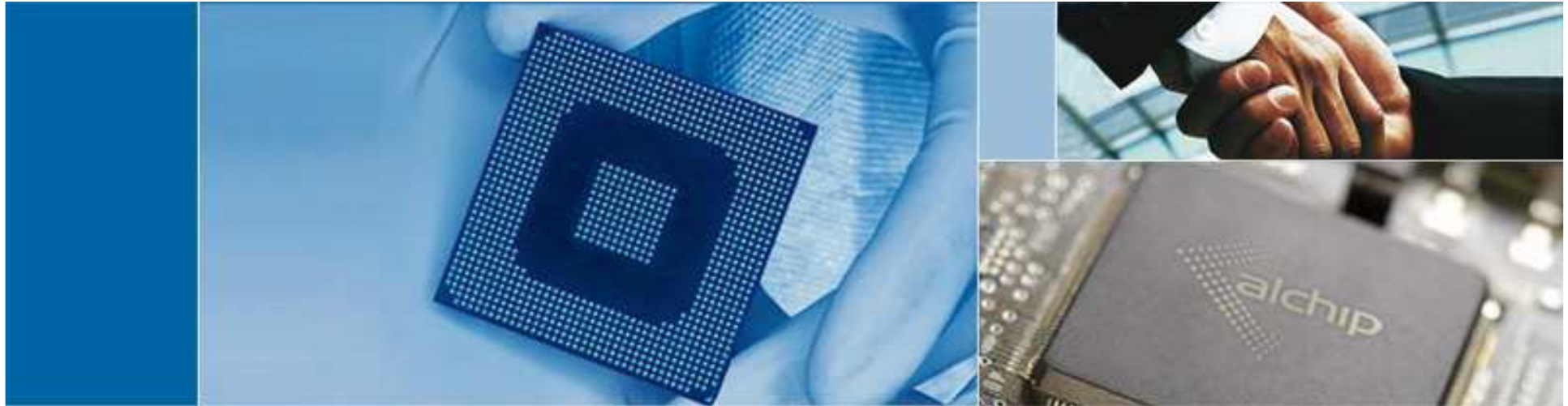




**(3661 TT)**



# **Alchip Technologies**

**Trusted Silicon Partner Realizing Innovations**

# Safe Harbor Disclaimer



This presentation contains forward-looking statements, including statements about business outlook and strategy, and statements about historical results that may suggest trends for our business. These statements are based on estimates and information available to us at the time of this presentation and are not guarantees of future performance. Actual results could differ materially from our current expectations as result of many factors, including: our financial performance, including our net revenue, cost of revenue, operating expenses and ability to sustain profitability; our planned capital expenditures; our ability to expand our customer base; our ability to expand our product and service offerings; the impact of seasonality on our business; our ability to remediate the material weaknesses and significant deficiencies in our internal control over financial reporting; our ability to stay abreast of modified or new laws applying to our business; and our spending of the net proceeds from this offering. Except as required by law, we undertake no obligation to update any forward-looking statements, whether as a result of new information, future events, or otherwise.

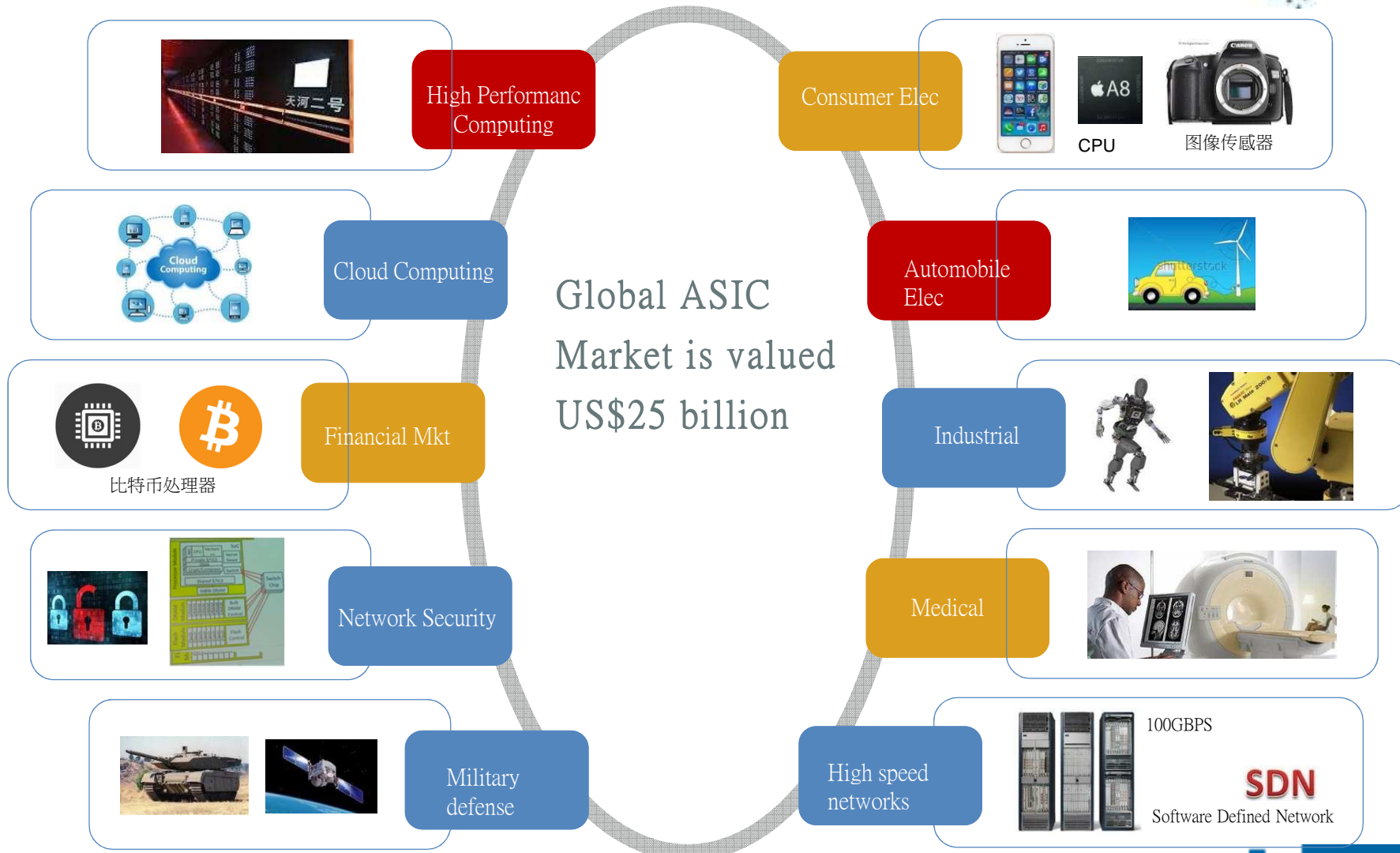
# Company basic information



- Founded: February 2003
- **Chairman: Kinying Kwan, CEO: Johnny Shen**
- **Business: ASIC design service and manufacturing**
- Employee: 260-280
- Capital: 607 million NT dollars



# ASIC Application Market



# 4Q16 P&L statement



美金(千元)	1Q16	2Q16	3Q16	4Q16	QoQ (%)	YoY (%)	4Q15
Revenue	28,645	25,148	28,596	32,014	12.0	17.1	27,341
Gross Profit	5,163	575	3,380	6,002	77.6	-30.4	8,621
Op. Exp	5,184	6,544	4,662	5,231	12.2	-18.5	6,416
Op. Income	-21	-5,969	-1,283	772	n.m.	-65.0	2,205
Non. Op.	297	-926	541	349	-35.4	73.9	201
Pre-Tax Profit	277	-6,896	-742	1,121	n.m.	-53.4	2,406
Income Tax	-12	-498	-125	322	n.m.	1,690	18
Net income	264	-7,393	-867	1,443	n.m.	-39.5	2,387
EPS (NT\$)	0.14	-3.94	-0.42	0.77			1.23

# 2016 Income Statement



美金(千元)	2014	YoY(%)	2015	YoY(%)	2016	YoY(%)
Revenue	154,814	77.9	119,277	-23.0	114,403	-4.1
COGs	123,358	100.6	93,363	-24.3	99,282	6.3
Gross Profit	31,456	23.2	25,914	-17.6	15,121	-41.7
Op. Exp	20,165	4.7	21,477	6.5	21,621	0.7
Op. Income	11,292	80.2	4,437	-60.7	-6,500	n.m.
Non. Op.	-1,409	-2.2	864	n.m.	261	-69.7
Pre-Tax Profit	9,883	92.8	5,301	-46.4	-6,239	m.m.
Income Tax	2,914	103.4	1,238	-57.5	313	-74.8
Net income	6,969	88.7	4,062	-41.7	-6,552	n.m.
EPS(NT\$)	3.77		2.07		-3.45	
(每股純益依當時股本/匯率計算)						

# 2016 Operational Recap



**4Q16 revenue grow 12% and 17% QoQ and YoY, Op income turn positive**

- HPC design revenue kick in, driving more favorable product mi
- Isp chip shipments were stronger than we expected

**2016 revenue came at US\$114.4M, down 4.1% YoY on**

- Revenue from TV keeps on declining as customers are leaning toward using ASSP
- Bitcoin mining chip design and shipment revenue suffered significant YoY decline on intensifying competition of coin mining industry

# 2016 Operational Recap (cont.)



## 2016 gross margin decline to 13.2% on

- Less favorable sales mix on lower design revenue
- Lower sales scale
- Inventory write-off caused by KnC's bankruptcy in 2Q16

## 2016 net loss of US\$6.5M

- Lowering gross margin was the main attributor to this operating loss
- AR/Inventory write-off caused by KnC's bankruptcy
- In addition to mentioned reasons above, an additional US\$1.03M loss from write-off KnC's stake also contributed to this negative bottom line

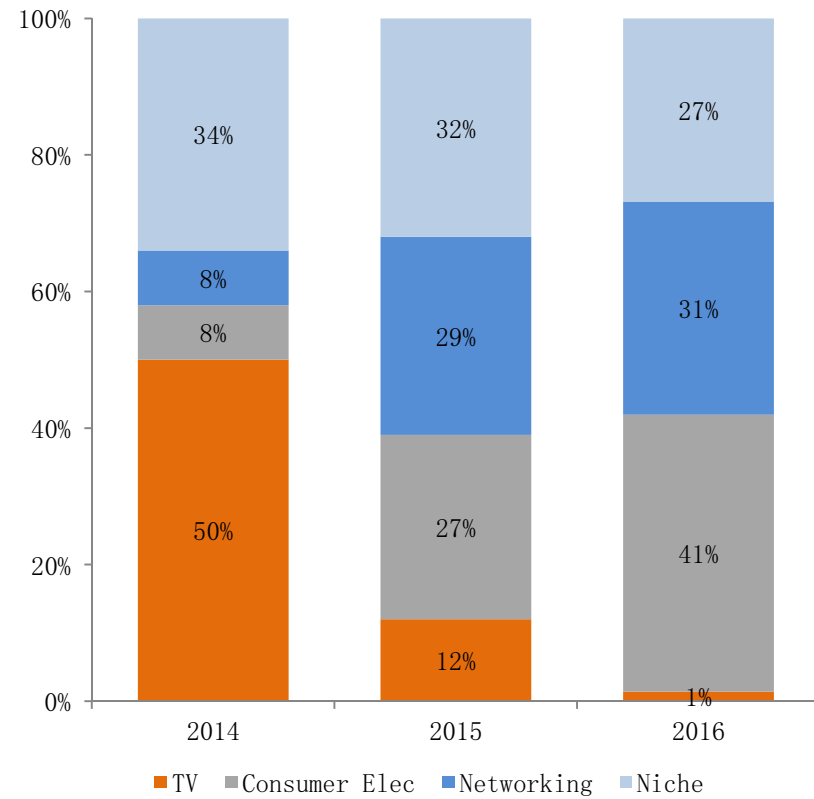
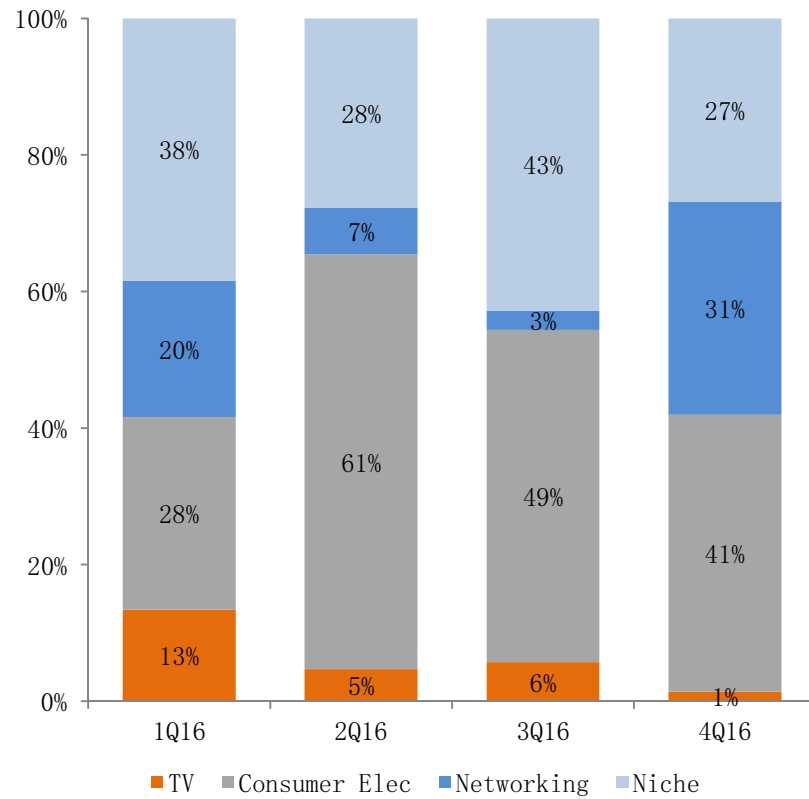




# Revenue breakdown by application

## Quarterly breakdown

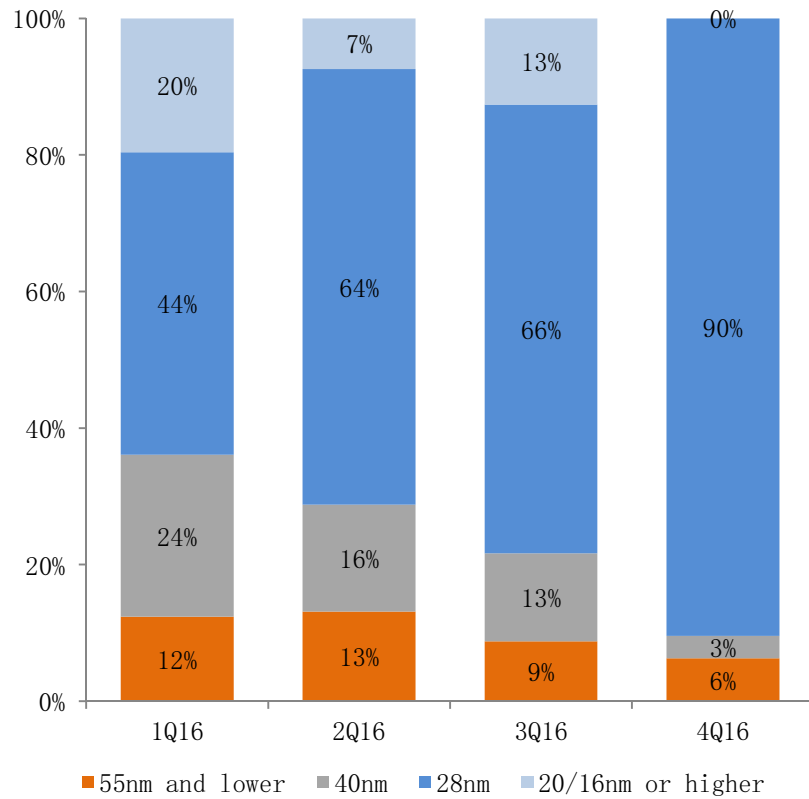
## 14-16 yearly breakdown



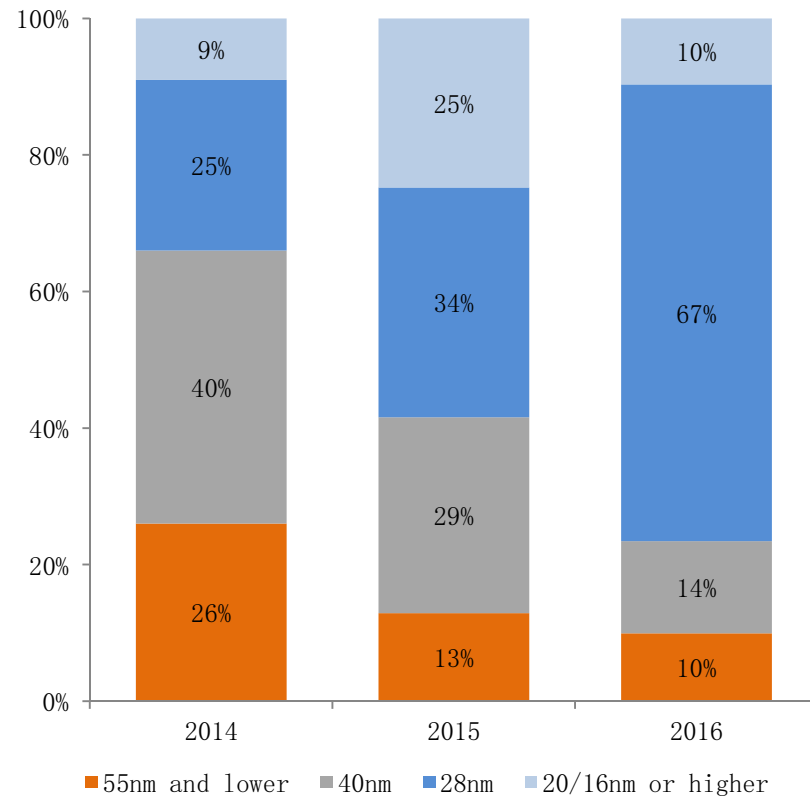


# Revenue breakdown by process node

## Quarterly breakdown



## 14-16 yearly breakdown



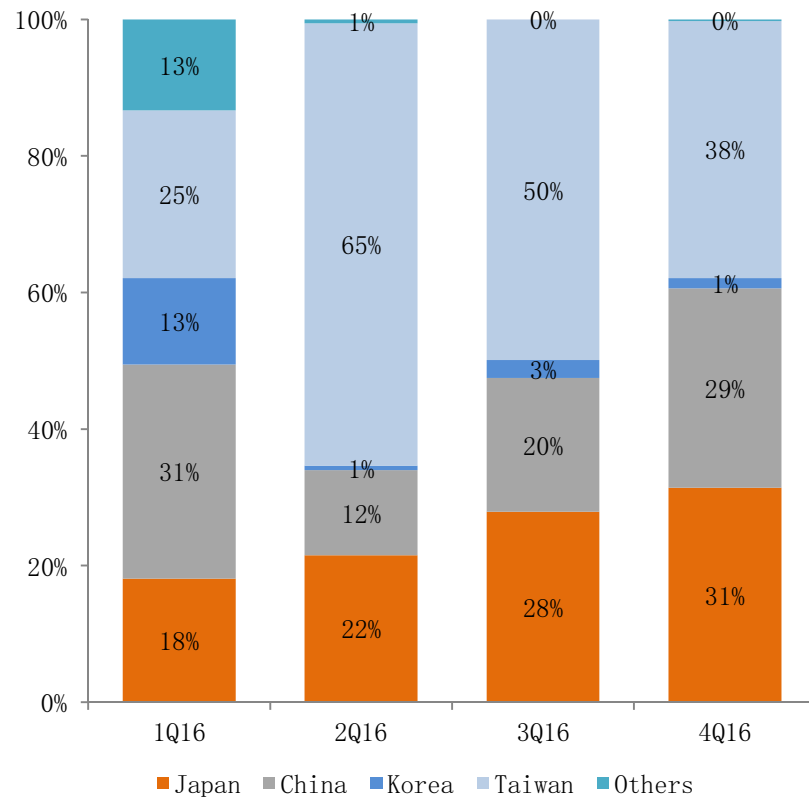
Advanced process node means 40nm or better

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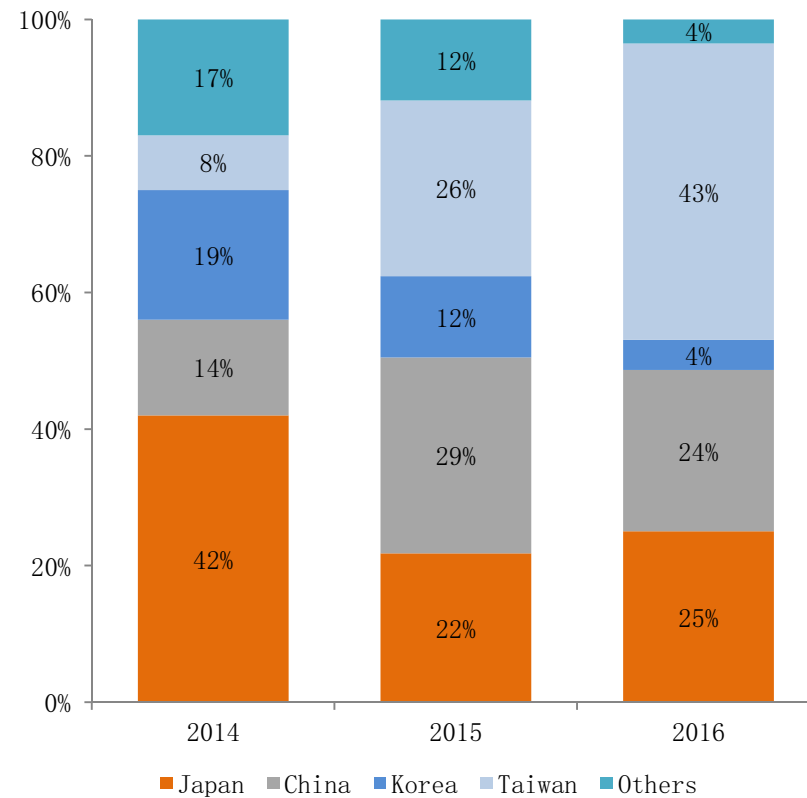


# Revenue breakdown by region

## Quarterly breakdown



## 14-16 yearly breakdown



# 2017 Overall outlook



## Continuously positive on China market

- Continuously strong support and subsidy by government for China semiconductor/IC industry
- Numbers increase of China customers who become able to adapt advanced technology nodes
- Alchip still enjoys advantage within the advanced technology nodes

## Japan and Korean market

- Shipment of JP amusement machine main chip restarted in late 2Q and is expected to continue through 2017
- Kick-off of 16nm JP medical supercomputer projects
- Many advanced technology node products in business discussion with JP customers
- Korean customers are slow and no significant recovery expected in the near-term

# 2016年的中國市場



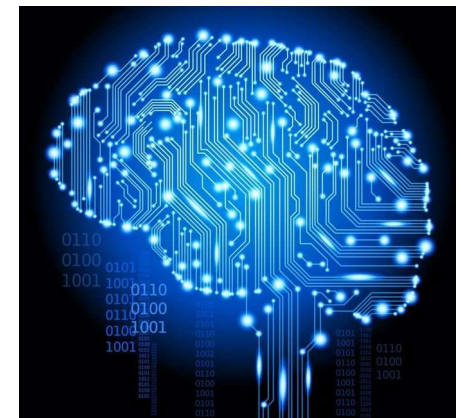
- China government is reportedly announcing 2017年3月中國政府工作報告宣布“全面實施戰略性新興產業發展規劃，加快新材料，人工智能，集成電路，生物制藥，第五代移動通信技術研發和轉化，做大做強產業集群”。 “把發展智能制造作為主攻方向，推進國家智能制造示範區、制造業創新中心建設。” “擴大數字家庭等信息消費。”
- 2016年中國大陸集成電路產業銷售額為4,335.5億元人民幣，同比增長20.1%。其中，IC設計業銷售額為1,644.3億元，同比增長24.1%；與之對應，2016年全球半導體市場全年總銷售值達3,389億美元，僅較2015年成長1.1%
- 設計業增速最高的十個城市中，合肥以872.5%增速名列榜首

# The new applications drives growth



## *Artificial Intelligence*

- Investment and speeding up development of artificial intelligence emerges on government policy
- IDC estimates the AI market value would reach US\$47bn in 2020 at CAGR of 55.1%
- Over US\$10bn investment in AI field for 1,200 projects
- Related applications includes machine vision , voice recognition, auto pilot, drone, Robot, etc.
- It is expected deep learning related chip providers and sensor makers are the direct beneficiaries

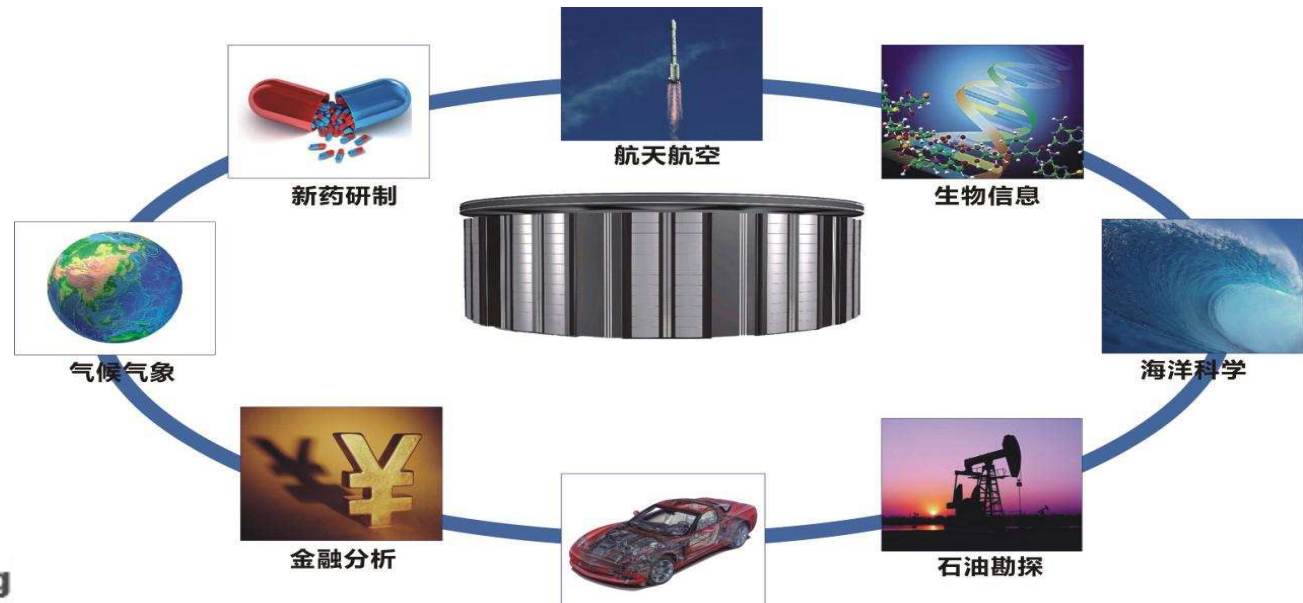


# HPC application analysis



## HPC (high performance computing)

- High entry barrier (large chip size, high gate counts, the most advanced processing nodes, most complex packaging, and high requirement on energy consumption )
- Fast increasing end applications
- We are currently the major back-end service provider to current HPC players in the market

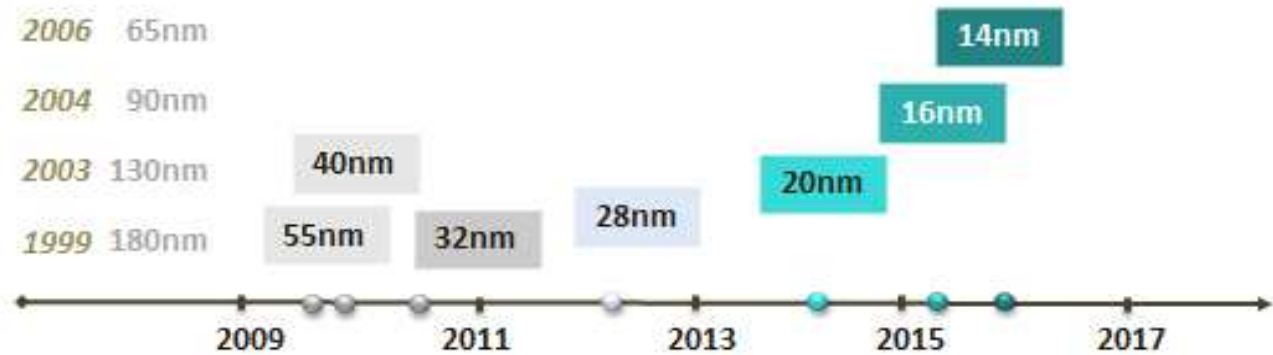


# Track Record



Over 300 successful tape-outs since establishment

**300+**  
**Tape-Outs**







**Thanks!**

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



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