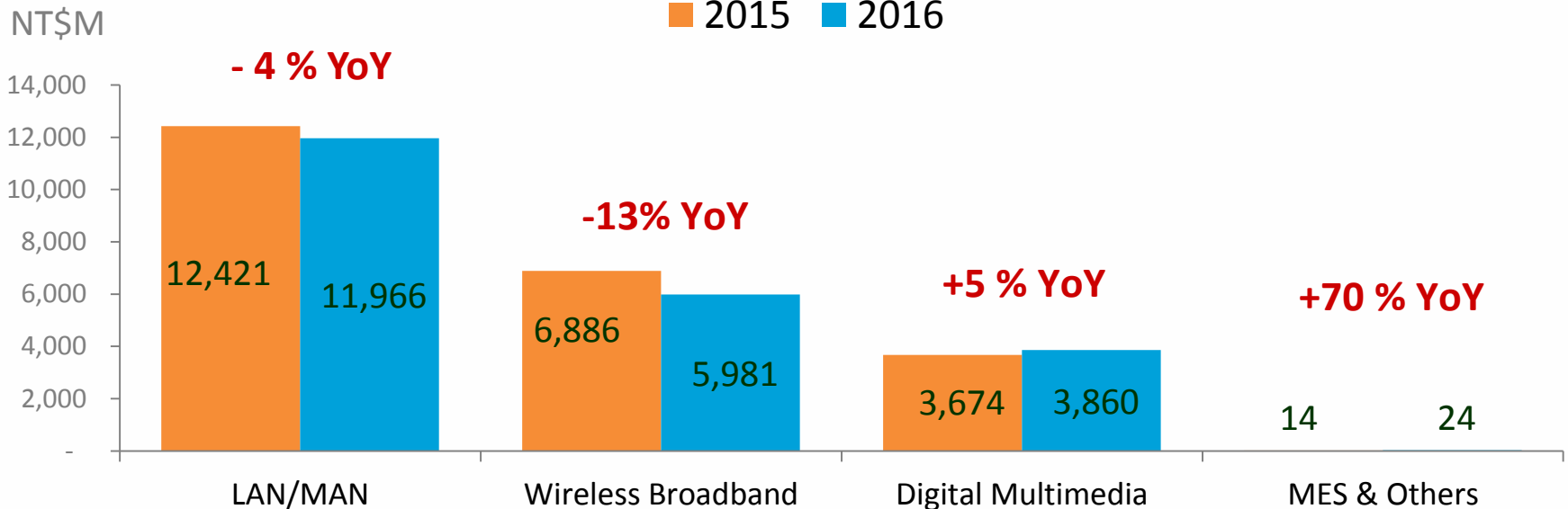
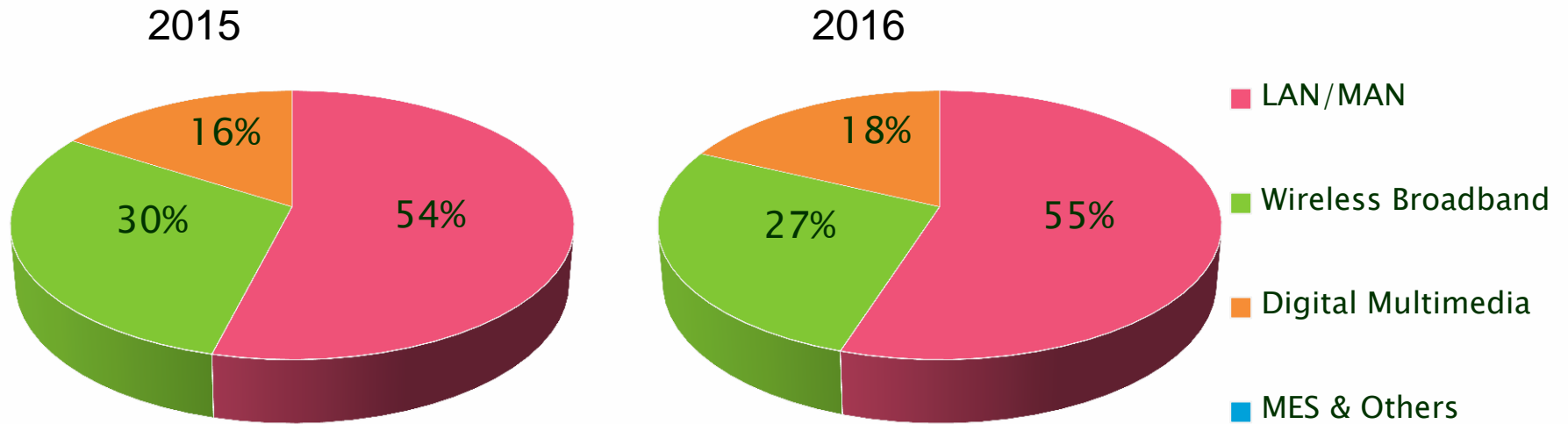
# Consolidated Statements of Comprehensive Income

NT\$ Millions	4Q 2016		3Q 2016		QoQ	
	Amount	%	Amount	%	Amount	%
Net Revenue	5,136	100	5,075	100	61	1.2
Cost of Goods Sold	4,413	85.9	4,323	85.2	90	2.1
<b>Gross Profit</b>	723	14.1	752	14.8	(29)	(3.9)
Operating Expenses	593	11.5	603	11.9	(10)	(1.7)
<b>Operating Income</b>	130	2.5	150	3.0	(20)	(13.3)
Non-Op. Inc. (Loss)	51	1.0	(18)	(0.4)	69	383.3
Income Before Tax	180	3.5	132	2.6	48	36.4
<b>Net Income</b>	122	2.4	97	1.9	25	25.8
<b>EPS (NT\$)</b>	0.28		0.22			

# Consolidated Statements of Comprehensive Income

NT\$ Millions	2016		2015		YoY	
	Amount	%	Amount	%	Amount	%
Net Revenue	21,831	100	22,995	100	(1,164)	(5.1)
Cost of Goods Sold	18,647	85.4	20,095	87.4	(1,448)	(7.2)
<b>Gross Profit</b>	3,183	14.6	2,900	12.6	283	9.8
Operating Expenses	2,534	11.6	2,801	12.2	(267)	(9.5)
<b>Operating Income</b>	649	3.0	98	0.4	551	562.2
Non-Op. Inc. (Loss)	155	0.7	(360)	(1.6)	515	143.1
Income (Loss) Before Tax	804	3.7	(261)	(1.1)	1,065	408.0
<b>Net Income (Loss)</b>	608	2.8	(340)	(1.5)	948	278.8
<b>EPS (NT\$)</b>	1.40		(0.74)			

# 2016 Revenue Breakdown by Products & YoY Comparison



# Consolidated Balance Sheets 2016/12/31 vs. 2015/12/31

NT\$ Millions	31-Dec-16		31-Dec-15		YoY
	Amount	%	Amount	%	%
Cash and Cash Equivalents	1,890	13.3	2,454	17.1	(23.0)
Accounts Receivable	3,649	25.6	3,904	27.3	(6.5)
Inventories	3,130	21.9	3,788	26.5	(17.4)
Other Current Assets <sup>(Note)</sup>	2,714	19.0	623	4.3	335.6
Non-current Assets	2,878	20.2	3,545	24.8	(18.8)
<b>Total Assets</b>	<b>14,261</b>	<b>100.0</b>	<b>14,314</b>	<b>100.0</b>	<b>(0.4)</b>
Current Liabilities	5,297	37.1	4,784	33.4	10.7
Non-current Liabilities	445	3.1	1,119	7.8	(60.2)
<b>Total Liabilities</b>	<b>5,742</b>	<b>40.3</b>	<b>5,903</b>	<b>41.2</b>	<b>(2.7)</b>
<b>Shareholders' Equity</b>	<b>8,519</b>	<b>59.7</b>	<b>8,411</b>	<b>58.8</b>	<b>1.3</b>

## Key Indices:

A/R Turnover Days	63	74
Inventory Turnover Days	68	71
A/P Turnover Days	69	65

(Note) Other current assets includes deposits with original maturities of more than three months:  
NT\$2,353M and NT\$310M as of Dec. 31, 2016 and 2015.



# Growth Drivers

# Seeing the Light at the End of the Tunnel

Year	1990	2000	2007	2010-2016	2017-2019	2020
Driver/Event	PC	Internet	3G Mobile Broadband	4G/LTE	??	5G Deployment
Quantity	100M	1 Billion subscribers	10 Billion phones & Devices		??	

- ICT Industry: Mainframe → Minicomputer → PC → internet → Mobile internet; historically growing 10 - fold every 10 years
- 4G mobile networks were almost completely built in 2016 along with saturation of 4G mobile phones and longer replacement cycle.
- ICT industry is expecting IoT devices (high volume low price) and AR/VR (low volume high price) to stimulate the growth, however, it still takes time.
- 5G NR(New Radio) standard will be ratified in 2Q18 and be launched in 2020.

WW Device (in Million)	2016	2017	2018	2019
PC & Notebook	268	266	272	278
Tablet	168	165	166	166
Subtotal	436	432	438	444
Mobile Phone	1888	1893	1920	1937
Total	2,324	2,324	2,357	2,380

# Dawn: Video Streaming Booms Network Industry Growth

## Cisco VNI Forecast:

2016-2021: mobile video will increase **8.7-fold**

2021: mobile video will represent **78%** of all mobile traffic

Rise in global mobile data center traffic

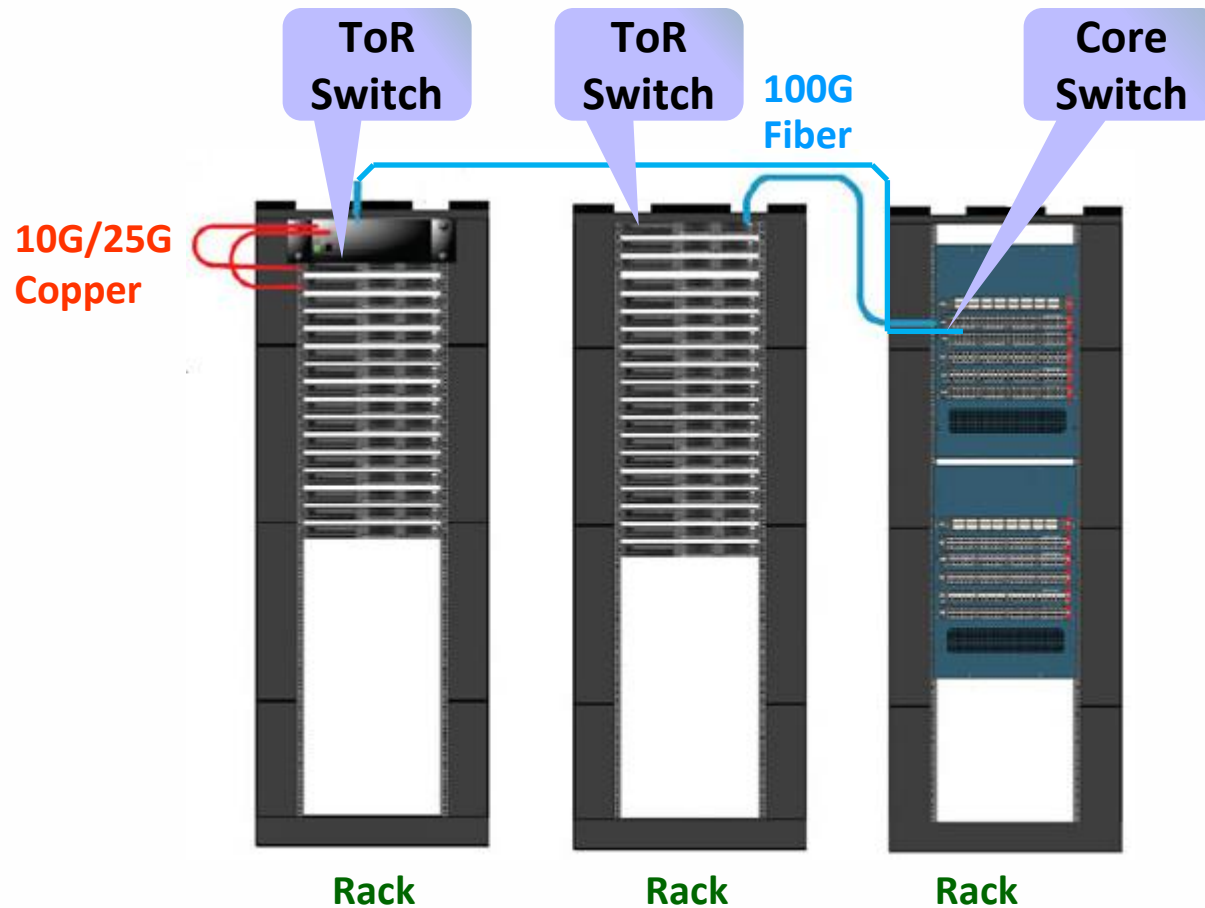
High growth for live video on mobile

Growth in VR and AR

Global connected wearable devices driving M2M growth

Mobile data traffic offload to Wi-Fi networks

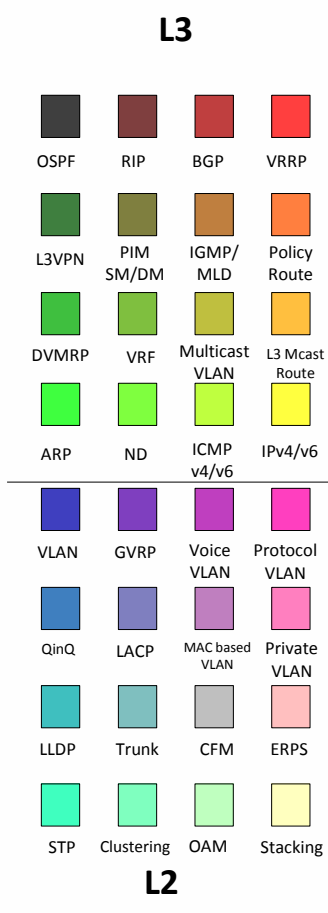
# Switch: Continue to Develop More High-End Market Segments



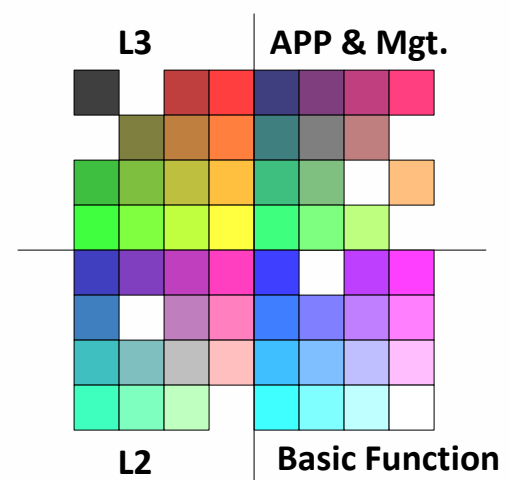
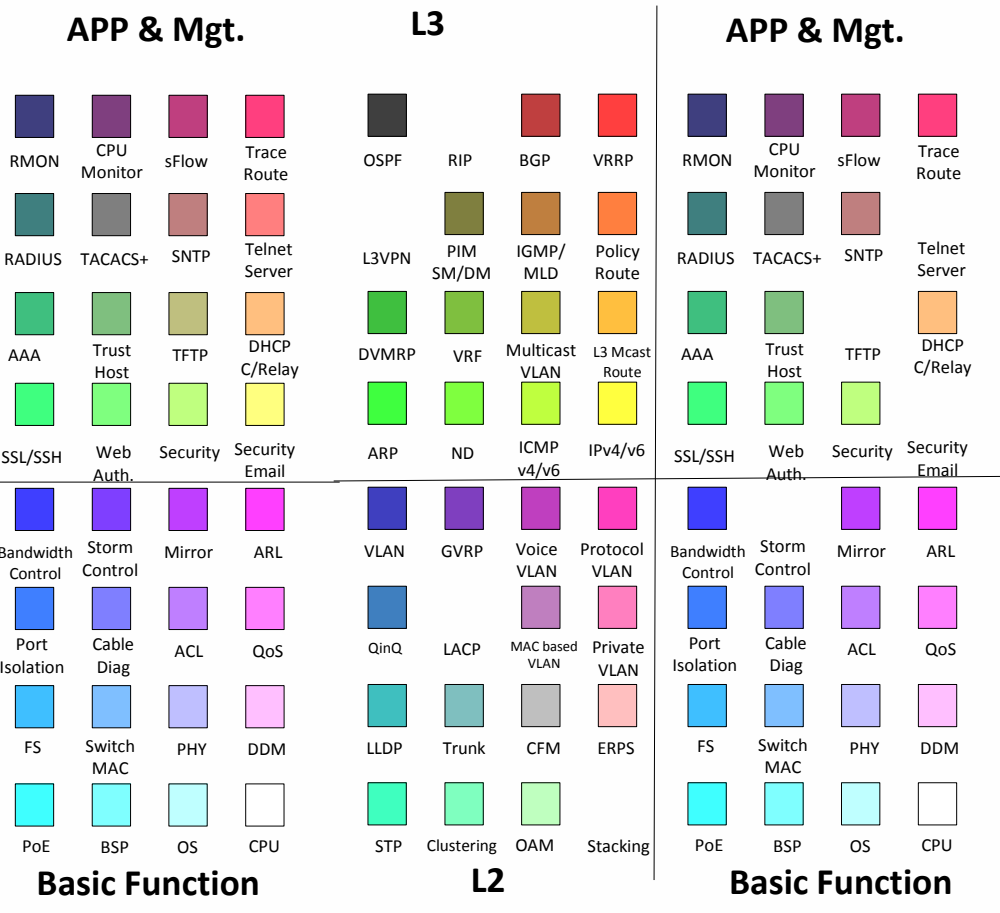
- **ToR Switch:**  $10G*48 + 40G*6 \rightarrow 10G/25G*48 + 100G*6$
- **Core Switch:**  $40G*32 \rightarrow 100G*32, 100G*64$
- **High-Density 100G Switch**

# Subtraction: Advantage of Switch Software Platform

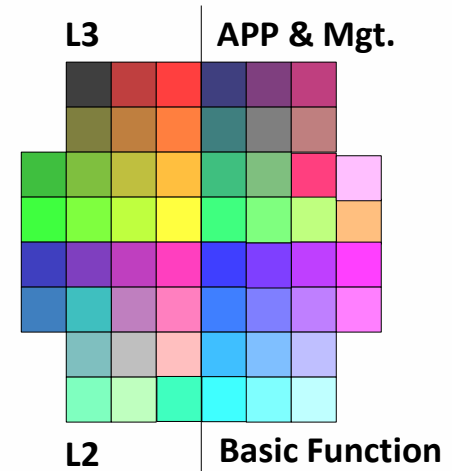
## Complete & Integrated Modules



## Remove Non-ordered Functions



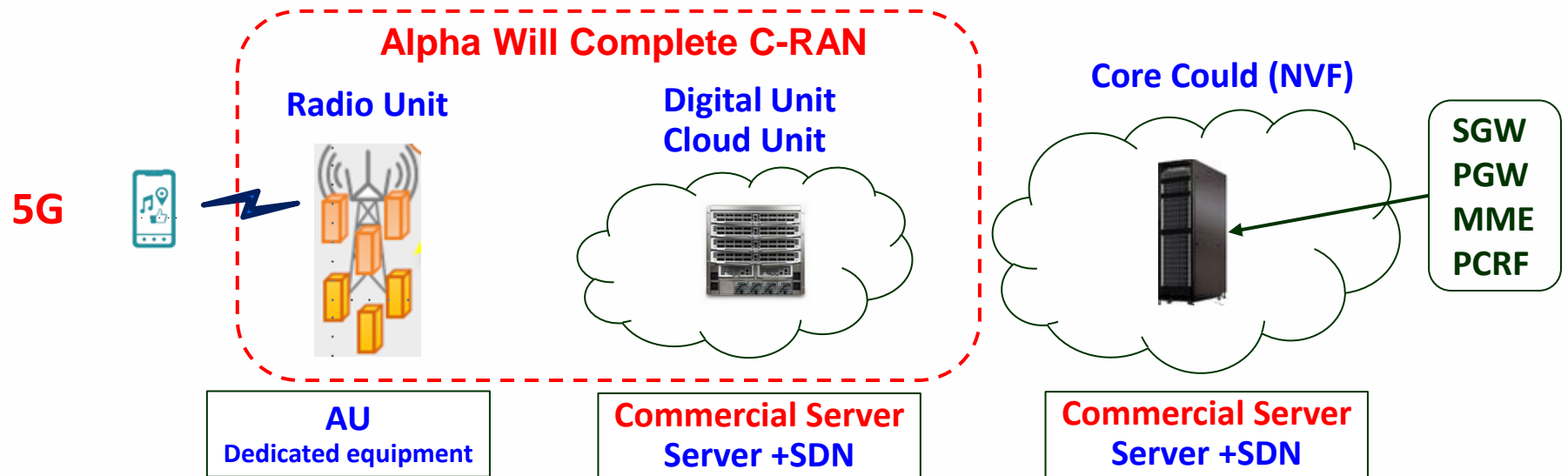
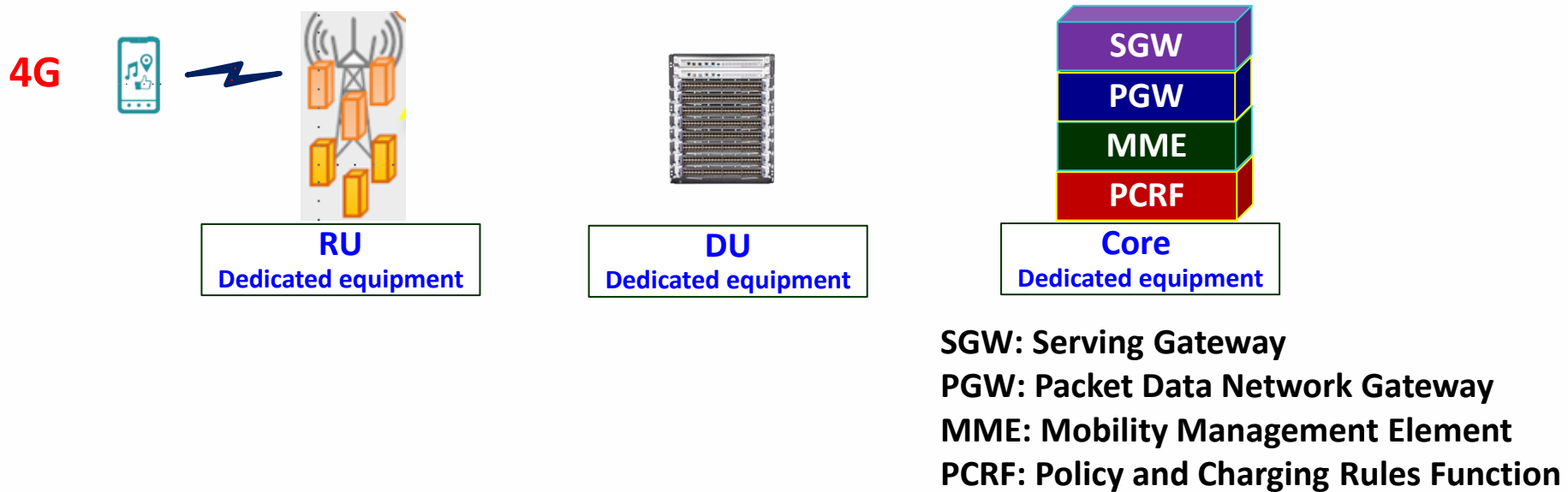
## Refreshing



Highly integrated and modularized switch software platform:

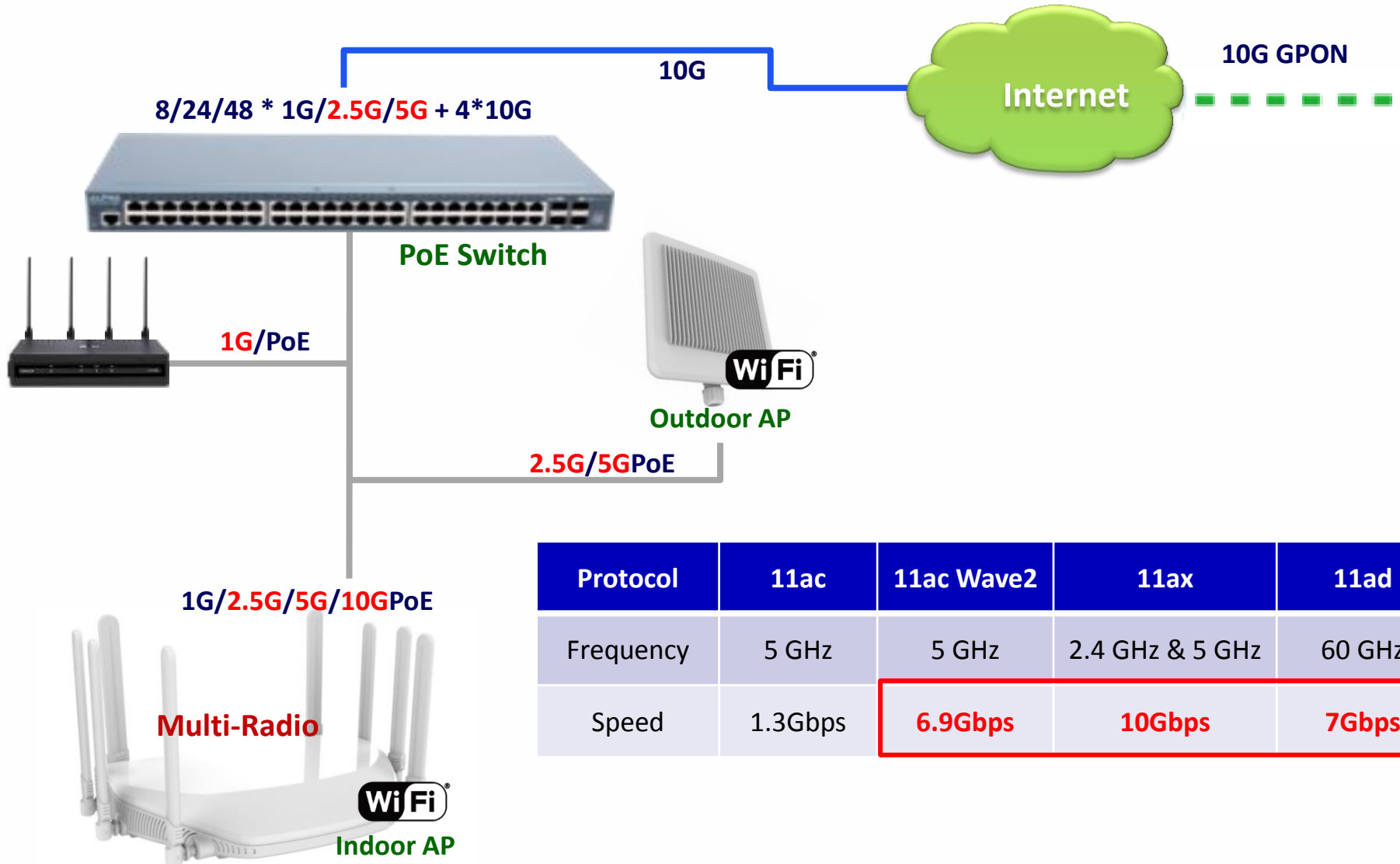
- ◆ **To remove existing functions is much faster, more stable** than to develop new modules.
- ◆ **Efficiency in customization (completing a switch software design within 3 months).**

# 5G Enhanced Mobile Broadband = NFV + SDN



**5G Devices: (1) Radio Unit (2) NFV Server + SDN Switch**

# Wireless Network: Exceeding the Threshold of 5Gbps



Protocol	11ac	11ac Wave2	11ax	11ad
Frequency	5 GHz	5 GHz	2.4 GHz & 5 GHz	60 GHz
Speed	1.3Gbps	6.9Gbps	10Gbps	7Gbps

# Last Mile of Communications: Fiber, LTE/5G, Copper





# Intelligence Hub: New Generation of Smart Home Center

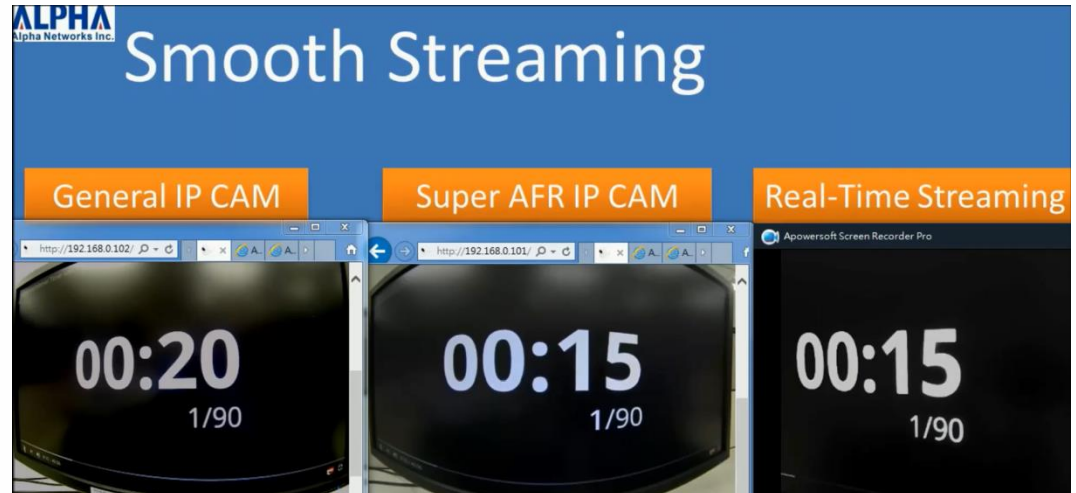


# IP-Cam Provides Perfect User Experience in Recording & Playback



- 180-degree wide-angle lens & full HD 1920 x 1080 resolution (no more pan and tilt)
- IR LEDs to see in complete darkness
- Built-in microphone and speaker for two-way communication
- Key- word automatic speech recognition
- Motion detection feature automatically records, captures events and sends alerts
- Recording video clips and images into a microSD

**Alpha Special Function:  
Super Adaptive Frame Rate  
(Super AFR) –  
most powerful function adapting to  
changes in the network environment**



# Fusion: Smart Radar Sensor Integrated with Camera



## Microwave Radar Sensors:

- 24GHz Collision Avoidance Radar (within 50m): Delivering
- 77GHz Collision Avoidance Radar (within 200m): Testing
- 24GHz Low-mobility Collision Avoidance Radar: Sample delivering



## Fusion - Developing

- 24GHz/77GHz Forward Collision Warning (FCW): Automotive sensor fusion of integrated radar and camera
- AVB Camera: Bird view and collision avoidance

# Achievements: Alpha Networks' Outstanding Accomplishments

## 5G Mobile Network

2016 Department of Industrial Technology  
The A+ Industrial Innovation R&D Program  
M-ECHO (Mobile-Edge Cloud Hetnet  
Orchestra)

## ADAS Telematics

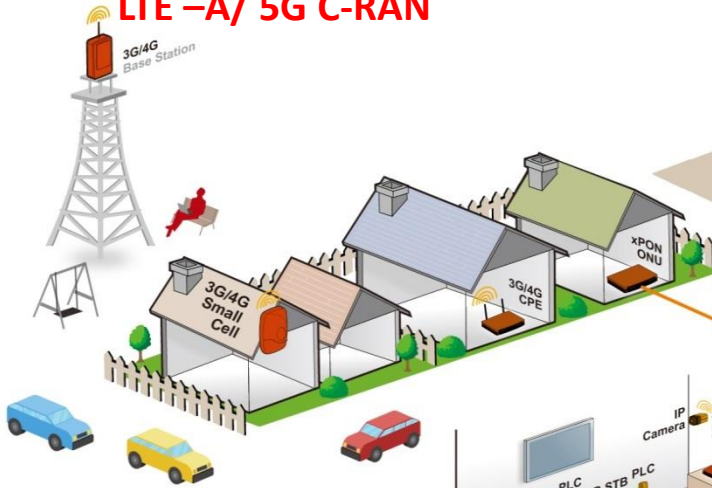
2016 Industrial Development Bureau  
Taiwan Industrial Innovation Platform High-  
value Program  
Automotive Sensor Fusion of Integrated Radar &  
Camera for FCW System Development Program

# Alpha Networks' Complete Product Portfolio and **Vision**

## Mobile & Broadband

LTE Router/Small Cell

LTE -A/ 5G C-RAN

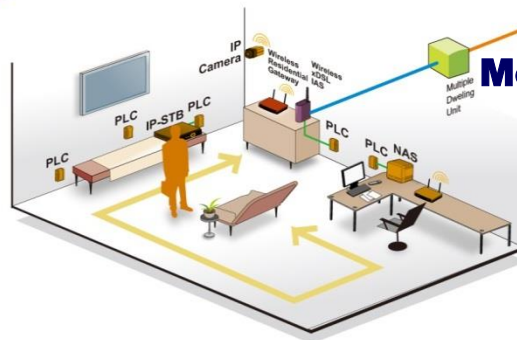


## Mobile Enterprise Solutions

24GHz/ 77GHz Radar

Fusion

AVB Camera



## Digital Multimedia

IP-Cam/NAS/STB/PLC

Smart Home

Intelligence Hub

## Wireless

WL Router/ Enterprise AP

Module/ Extender

11ac Wave2

11ax



## Enterprise IoT

## Mobile & Broadband

VDSL/PON

G.fast/10G-PON



## LAN/MAN

Data Center Switch

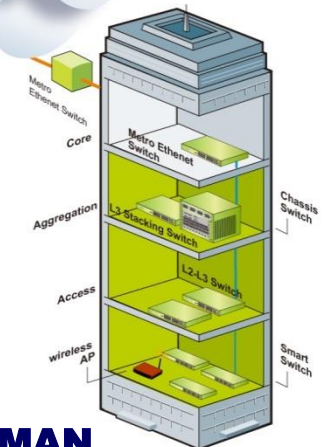
Enterprise/SMB Switch

Carrier Switch

1G/10G/40G/

2.5G/ 5G/ 50G

25G/100G/200G/400G



# Q&A

*Thank You.*

[www.alphanetworks.com](http://www.alphanetworks.com)