

ASPEED Technology Inc.

Lili Wu
IR Manager

2017/05

Company Profile

Server Market Analysis

Acquisition

New Product Introduction

Financial Performance

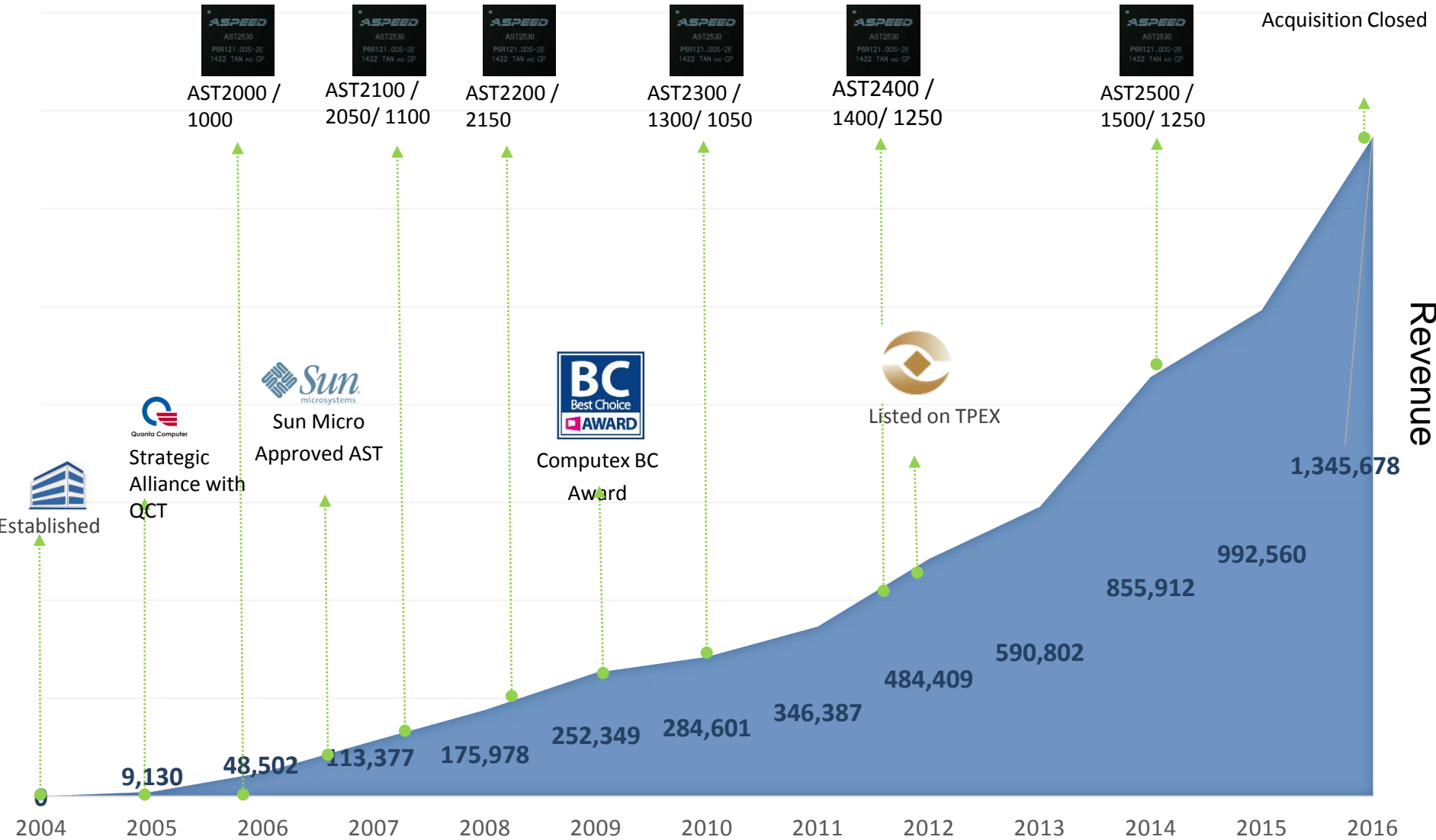
ASPEED in Brief



- Established in Nov. 15th , 2004
- Address:
 - Headquarter: No.15, Industry East 4th Rd., Hsinchu Science Park
 - US Office: 2290 N. First Street, Suite 300, San Jose, CA 95131, USA
 - India Office : The Pinnacle, First Floor, Building No. 8, 5th Block, 100 Ft Road, A Cross Road, Koramangala, Bengaluru - 560095, Karnataka, India
- Number of Employees :
 - HQ: 56
 - US: 8
 - India: 11
- Business Model: Fabless IC Company
- Product Lineup:
 - Remote Server Management
 - PC /AV Extension
 - Desktop Virtualization



Company Profile- Mileston



Company Profile– Management Team



Title	Name	On Board	Education	Other Position	Years of Experience
President	Chris Lin	Nov.15 th , 2004	<ul style="list-style-type: none"> • Master, Electrical Engineering, NTU • EMBA, NCTU • President, XGI • VP / Multimedia Product Division, SIS 	<ul style="list-style-type: none"> • Director, Fung-Hwa Investment Inc. • Director, Sheng-Hwa Investment Inc. 	27
Vice President / Sales and Marketing Dept.	Luke Chen	Oct. 3 rd , 2005	<ul style="list-style-type: none"> • EMBA, NCCU • Director / Strategy Marketing Dept., SIS 	None	26
Vice President / Product and Technology Dept.	Hung-Ju Huang	Nov.15 th , 2004	<ul style="list-style-type: none"> • BS/EE, MS/EE, NCKU • Director / Engineering, XGI • Senior Manager / Engineering Dept., SIS 	None	24
Manager / Finance Dept.	Tina Chiu	Apr.9 th , 2007	<ul style="list-style-type: none"> • Accounting, FCU • Accounting Administrator, HON HAI PRECISION IND. 	None	17
Vice President/ Overseas Dept.	Dwarka Partani	Jan.1 th , 2017	MS EE University of Texas	None	26

Company Profile – Product Lineup



AST1010
AST2200 / AST2150
AST2300 / AST1300 / AST1050
AST2400 / AST1400 / AST1250
AST2500 / AST2510 / AST2520 / AST2530
Pilot 3/ Pilot 4

40nm LP Process
800MHz CPU
DDR4 SDRAM
PCIe Gen-II
ES: Jun 2014
PS: July 2015

Server
Management

AST1500 /
AST1510
AST1520 /
AST1525

40nm LP Process
4Kx2K Support
Multi-Screen TV Wall
1GHz CPU
DDR4 SDRAM
ES: Jun 2014
PS: July 2015

PC/AV
Extension

Desktop
Virtualization

AST3100
AST3200

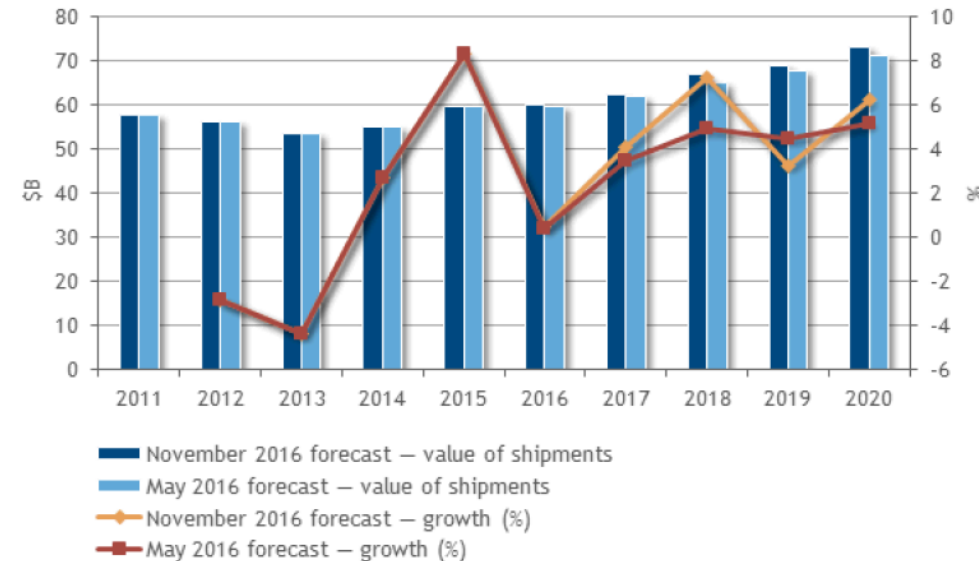
40nm LP Process
Microsoft RemoteFX 8.0
Citrix HDX Ready
1GHz CPU
DDR4 SDRAM
PCIe Gen-II
ES: Jun 2014
PS: July 2015



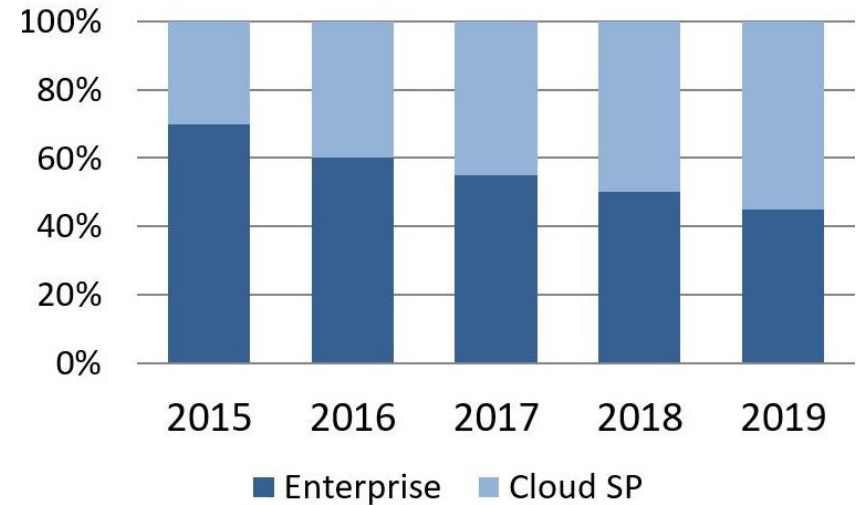
Server Market Analysis: Global vs Cloud



Worldwide Server Value of Shipments, 2011-2020: Comparison of May 2016 and November 2016 Forecasts

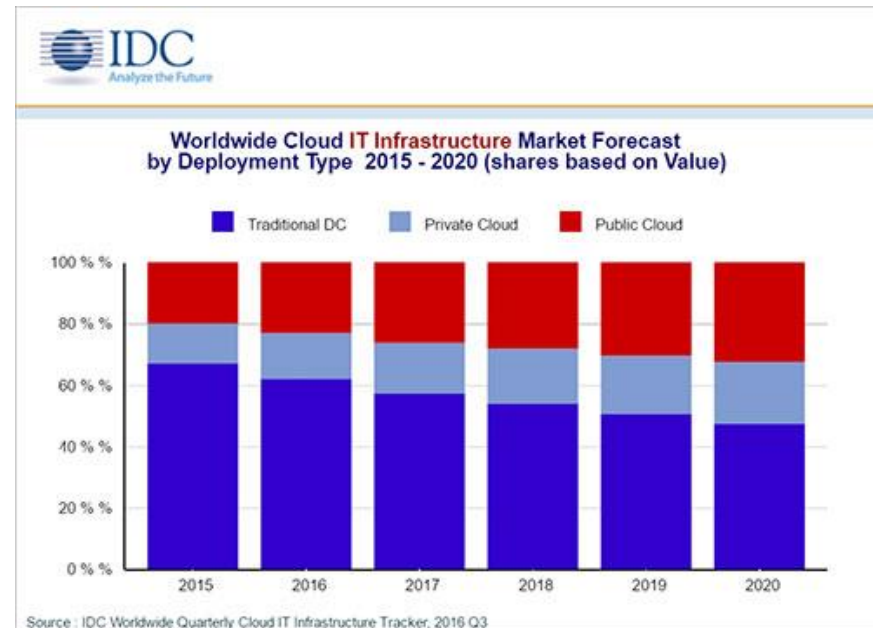


Server Shipment Split



- WW Shipment expect to grow 4~6% in 2017
- Cloud IT infrastructure spending on server, switch, networking will grow 18.2% this year
- Driven by new hyperscale datacenters (超大型資料中心) across the globe as well as tier-2 and regional services.

*There are 24 companies consider as hyperscale:
Amazon/AWS, Rackspace, Google, Microsoft (Azure), Salesforce, Facebook, Yahoo, Apple, Alibaba, ebay etc.



Server Market Analysis: Server Demand Drivers **ASPEED**

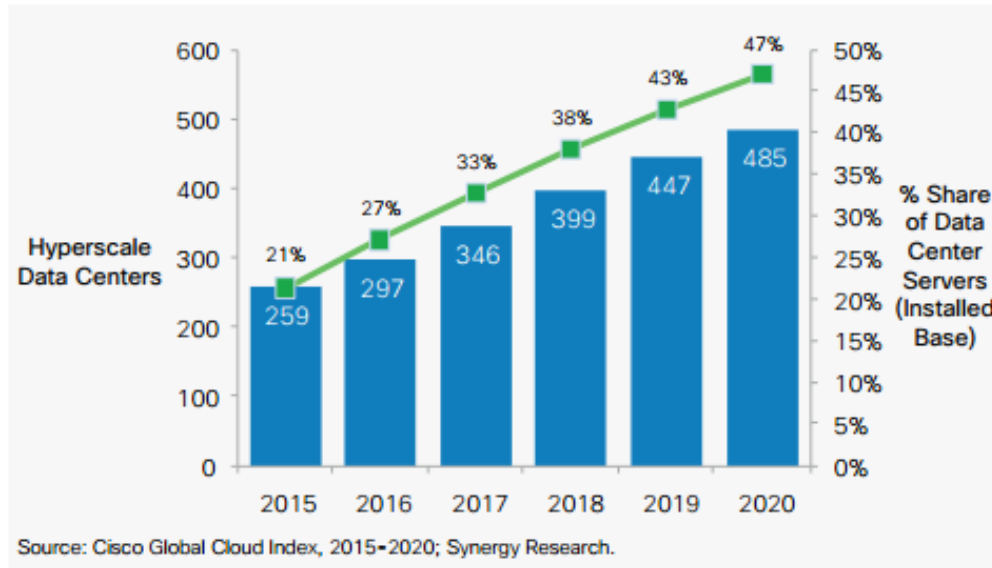


1) Source: Cisco Visual Networking Index: Forecast and Methodology, 2014 - 2019
2) Source: Cisco Global Cloud Index, 2019
3) Source: Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2015-2020

Server Analysis: Hyperscale Datacenters



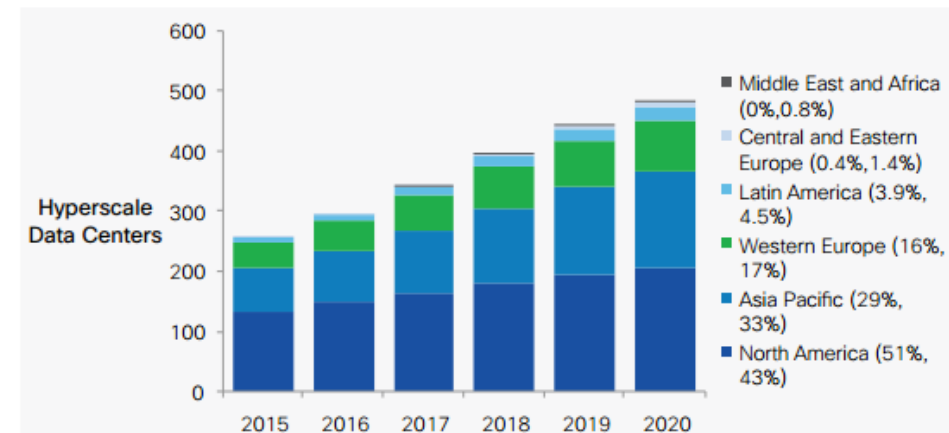
Figure 1. Data Center Growth



- Hyperscale datacenters will grow from 259 in 2015 to 485 in 2020
- By 2020 Hyperscale will be 47% of all data center
- By 2020 Hyperscale will be 83% of Public Cloud, and 86% of public cloud workloads.
- * Hyperscale : Amazon/AWS, Rackspace, Google, Salesforce, Facebook, Yahoo, Apple, Alibaba, ebay etc.

- 2016 N.A Hyperscale datacenters 51% → 2020 43%
- 2016 Asia 29% → 2020 33%

Figure 2. Data Center Growth: Regional View



Note: Percentages within parentheses refer to relative share for 2015 and 2020.

Source: Cisco Global Cloud Index, 2015-2020; Synergy Research.

Server Analysis: Market Share



Top 5 Corporate Family, Worldwide Server Systems Vendor Revenue, Market Share, and Growth, First Quarter of 2016 (Revenues are in Millions)

Vendor	1Q16 Market		1Q15 Market		1Q16/1Q15
	1Q16 Revenue	Share	1Q15 Revenue	Share	Revenue Growth
1. HPE	\$3,306.8	26.7%	\$3,196.2	24.9%	3.5%
2. Dell	\$2,267.8	18.3%	\$2,308.3	18.0%	-1.8%
3. IBM	\$1,139.5	9.2%	\$1,697.3	13.2%	-32.9%
4. Lenovo *	\$871.2	7.0%	\$953.6	7.4%	-8.6%
4. Cisco *	\$850.2	6.9%	\$890.3	6.9%	-4.5%
ODM Direct	\$863.8	7.0%	\$971.0	7.6%	-11.0%
Others	\$3,082.4	24.9%	\$2,826.7	22.0%	9.0%
Total	\$12,382	100%	\$12,843	100%	-3.6%

IDC's Worldwide Quarterly Server Tracker, June 2016

- Q1/16 HP has 26.7% and by Q4/16 HP dropped to 22.9%
- Q1/16 Others 24.9% and by Q4/16 Others increased to 34%

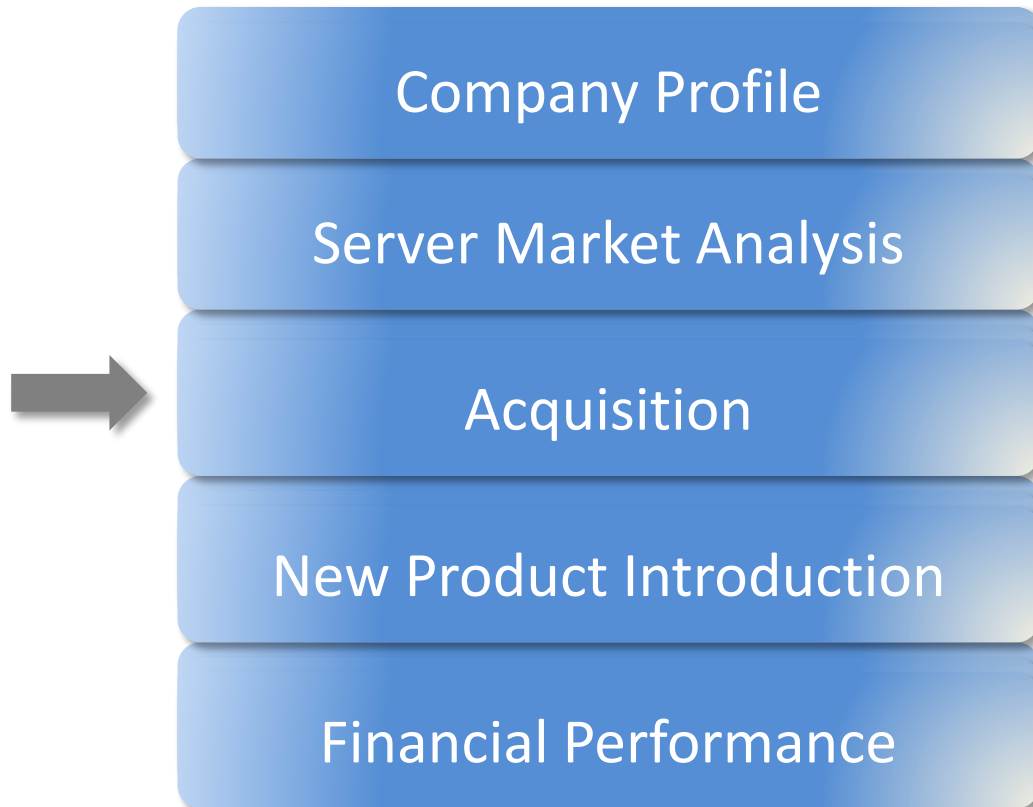
Table 1. Worldwide: Server Vendor Revenue Estimates, 4Q16 (U.S. Dollars)

Company	4Q16 Revenue	4Q16 Market Share (%)	4Q15 Revenue	4Q15 Market Share (%)	4Q16-4Q15 Growth (%)
HPE	3,392,601,012	22.9	3,813,592,269	25.2	-11.0
Dell	2,578,181,854	17.4	2,533,495,993	16.7	1.8
IBM	1,732,474,861	11.7	1,974,018,084	13.0	-12.2
Huawei	1,249,813,371	7.7	610,225,437	4.0	88.4
Lenovo	946,283,185	6.4	1,136,141,494	7.5	-16.7
Others	5,039,143,533	34.0	5,064,301,087	33.5	-0.5
Total	14,838,497,815	100.0	15,131,774,365	100.0	-1.9

Source: Gartner (March 2017)

Server Analysis: Data Center Location





Acquisition Result – Complete Customer base

品牌客戶



ODM/OEM 客戶



Acquisition Result– 2017/Q1 Revenue



	2017/Q1 (NTD 1,000)	%	2016/Q1 (NTD 1,000)	%	YOY
Server Management AST Series	319,847	71%	257,065	90%	24%
Server Management Pilot Series	90,106	20%	0	0%	
PC/AV Extension	42,714	9%	28,243	10%	51%
<u>Grand Total</u>	<u>452,667</u>		<u>285,308</u>		<u>59%</u>

New Product – Next Generation



- Dual Brands: AST Series & Pilot Series
- One Silicon Supporting Two Architectures
- High Performance and Low Power Consumption
- Adopting Advanced Process Node
- Engineering Samples : 2018/H2





AST1620



HDMI over LAN
USB over LAN

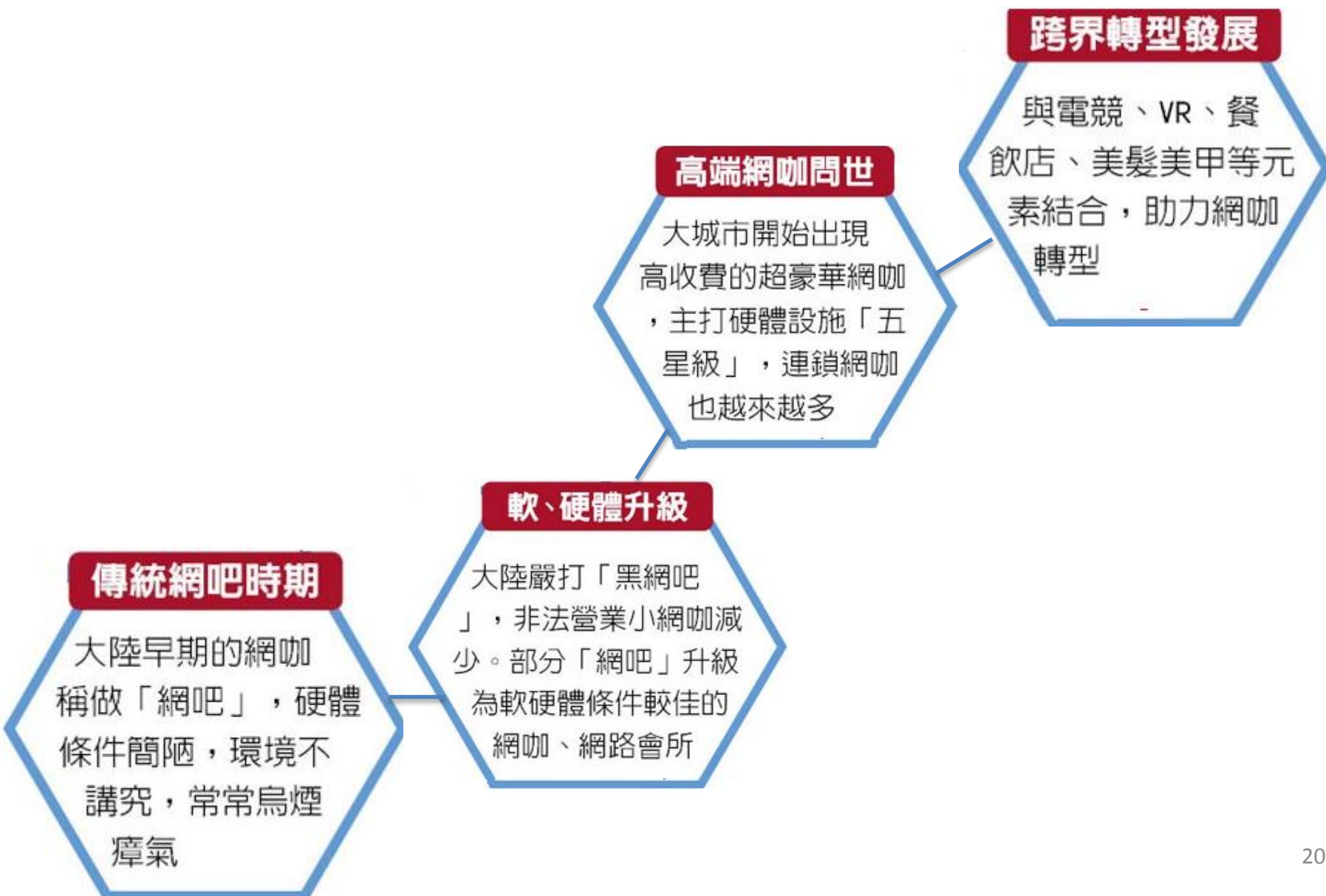
- **< 80us 低延遲反應 low latency**
- Support 4Kx2K@30Hz, 2Kx1K@60Hz/120Hz
- Visually Lossless Video Compression
- Complimentary with Switch; no limitation on the distance
- Through internet Switch, Host and Client and pair accordingly. 配對可自由切換
- Engineering Samples : 2017/Q2
- Production Samples: 2017/Q3
- Mass Production : 2017/Q4

New Product Launch– iCafe in China

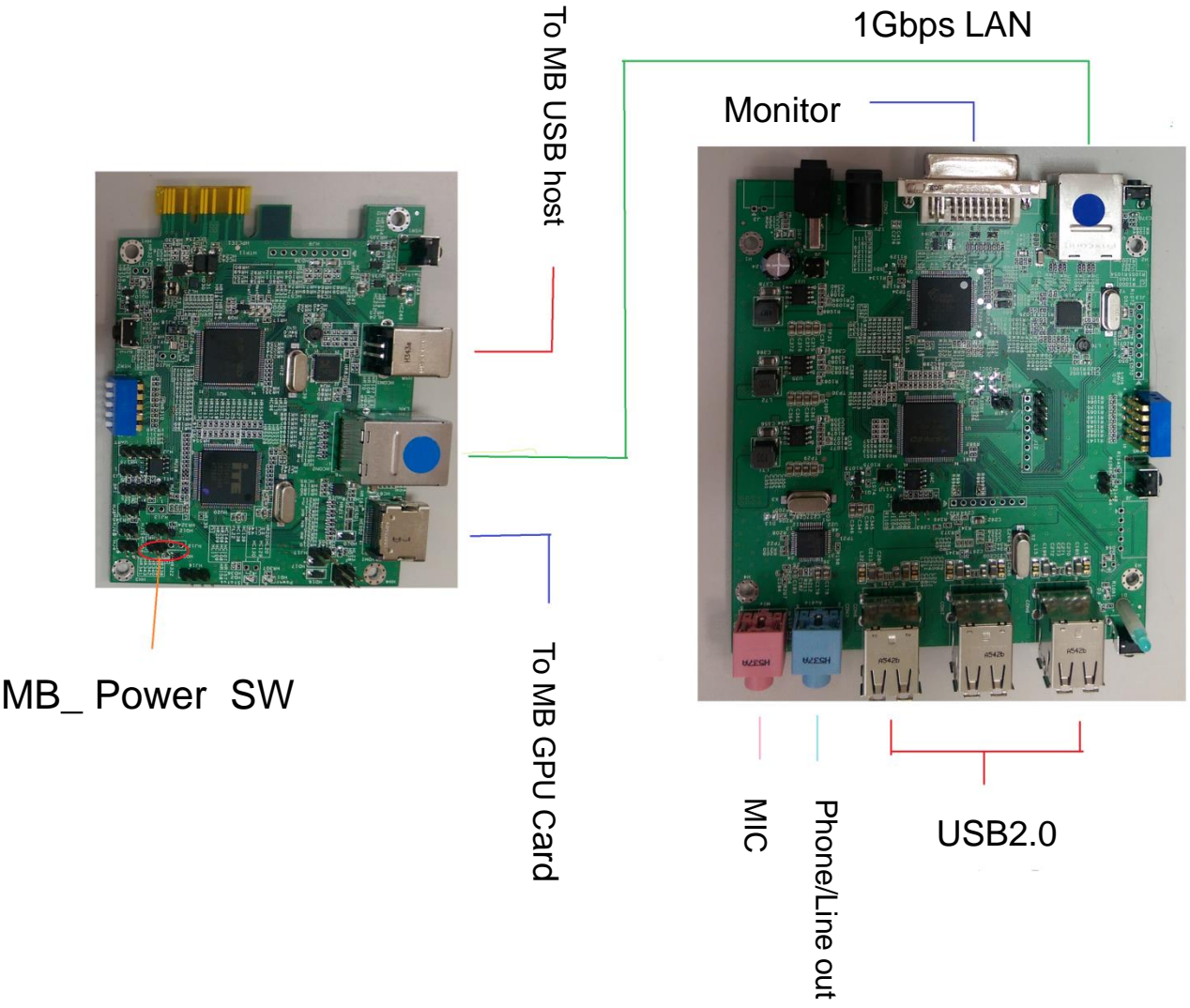


- **Market size: Approx. 150,000 iCafe in China**
- **Average 70 seats/ iCafe**
- **Install base :10M/ pcs**

New Product Launch– History of iCafe



New Product Launch- AST1620 extension



1. More space per seat

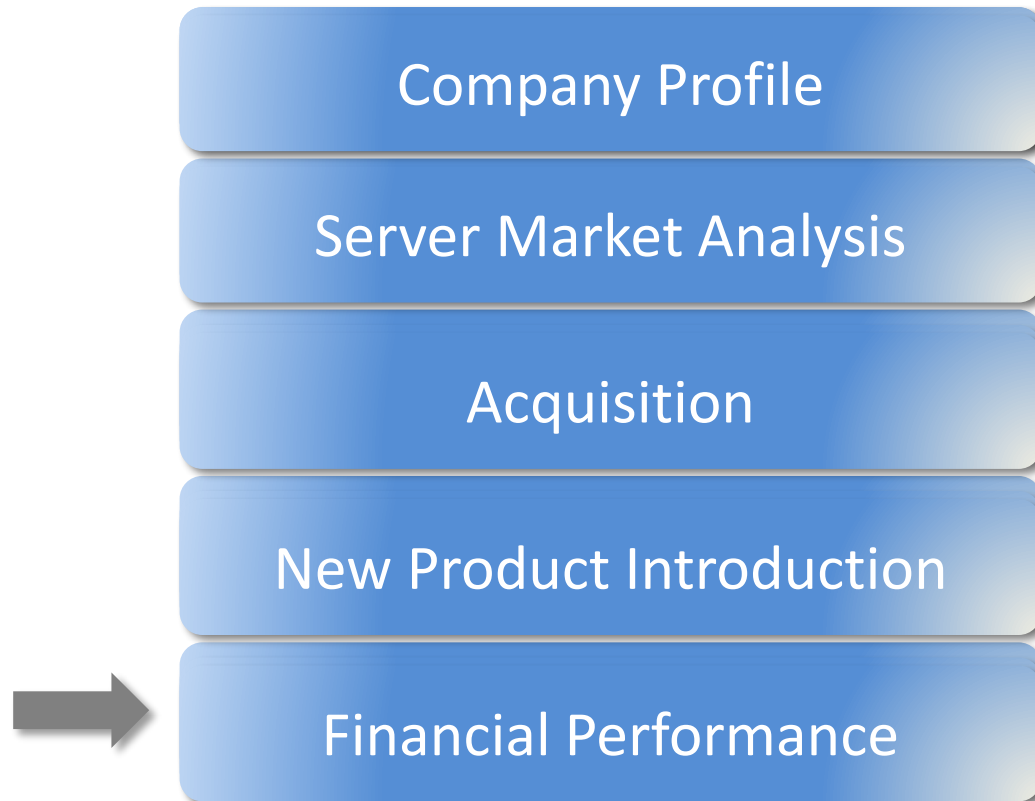
2. Better interior design layout

3. Lower OPEX

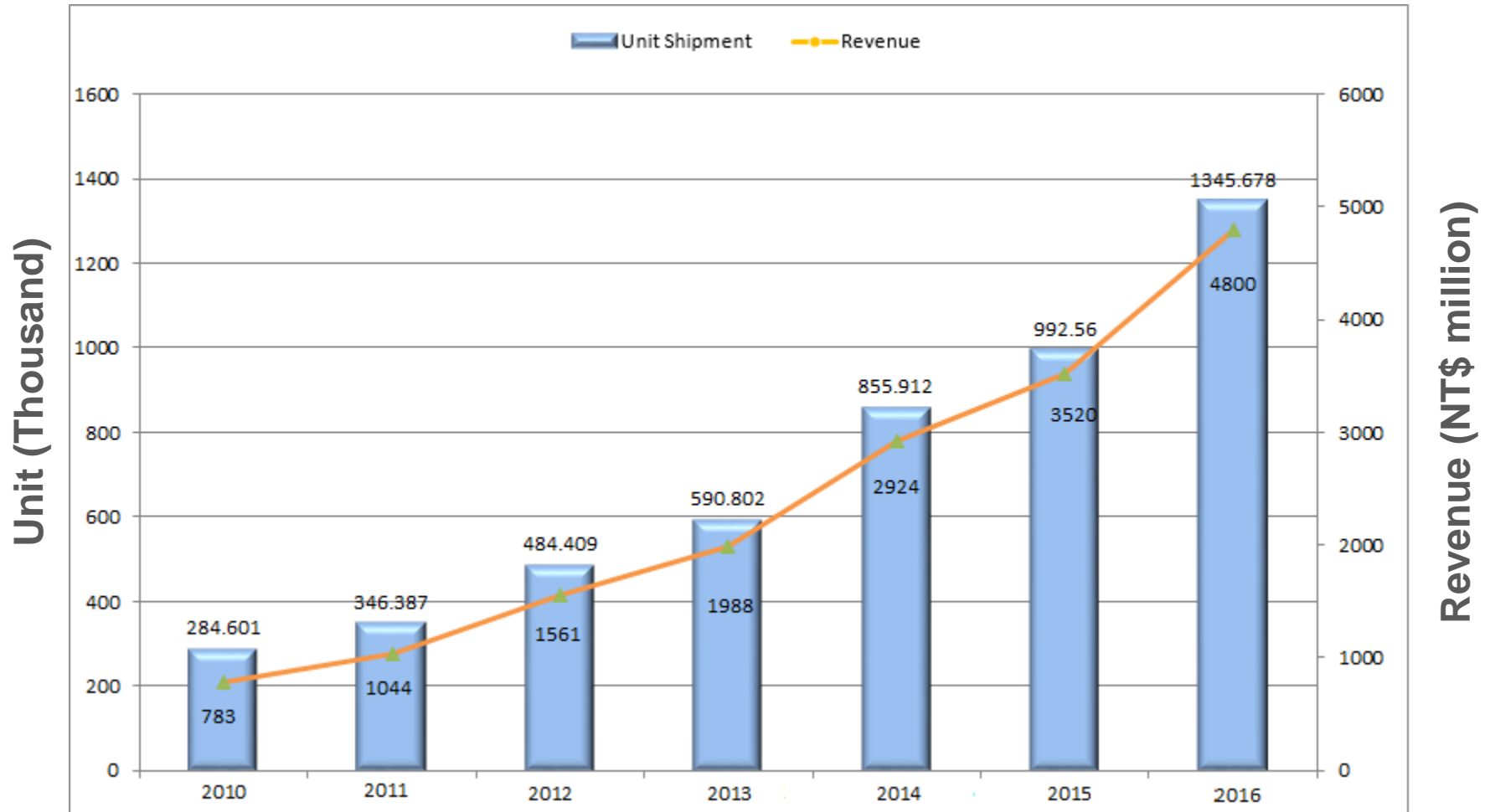
- Less theft, damage to the computer
- Easier upgrade/ fix for MB/VGA/ Monitors
- Lower electricity cost

4. Better management

- Easily change the PC and user behavior
- Less noise, heat



Financial Performance– 2016 Revenue and Shipment



Financial Performance– 2017/Q1



Unit : NTD 1,000	2016Q1	2017Q1	
	NTD	NTD	YoY
Sales Revenue	286,452	452,976	58.13%
Net Operating Profit	115,766	151,429	30.81%
Pre-Tax Profit	107,598	123,854	15.11%
Net Income	89,361	102,797	15.04%
EPS	2.83	3.04	7.42%

Financial Performance – 2016FY



Unit : NTD 1,000	FY 2015	FY2016	
	Amount	Amount	YoY
Sales Revenue	992,560	1,345,678	35.58%
Net Operating Profit	368,076	534,782	45.29%
Pre-Tax Profit	389,165	543,728	39.72%
Net Income	339,908	445,919	31.19%
EPS	10.79	14.07	30.40%

Financial Performance– 2017/Q1 Key Indices



	2016Q1	2017Q1	
Unit : NTD 1,000	Amount	Amount	YoY
Cash	939,319	915,443	(2.54%)
Account Receivable	218,781	307,740	40.66%
Inventory	64,408	84,969	31.92%
Debt- Short term	-	170,000	100%
Shipment Qty (K/pcs)	1,010	1,614	59.80%

Dividend Policy



	2009	2010	2011	2012	2013	2014	2015	2016
Cash Dividend	2.29	3.00	4.00	5.00	5.50	7.00	8.00	12.00*
Stock Dividend	2.00	1.42	0.00	0.00	0.00	2.00	0.00	0.00
Dividend From Capital Reserves	0.30	0.60	0.22	0.20	1.00	0.00	0.00	0.00
Total Dividend	4.59	5.02	4.22	5.20	6.50	9.00	8.00	12.00
EPS	5.64	5.66	4.77	6.50	7.40	10.72	10.79	14.07

Earning distributions:

- Employee bonus can not be less than 8%
- Directors bonus no higher than 3%
- With respect to the earnings available for distribution plus the previously cumulative undistributed retained earnings, the Board of Directors may present a proposal to distribute to the Shareholders by way of dividends at the annual general meeting for approval. Having considered the operational, financial and tax factors, including the Company being in the growing stage during the business life cycle and the future expansion projects, any remaining profits may be distributed in the form of cash dividends and/or shares, and the cash dividends shall be no less than 10% of such remaining profits to be distributed.
- *The appropriations of earnings for 2016 are to be presented for approval in ASPEED's shareholders' meeting to be held on May 26, 2017 (expected).

Thank You!

Q & A

