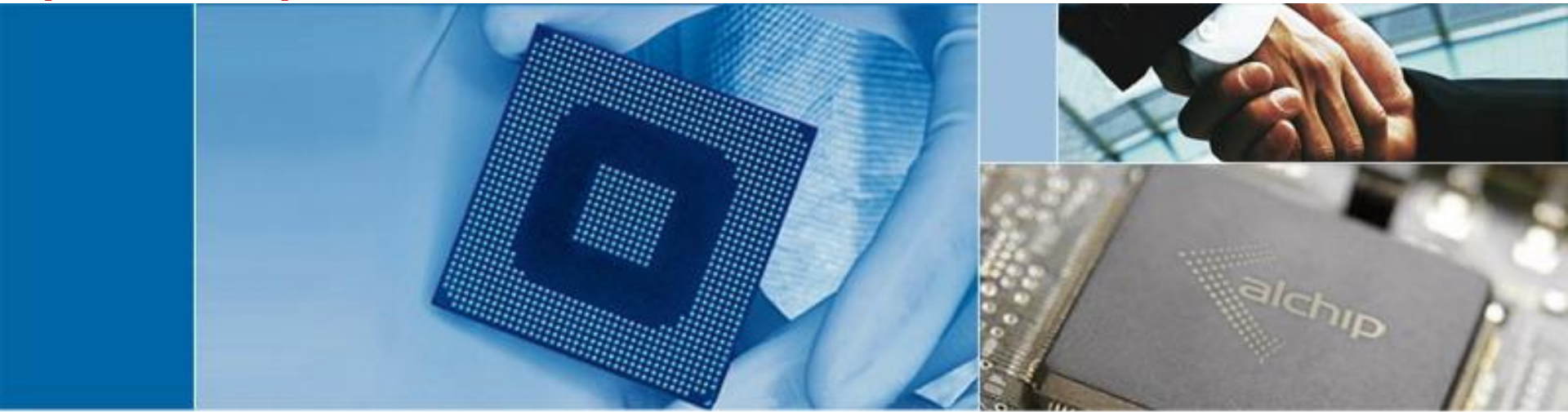




**(3661 TT)**



# **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 Introduction



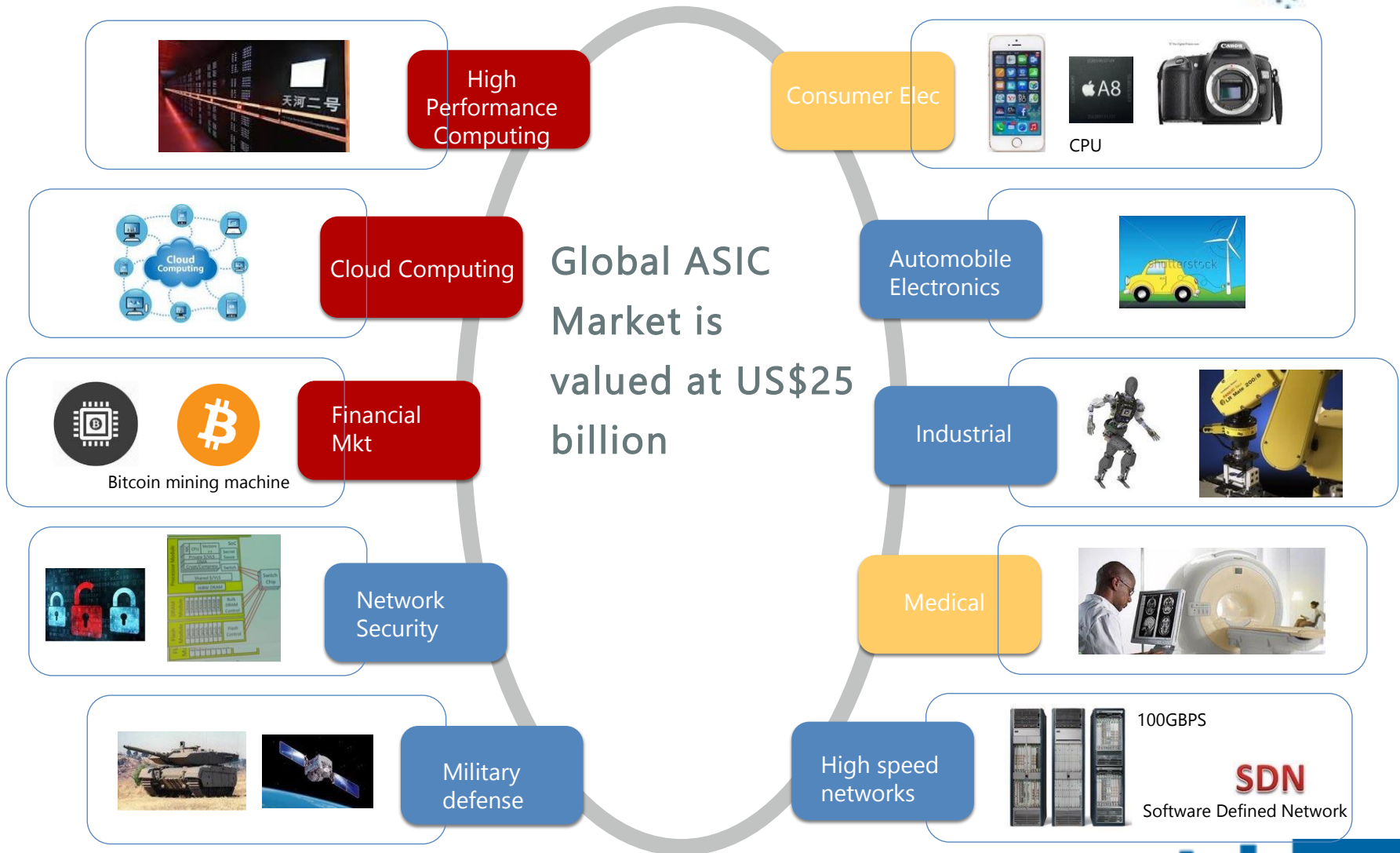


# Corporate Profile

Establishment : 2003	Business : ASIC Design & Turnkey Service
Chairman : Kinying Kwan	CEO : Johnny Shen
Employee : Total@410 , Engineer@290	Paid-in Capital: NT\$617M

<h3>China</h3> <p><b>Shanghai</b> 11F, East tower Greenland Center, 596 Mid-Longhua Road, Xuhui Dist.</p> <p><b>Wuxi</b> 4F, Building A5, No.777, Jianzhuxi Road, Binhu District, Wuxi, Jiangsu,</p> <p><b>Hefei</b> 6F, Building C4, No. 800,Wangjiang West Road, Gaoxin District, Hefei City, Anhui Province,</p> <p><b>Jinan</b> Qilu Soft Park, Gaozin Dist. Jinan City</p> <p><b>Beijing &amp; Guangzhou offices</b></p>	<h3>Taiwan</h3> <p><b>Taipei</b> Taipei (Headquarters) 9F., No.12, Wenhui St., Neihu Dist.,</p> <p><b>Hsincsu</b> 11F.-1,No.1, Taiyuan 1 St., Zhubei City, Hsinchu County</p>	<h3>Japan</h3> <p><b>Sin-Yokohama</b> 10F Shin-Yokohama Square Bldg, 2-3-12 Shin-Yokohama, Kouhoku Yokohama Kanagawa Japan</p> <hr/> <h3>Korea</h3> <p><b>Seoul</b> A-903, 559, Dowha-dong, Mapo-gu, Seoul, 121-784, KOREA</p> <hr/> <h3>North America</h3> <p><b>Silicon Valley</b> P. O. Box 5176Santa Clara, CA 95056-5176</p>
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# ASIC Application Market

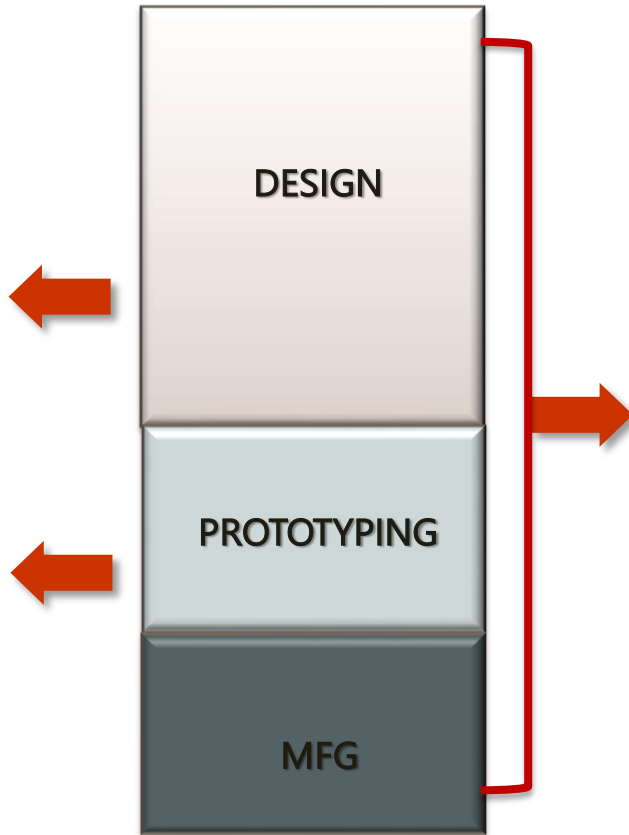


# Partners & Solutions



Vertically Integrated

## PRODUCT FLOW



Alchip integrates "Best in Class" into one solution

# Partnership Model



## Customer

Focus on own core competencies  
*(architecture/front-end development)*

## Alchip

Focus on *silicon design, prototyping  
bring-up & manufacturing*



*Fast TTM &  
Cost Competitive*



*Product  
Ramping Success!*

*your business success*

### Long term contract

Early stage involvement  
*Dedicated* design team  
Local support  
Multiple project assignment  
RTL/Netlist to MP

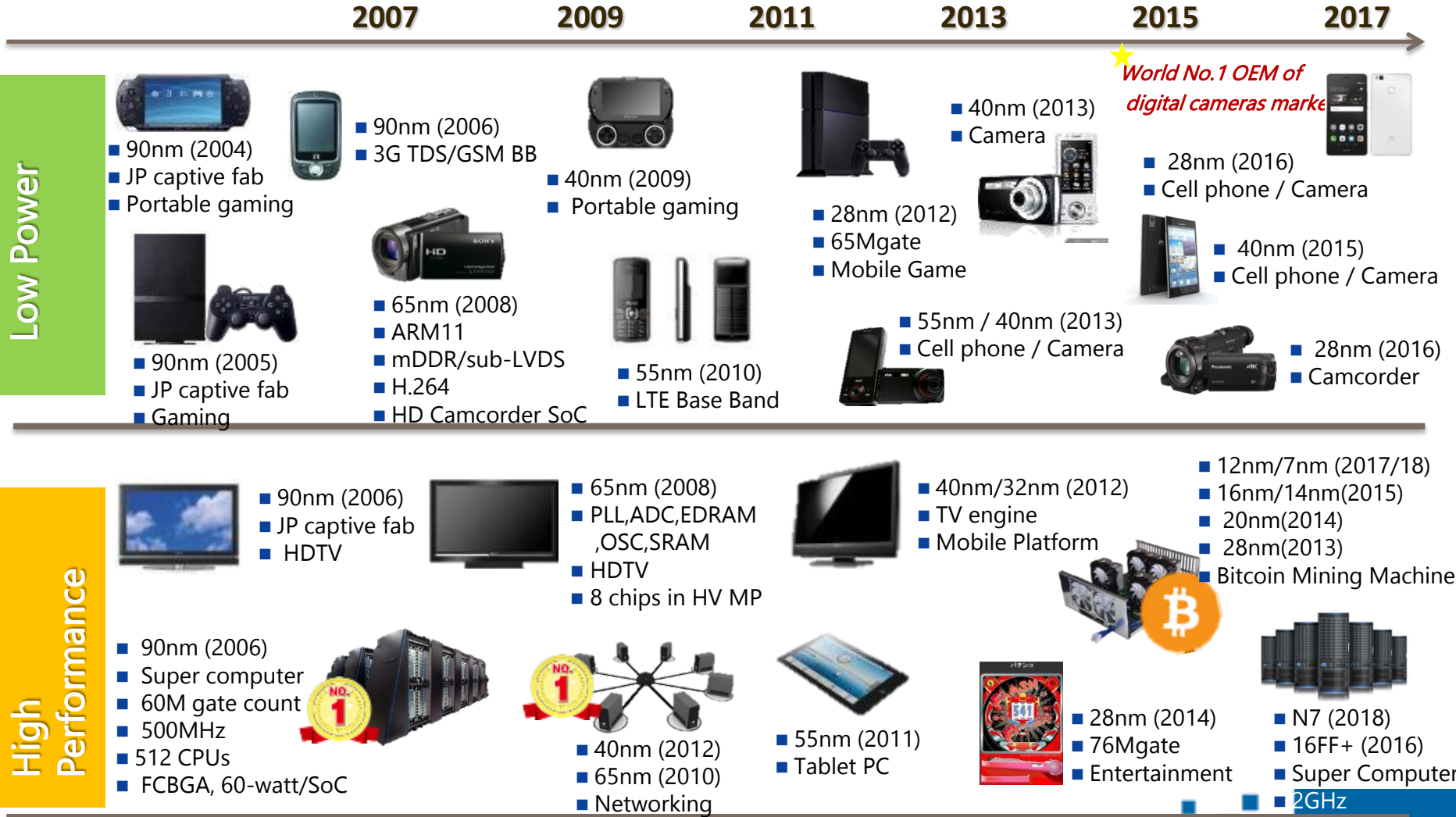
### Technology solutions

Multiple ARM usages  
Total IP Solutions  
Special circuit customization  
Advanced Packaging  
Unmatched SoC Design Solutions

### Manufacturing

Prototyping  
MP  
Full Supply chain management  
Continuous cost reduction

# Track Records

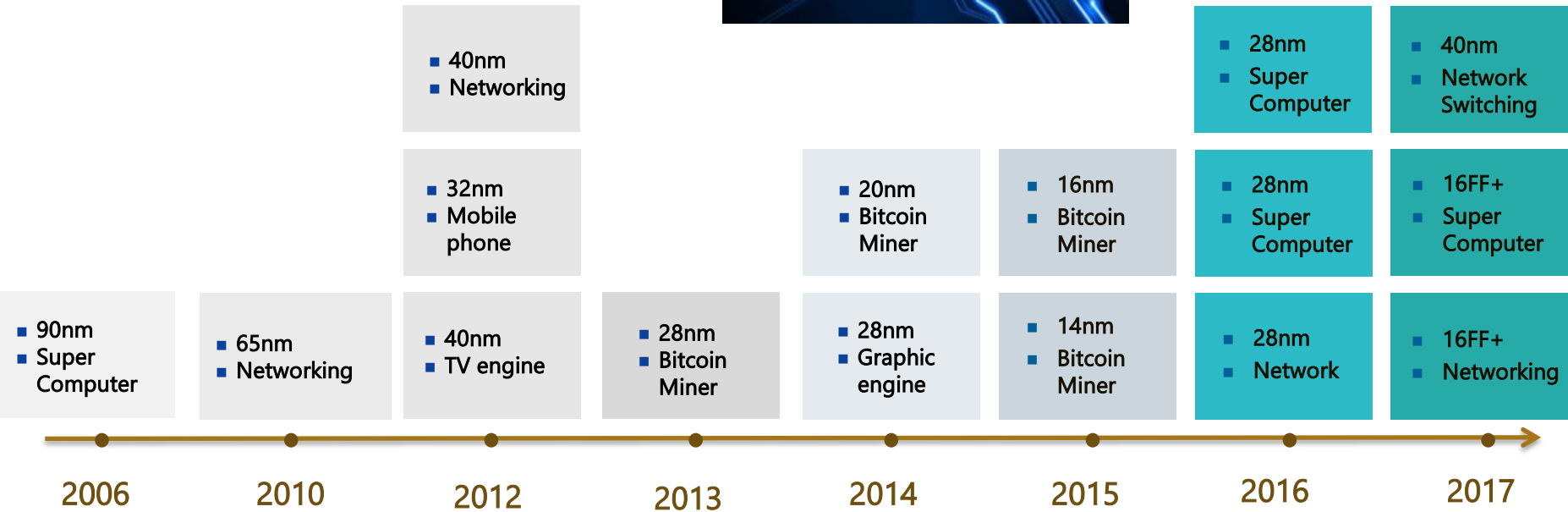
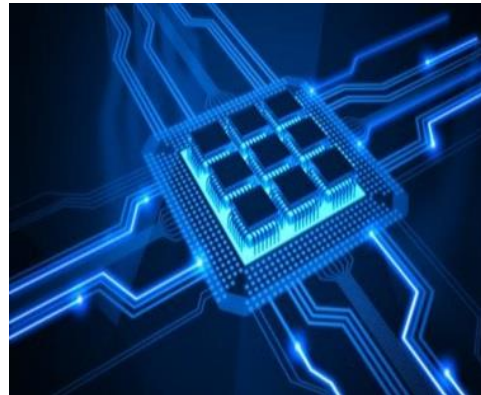


★ World No.1 OEM of digital cameras market

# Track Records (HPC)



**20+ Tapeouts**  
HPC related Design Projects



# Supercomputer Design History



The world's fastest supercomputer (2006)



## Grape DR (2006)

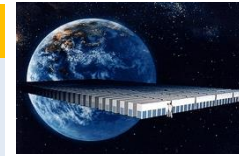
- TSMC 90nm
- Super computer
- 60M gate count
- 500MHz
- FCBGA, 60-watt/SoC



- TSMC 40nm (2012)
- Networking, core processor
- 50M gates

## Grape X (2013)

- TSMC 28nm HP, 1P8M
- Super computer
- 3.1M gates
- 500MHz
- 512 CPUs
- PKG: PBGA



2012

- TSMC 28nm HPM (2014)
- 471M gate count
- 733NHZ
- Medical Equipment

- TSMC 16nm FF+ (2016)
- 1521Mgates
- 1Ghz
- 120W power consumption



- TSMC 65nm (2010)
- Networking
- 60M gates
- 800MHz

2008

2010

2014



- TSMC 28nm (2015)
- Networking

- TSMC16 FF+ (2017)
- Networking
- 460M gate count

- High performance
- High volume of memory
- High bandwidth memory access
- High bandwidth I/O access
- Large scale cache coherency maintained



2018

2006

# Financials & Operation Outlooks

# 1H18 Quarterly Income Statement



US\$( '000)	1Q18	QoQ(%)	YoY(%)	2Q18	QoQ(%)	YoY(%)	1H18
Revenue	27,697	14	12	32,735	18	-15	60,432
COGs	14,999	21	-15	17,591	17	-37	32,590
Gross Profit	12,697	7	79	15,144	19	47	27,842
Op. Exp	8,577	-3	40	8,833	3	22	17,410
Op. Income	4,120	36	341	6,311	53	108	10,432
Non. Op.	584	223	78	-1,308	n.m.	n.m.	-724
Pre-Tax Profit	4,704	46	273	5,004	6	41	9,708
Income Tax	-831	53	1198	-983	18	92	-1,814
Net income	3,873	45	223	4,021	4	32	7,894
EPS (NT\$)	<b>1.85</b>			<b>1.95</b>			<b>3.80</b>

# 1H18 Operation Recap



1H18 revenue came at US\$60.4M, down 4% YoY

- 1H18 revenue came mainly from HPC related projects. Amongst it, revenue of cryptocurrency mining attributed the most
- Benefited by increasing mix of service and HPC related revenue, the 1H gross margin reached 46% (vs. 1H17 @ 27.6%)

2Q18 revenue was US\$32.8M, down 15% YoY. Operating income reached US\$6.3M, up 108% YoY

- The major reason for the YoY revenue decline for 2Q18 was due mainly to lack of production contribution of HPC shipments
- HPC related NRE revenues were the major contributor to 2Q18. NRE accounts for more than 50% of the total revenue

# 1H18 Operation Recap



2Q18 net income came at US\$4.02M, up 4% QoQ and 32% YoY, respectively

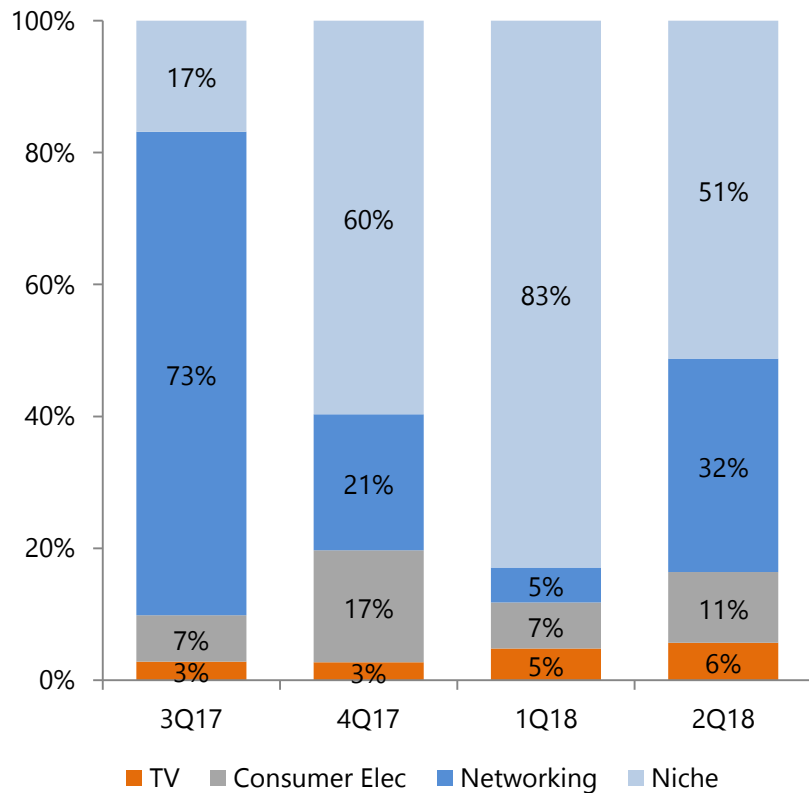
- The main reason for the gap between the operating income and net income recognizing investment loss of around 1.6M from our bond investment portfolio

## The non-operating (investment loss)

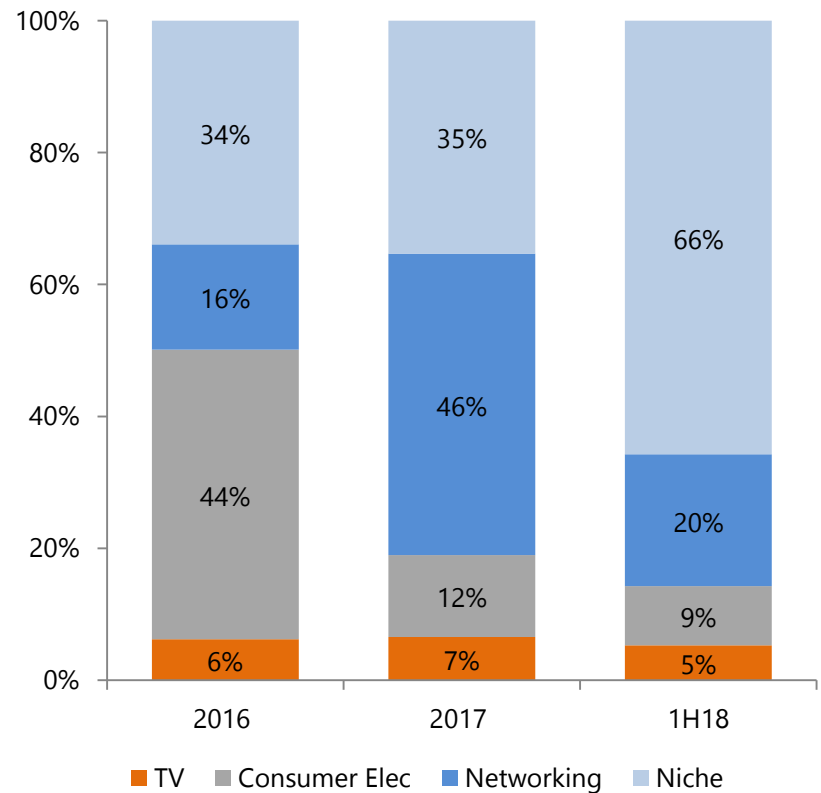
- The bond default : China Energy Reserve & Chemicals (CERC)
- Write-off 1M of the CERC bond, matured in May 2018
- Write-off 600K of the 800K held CERC bond, matured in June 2019

# Revenue breakdown by application

## Quarterly breakdown

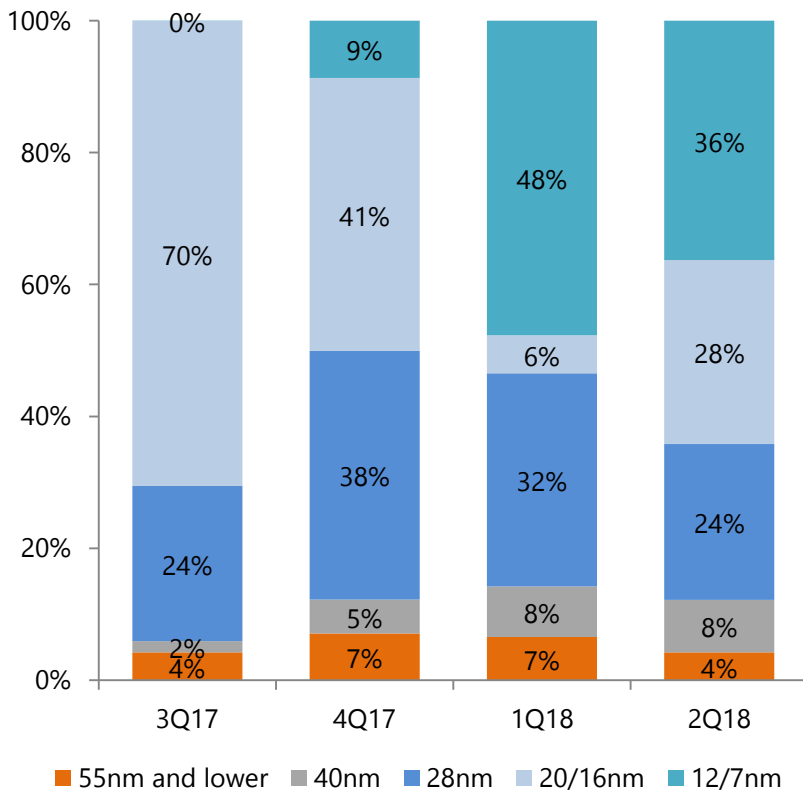


## 16-1H18 yearly breakdown

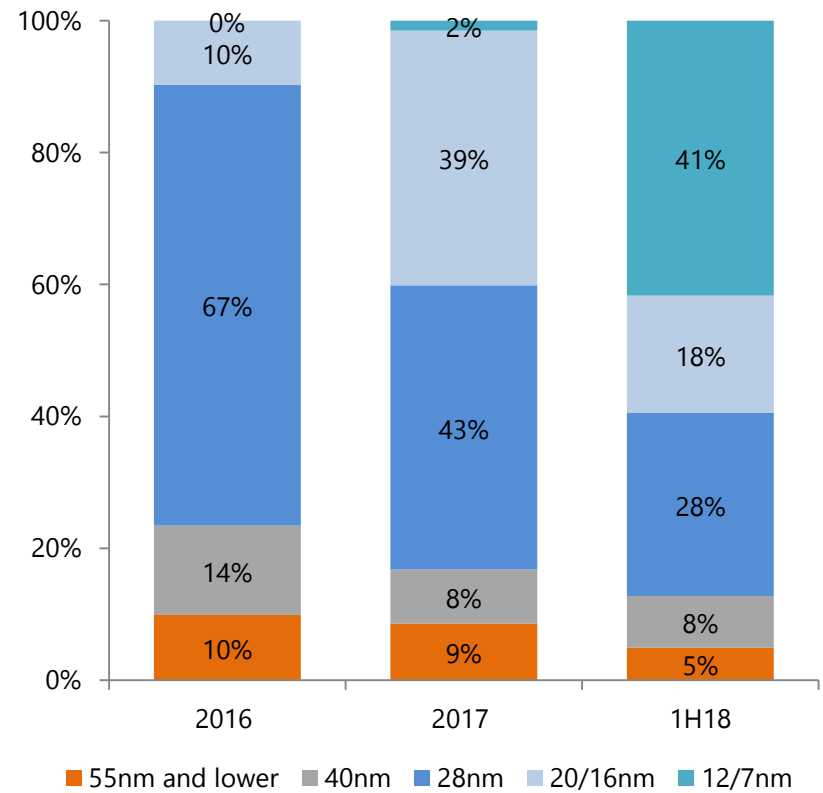


# Revenue breakdown by process node

## Quarterly breakdown



## 16-1H18 yearly breakdown

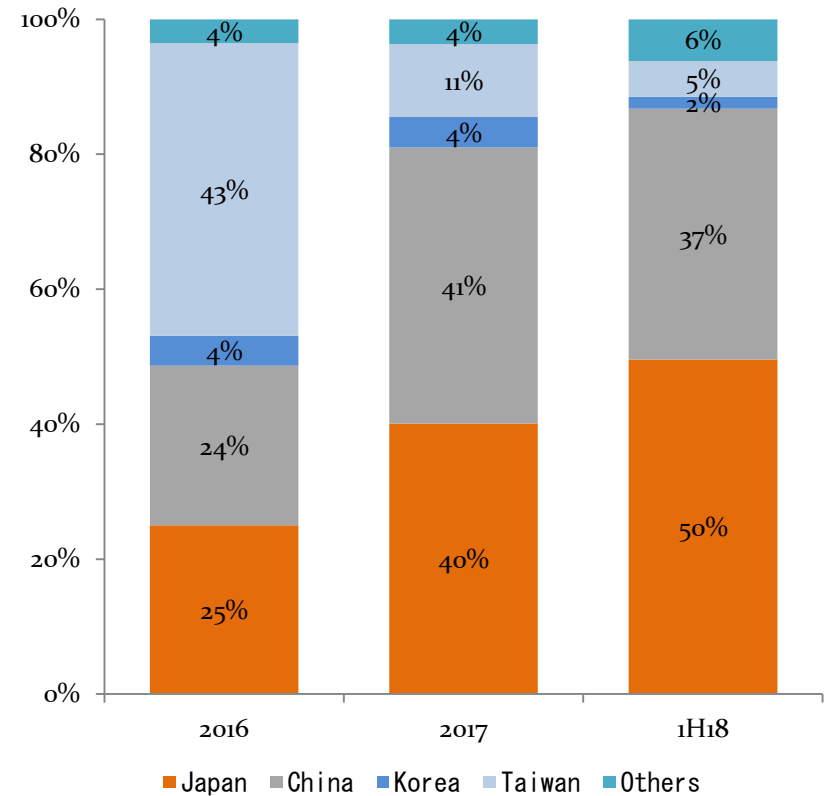
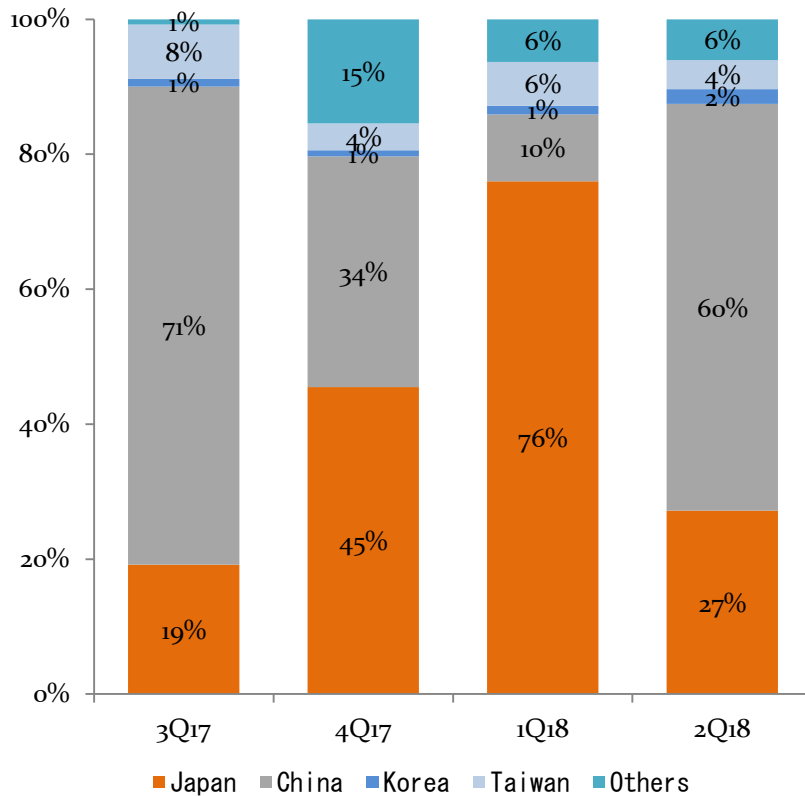


Advanced process node means 40nm or better

# Revenue breakdown by region

## Quarterly breakdown

## 16-1H18 yearly breakdown



# Track Record



Over 300 successful tape-outs since establishment

**350 +  
Tape-Outs**





**Thanks!**

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