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# China IC Opportunities

**Hanming Wu**  
Semiconductor International Manufacturing Corp.

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# Mobile Internet Growing Rapidly in Developing Country

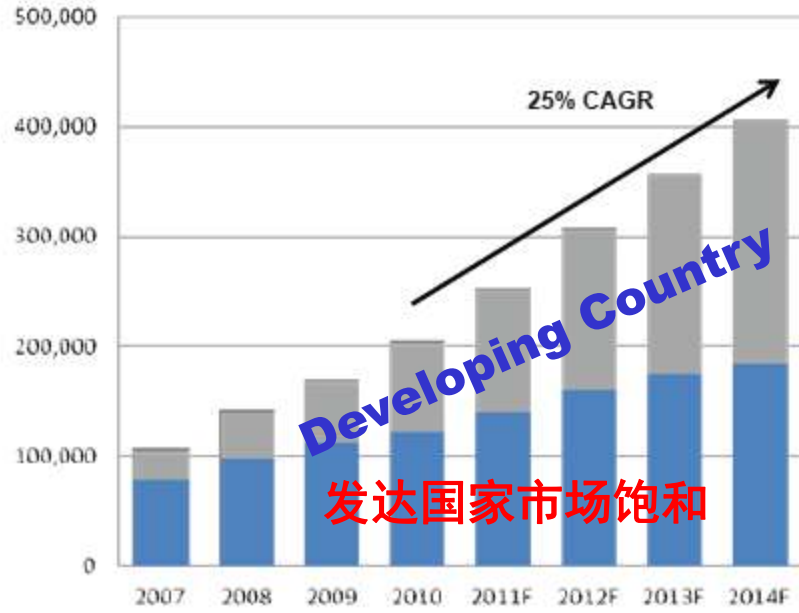
Mobile Cell Phone Device Shipments  
(000's)



Developing Nations

Growth Rate	2010	2011F
Developing Nations	50%	18%
Developed Nations	4%	4%
Total	32%	13%

Mobile PC Shipments  
(000's)

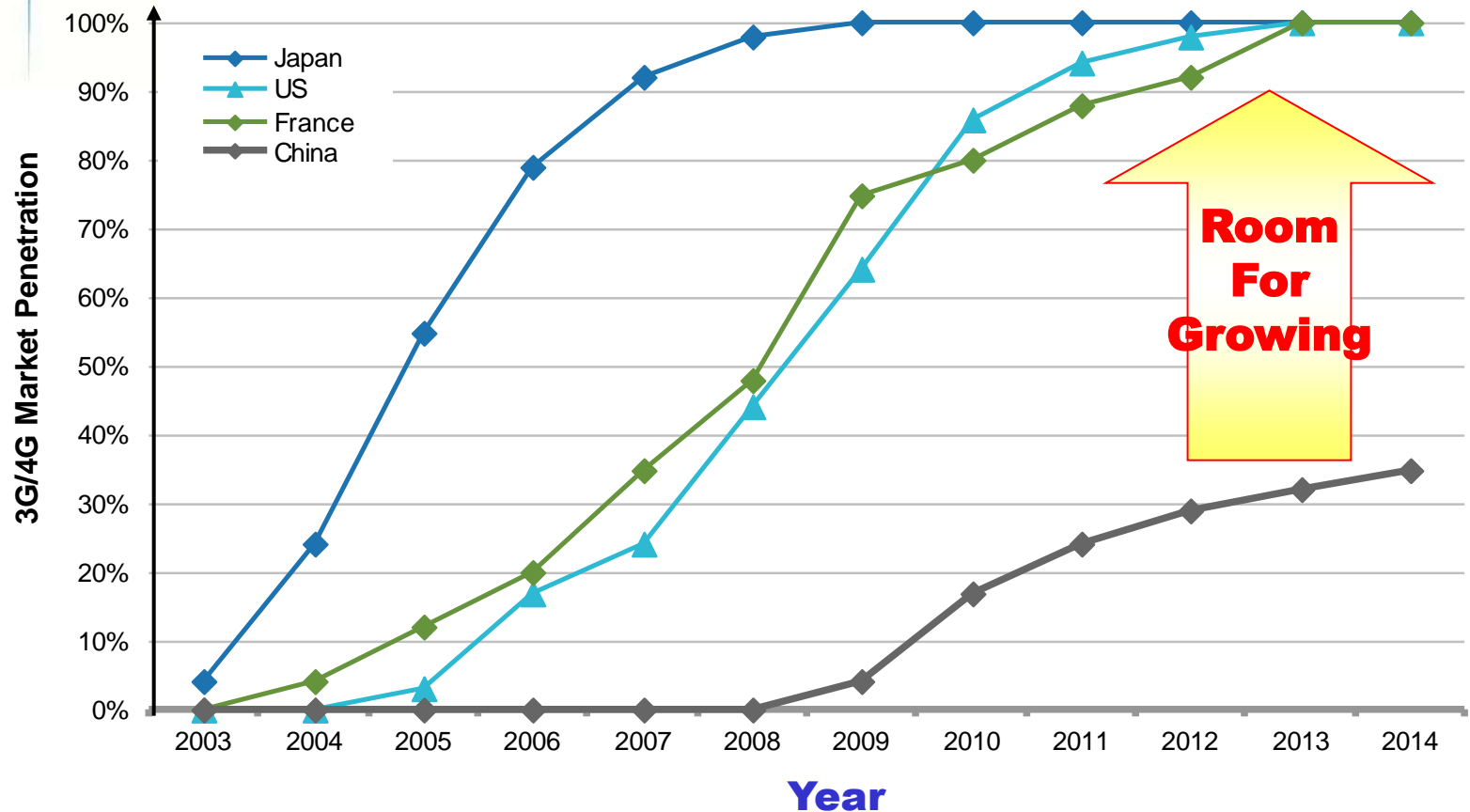


Developed Nations

Growth Rate	2010	2011F
Developing Nations	45%	37%
Developed Nations	9%	14%
Total	32%	13%

Source: Gartner

# Huge Potential for Mobile Internet In China



# 1: TD Baseband --- China Standard TD-SCDMA/TD-LTE



Spreadtrum released the industry's first TD-SCDMA dual-card mobile chip (SC8800G Oct, 2011), which is the world's first 40nm low-power commercial TD-HSPA/TD-SCDMA dual-mode communications chip that can be run on TD-HSPA, TD-SCDMA, GSM/GPRS/EDGE mode, and supports 2.8Mbps TD-HSDPA and 2.2Mbps TD-HSUPA.

SC8800G can be used for cost-competitive TD feature phone and TD smart phone applications. Its TD-SCDMA baseband platform, SC8803G, is used in the Samsung GALAXY Note.

*Source: Spreadtrum company website*



CYIT's TD-SCDMA chip uses 65nm process with independent IPs. It can be used in a variety of applications such as low-end smart phones, LTE multi-mode data card, and TD single-mode data cards that can be used in the Internet of Things.

*Source: CYIT company website*



Leadcore TD baseband dual-mode solution, DTivy® 1760, successfully passed the technical test. Its TD-LTE and TD-SCDMA function can switch automatically. This brings TD-LTE solution closer to commercial market.

*Source: Leadcore company web site and 集微网*



## 2: PAD --- Low-Cost Innovative Solutions for the World



Ingenic's Novo 7, based on MIPS and Android 4.0, was selected as one of "The Best Products of CES 2012" in Las Vegas on January 13 2012

*Source: Ingenic company website*



Allwinner Tech's xPAD dominates the Chinese consumer electronics market. xPAD uses a highly integrated ultra-high-definition 55nm SoC chip. With its low-cost high-definition performance, xPAD won "The Most Promising" Award in the 6th China IC Industry Promotion Conference held by CSIP.

*Source: Allwinner company website*



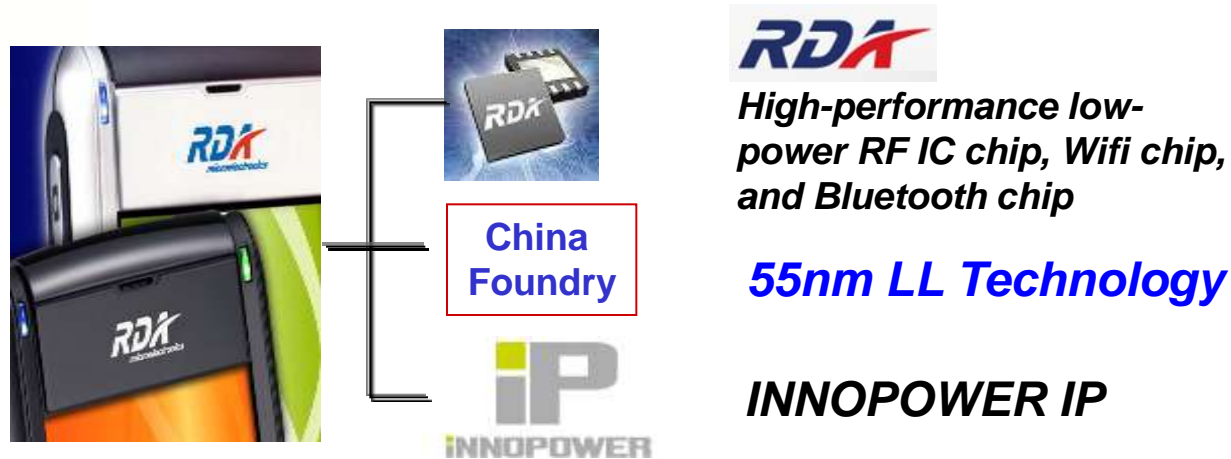
Rockchip's Multimedia pad

Rockchip's RK29XX series is based on 55nm process and uses an ARM Cortex-A8 processor running at up to 1.2GHz. It is also the first in the industry to support the VP8 video codec (open-sourced by Google's WebM platform).

*Source: Rockchip company website*



### 3: RDA Wins in Bluetooth, P/A, FM, & DVB-S Tuner



RDA Microelectronics – a leading radio-frequency and mixed-signal fabless design company which takes **the leading market share position in Bluetooth (37%) , End Module/Power Amplifiers (34%)** and also **#1 in FM and DVB-S Tuner** products. *(iSuppli, 2011 Q3)*

Source: 2011 Q1 RDA website



# 4: Material & Chemical Providers --- KonFoong & Anji



**KonFoong Materials** - leading providers of ultra high purity sputtering targets founded in 2005.

- Products are adopted by international brands such as SMIC, TSMC, IBM, Toshiba, Hynix, and NXP. Sales growth rate >100% each year



**Anji Microelectronics** – a leading supplier of advanced materials (CMP slurries, cutting slurries and associated chemical solutions for solar industry, resistance stripping and cleaning solutions, etc.)

## Anji's Advantages

- Domestic manufacturing and warehousing
- Local infrastructure supply chain

## KongFoon's clients

### Japan

Toshiba Semiconductor Company  
ROHM Co., Ltd.  
Fuji Electric Device Technology  
ULVAC Technologies, Inc.  
Renesas Electronics Corporation.  
Elpida Memory Inc.  
Fujitsu CO.,LTD.



### Europe

NXP Semiconductors Ltd.  
Infineon Technologies  
STMicroelectronics



### North American

#### Korea

Hynix Semiconductor Inc.  
Dongbu HiTek Co., Ltd.  
Fairchild Semiconductor Inc.  
MagnaChip Semiconductor.



### South East Asia

GLOBALFOUNDRIES Inc.  
Silterra Malaysia Sdn. Bhd.



### China

Semiconductor Manufacturing International Corp.  
Advanced Semiconductor Manufacturing Corporation Limited  
Shanghai Hua Hong NEC Electronics Company, Limited  
BCD Semiconductor Manufacturing Limited  
Hangzhou silan integrated circuits Co., ltd  
Founder Technology Group Corporation  
Shanghai Belling Co.Ltd.

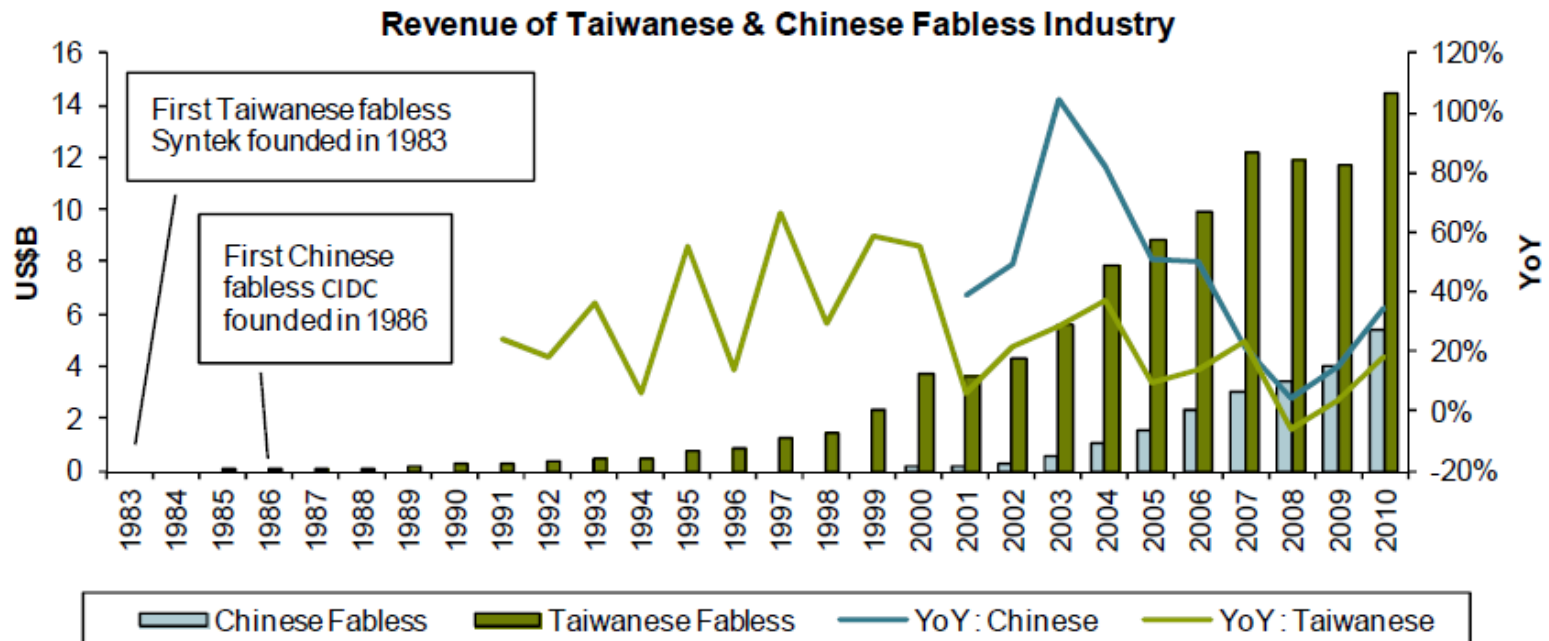


### Taiwan

Taiwan Semiconductor Manufacturing Company Limited  
United Microelectronics Corp.  
ProMOS Technologies Inc  
Nuvoton Technology Corporation  
Mosel Vitelic INC.  
Lite-on Semiconductor Corp.  
Macronix International Co., Ltd.  
Episil Technologies Inc.,



# China Fabless Revenue: Rapid Growth



Sources: Gartner, iSuppli, CCID, Bernstein Research, and Team Analysis Q4'11 ~ 02'12

## Mainland Chinese fabless industry demonstrates strong growth:

- High demand for electronics in China
- Favorable government policy
- Government standards for electronics



# 谢谢

*Thank You*

Semiconductor Manufacturing International Corporation

