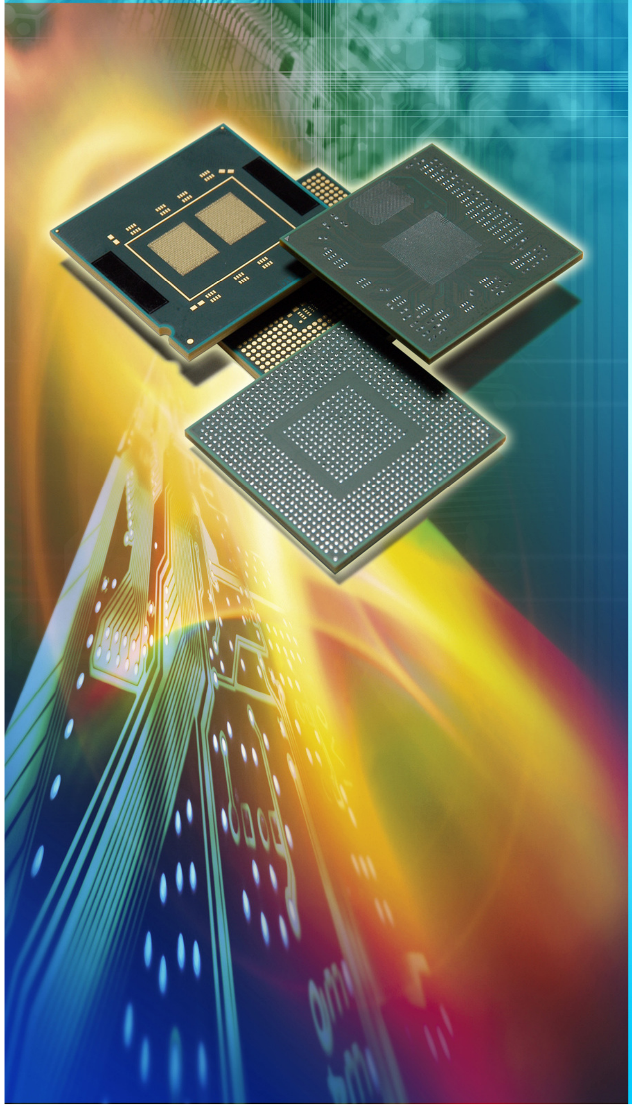


南亞電路板股份有限公司
NAN YA PRINTED CIRCUIT BOARD CORPORATION

COMPANY BRIEFING

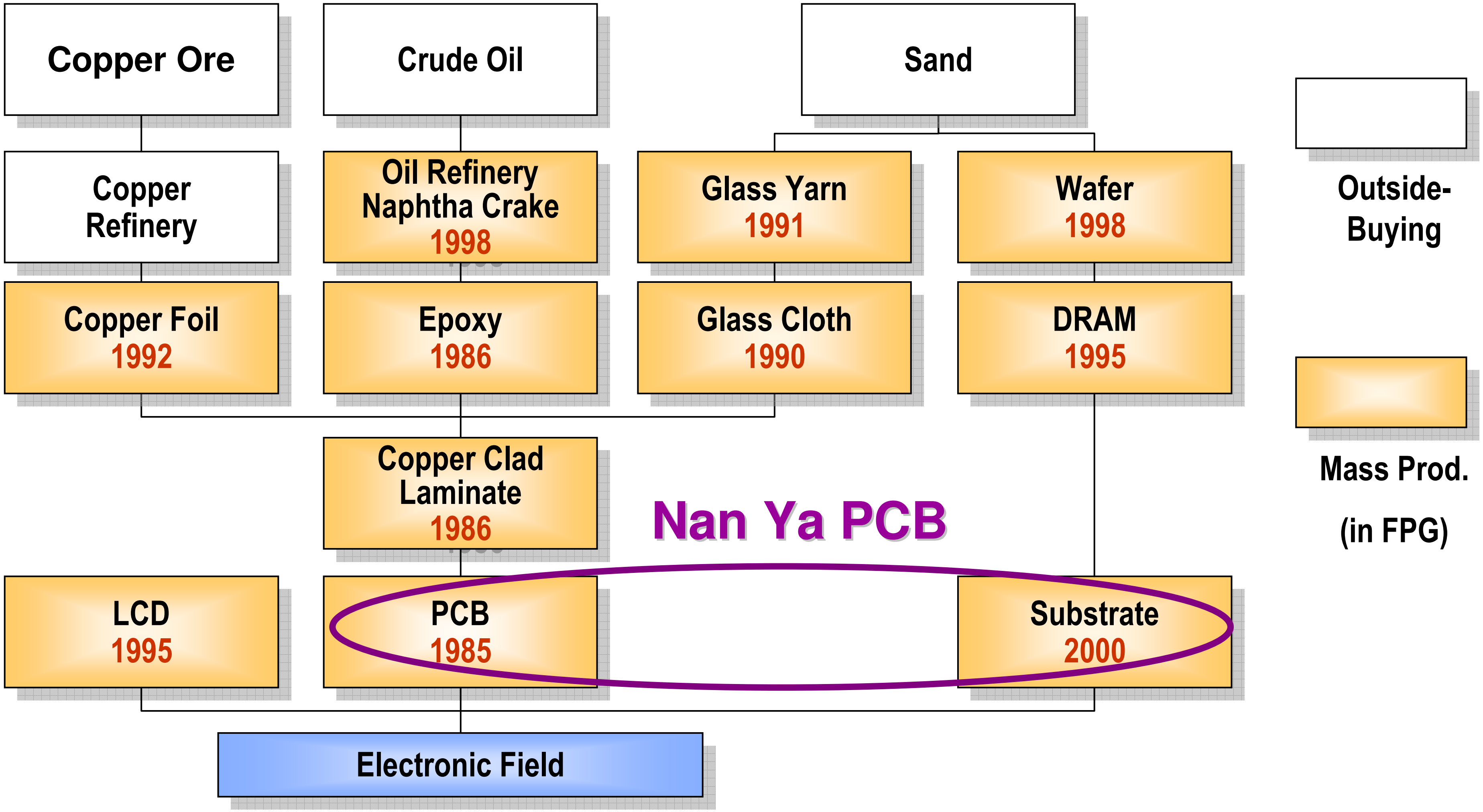
March 2010

Safe Harbor Notice

- Nan Ya PCB's statements of its current expectations are forward-looking statements subject to significant risks and uncertainties and actual results may differ materially from those contained in the forward-looking statements.

- Except as required by law, we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.

Vertical Integration within FPG



Copper Ore

Crude Oil

Sand

Copper Refinery

Oil Refinery Naphtha Crake 1998

Glass Yarn 1991

Wafer 1998

Copper Foil 1992

Epoxy 1986

Glass Cloth 1990

DRAM 1995

Copper Clad Laminate 1986

Nan Ya PCB

LCD 1995

PCB 1985

Substrate 2000

Electronic Field

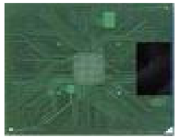
☐ Outside-Buying

▨ Mass Prod. (in FPG)

Milestone

Year 1985	Start up PCB mass production
Year 1997	Establish Na Ya PCB Corporation
Year 2000	Start up Wire-bond Substrate mass production
Year 2001	Start up Flip-chip Substrate mass production
Year 2002	Start up Kunshan PCB mass production
Year 2006	IPO (TWSE Ticker No.: 8046)

Production Allocation and Monthly Capacity



Flip Chip

P1+P5 15M Units

+

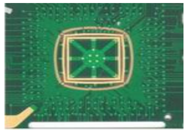
P6 8M Units

+

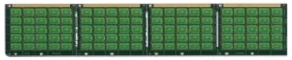
P7 7M Units

+

P8 (Potential 15M Units)



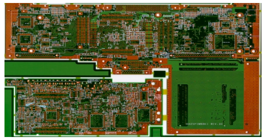
Wire Bond



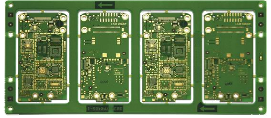
P2 320KSF

+

KS P2 225KSF



PCB, HDI



P3 160KSF

+

KS P1 1.2MSF

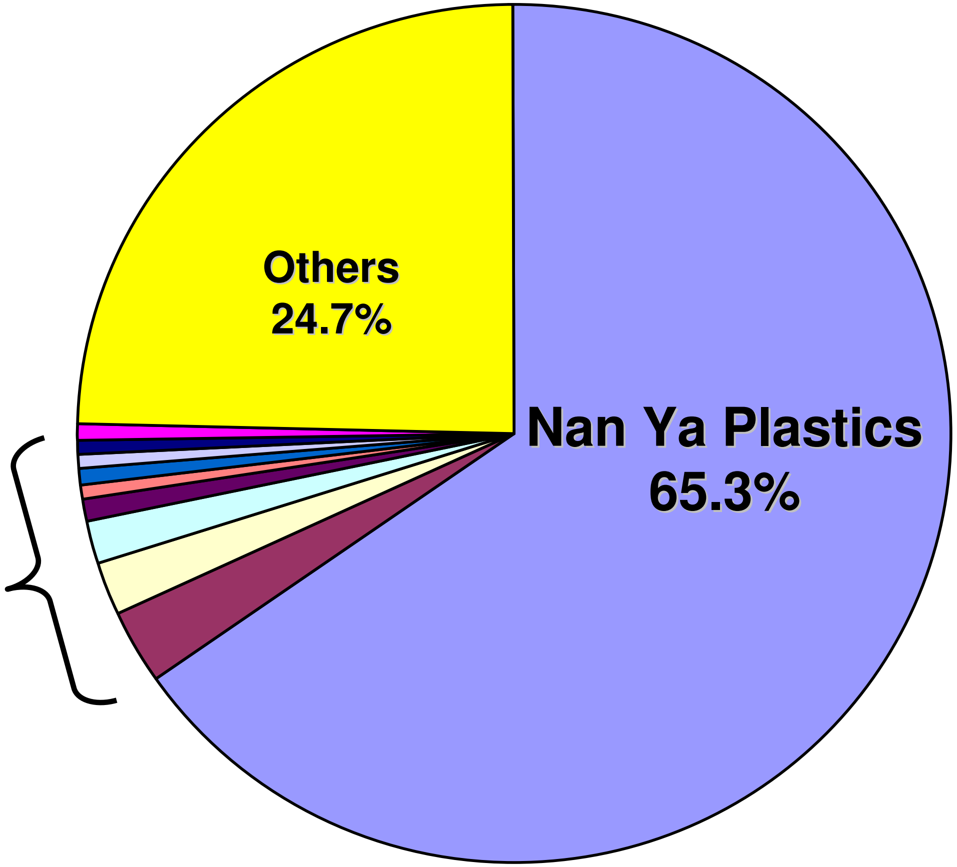
+

KS P2 600KSF

Note: KS=Kunshan China manufacturing campus

Structure of Shareholders

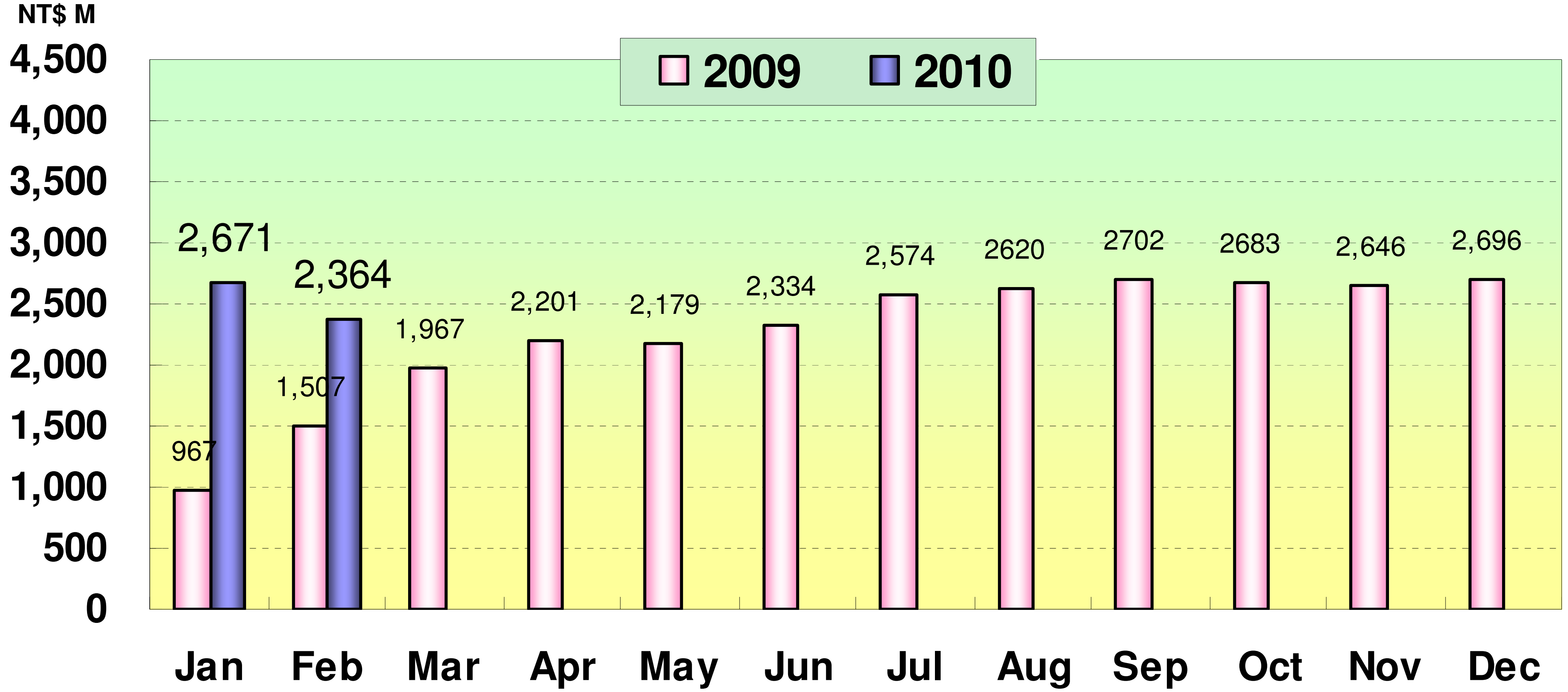
ABP	0.5%
GIC	0.5%
Fidelity Greater China Fund	0.5%
Capital High Tech Fund	0.6%
Shin Kong Life Insurance	0.7%
Standard Chartered Emerging Market	0.7%
Citi Asia Fund	1.9%
Nan Shan Life Insurance	1.9%
Chunghwa Post	2.7%



Total Shares: 630,398,531 shares

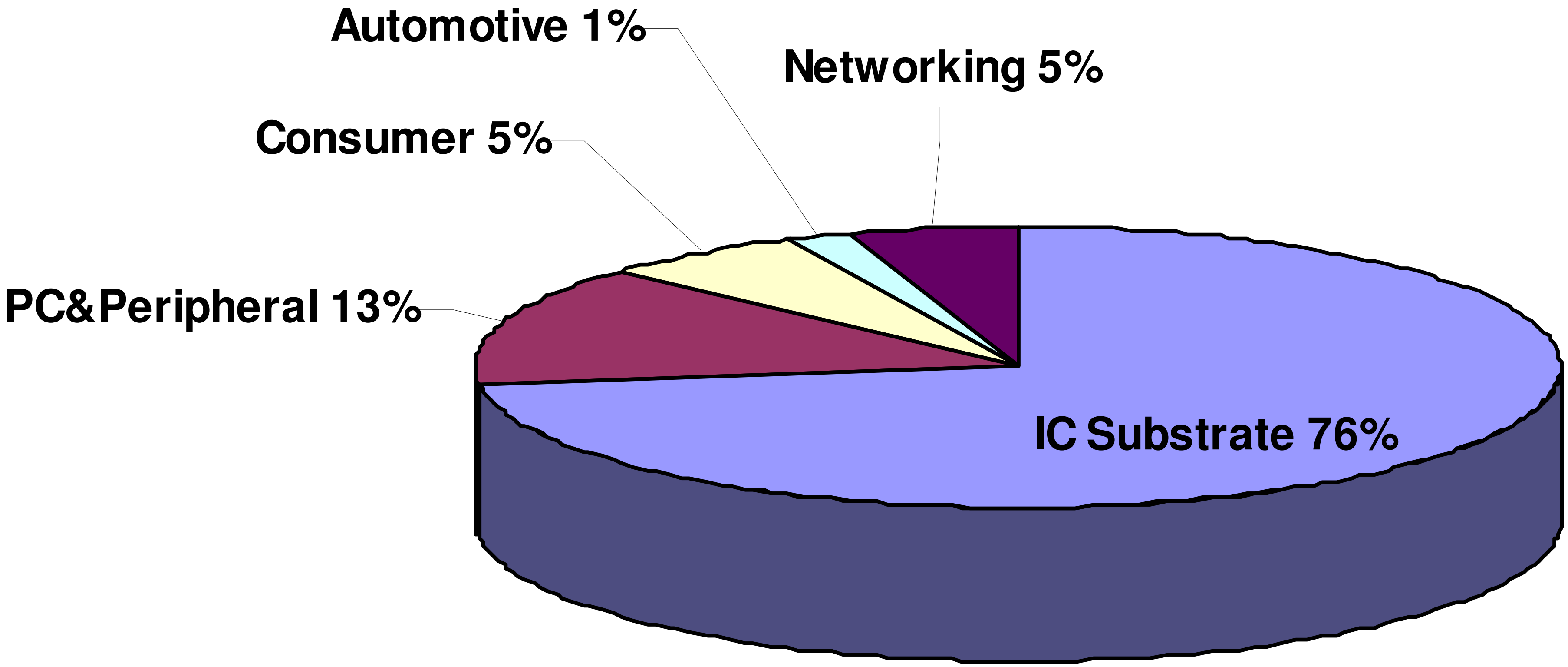
Date: August, 2009

2009~2010 Monthly Revenue in Taiwan

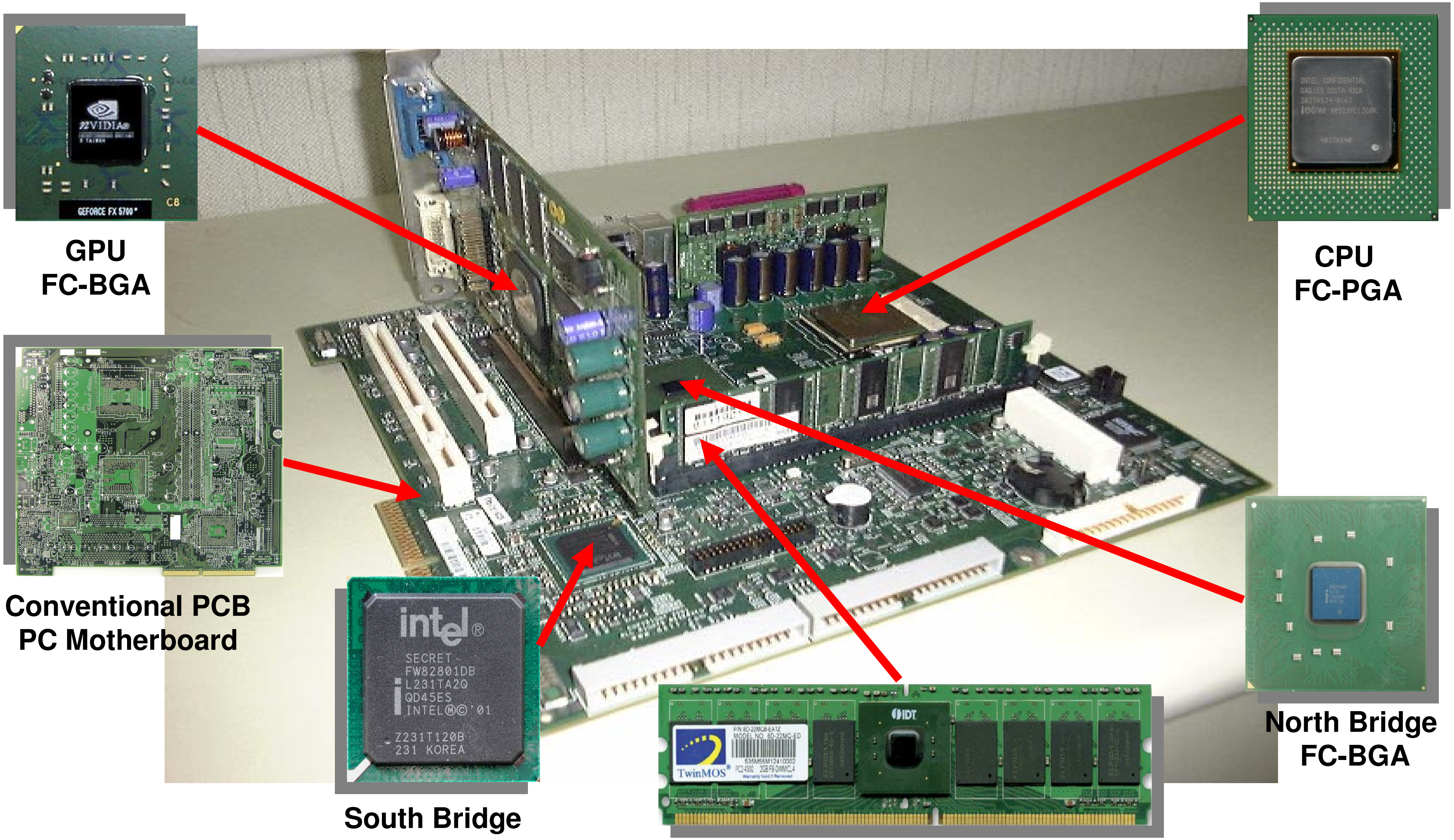


- **2010 February Sales = NT$ 2.4 Billion；MoM=-11.5%；YoY=+56.8%**
- **Accumulated 2010 Sales = NT$ 5.0 Billion ; YoY=+103.5%**

2010 Sales Breakdown by Application



Products & Applications-PC



GPU
FC-BGA

CPU
FC-PGA

Conventional PCB
PC Motherboard

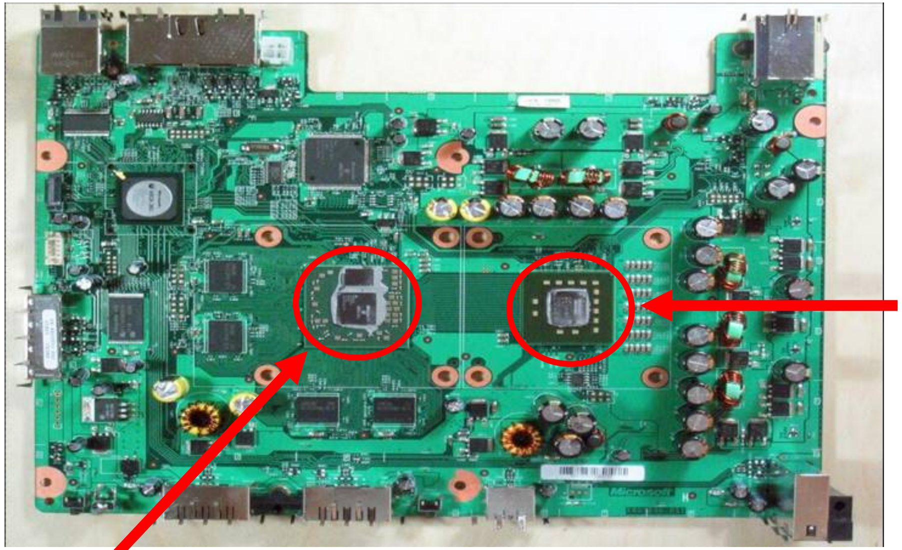
North Bridge
FC-BGA

South Bridge
WB-BGA

DDR II DRAM Module

Products & Applications-Game Console

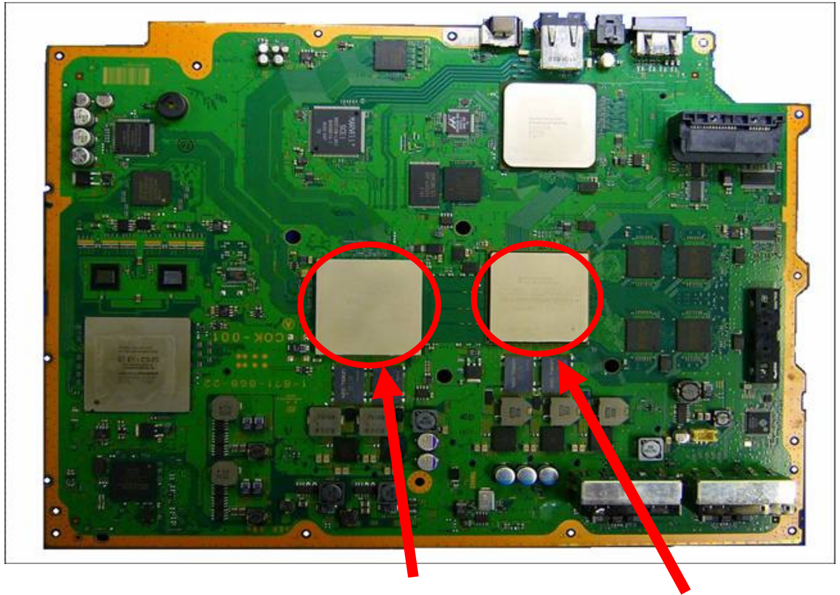
A



MPU
FC-BGA
27mm²
2/2/2

Integrated Chipset
FC-BGA
35mm²
3/2/3

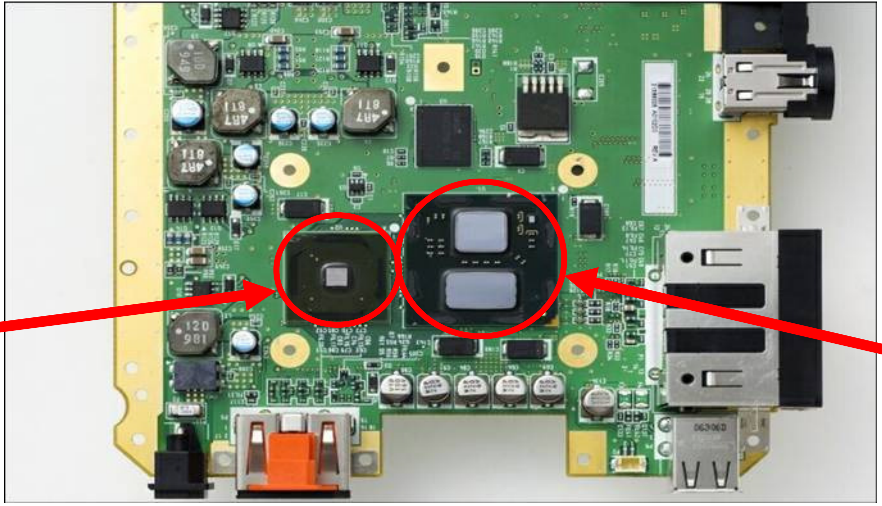
B



Integrated Chipset
FC-BGA
42.5mm²
3/2/3

MPU
FC-BGA
33mm²
2/2/2

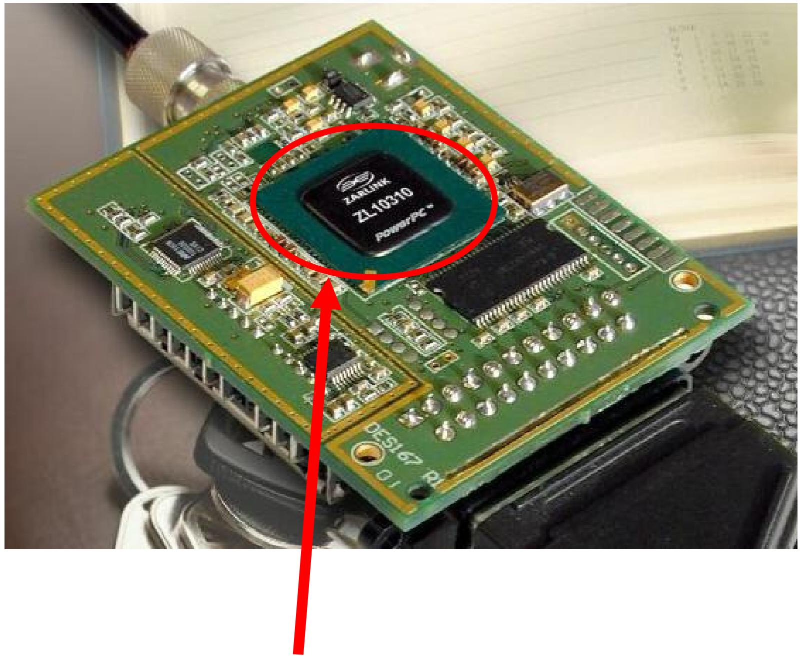
C



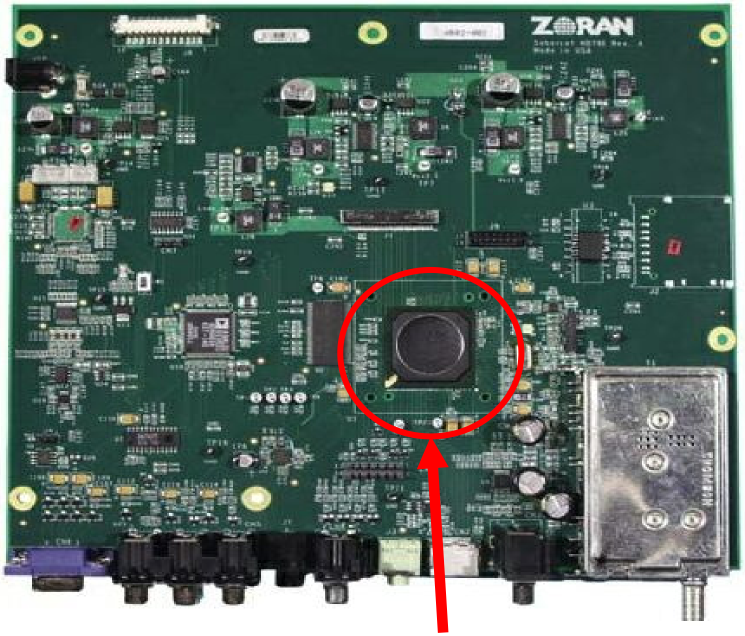
MPU
FC-BGA
21mm²
2/2/2

Integrated Chipset
FC-BGA
31mm²
2/2/2

Products & Applications-Others

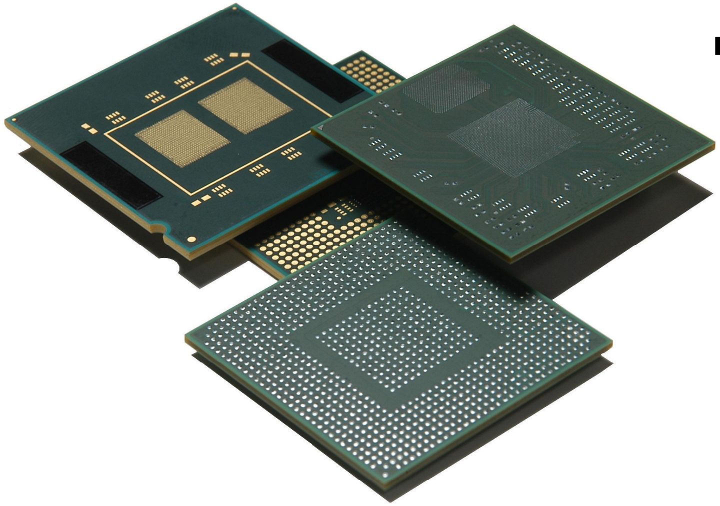


Set-Top Box
37.5mm²
2/2/2



HDTV Chipset
35mm²
2/2/2

- **Set-Top Box and HDTV started to migrate to flip-chip design in 2007, and annual demand has been expected to increase dramatically in 2010 .**

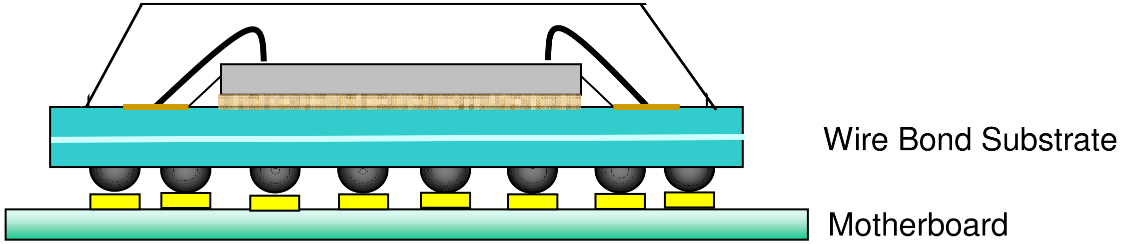


Thank You

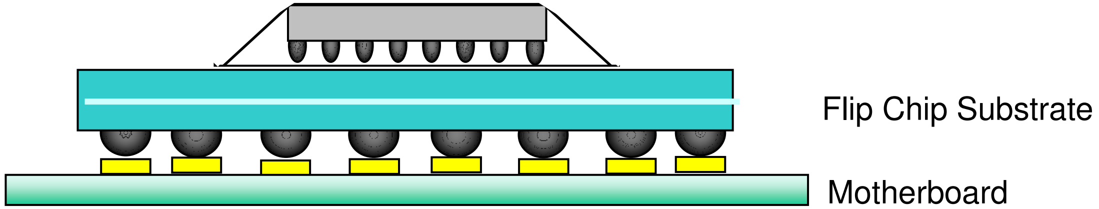
Q & A

IC Substrate Introduction

Wire Bonding Substrate Outline：
By using gold wires to connect electrical pads with the so-call wire bonding substrate which plays the function as the buffer between chips and motherboard.

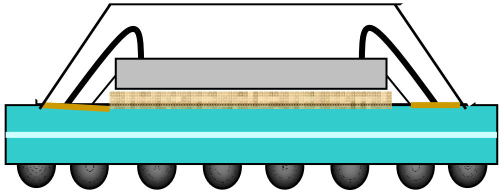


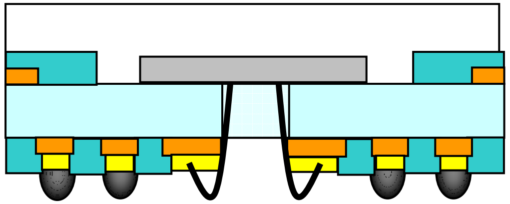
Flip Chip Substrate Outline：
The die is directly attached to the substrate which plays as the connections between the chip and motherboard by using solder bumps rather than gold wires.



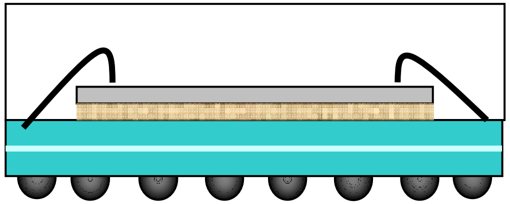
Types of Wire Bonding Substrates

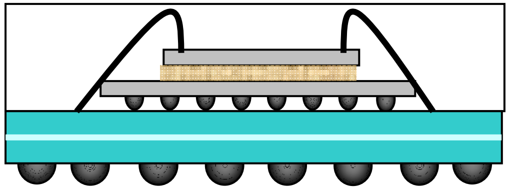
- Ball Grid Array (BGA)


Plastic Ball Grid Array (PBGA)


Window BGA

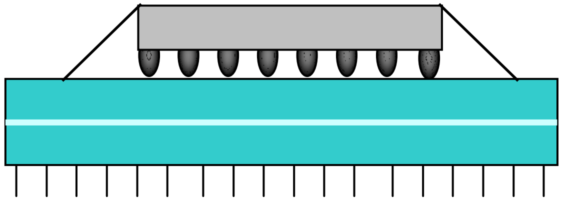
- Chip Scale Package (CSP)


Wire Bonding CSP (WB-CSP)

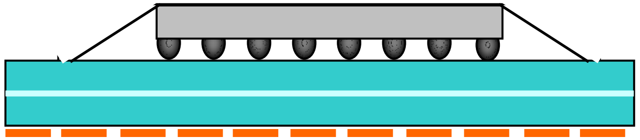

Flip Chip CSP (FC-CSP)

Types of Flip Chip Substrates

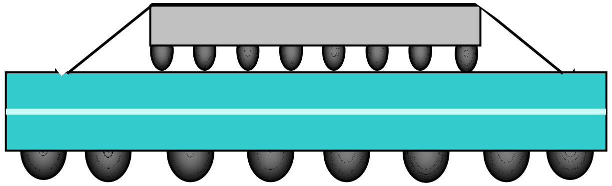
- FC-Pin Grid Array (FC-PGA)



- FC-Land Grid Array (FC-LGA)

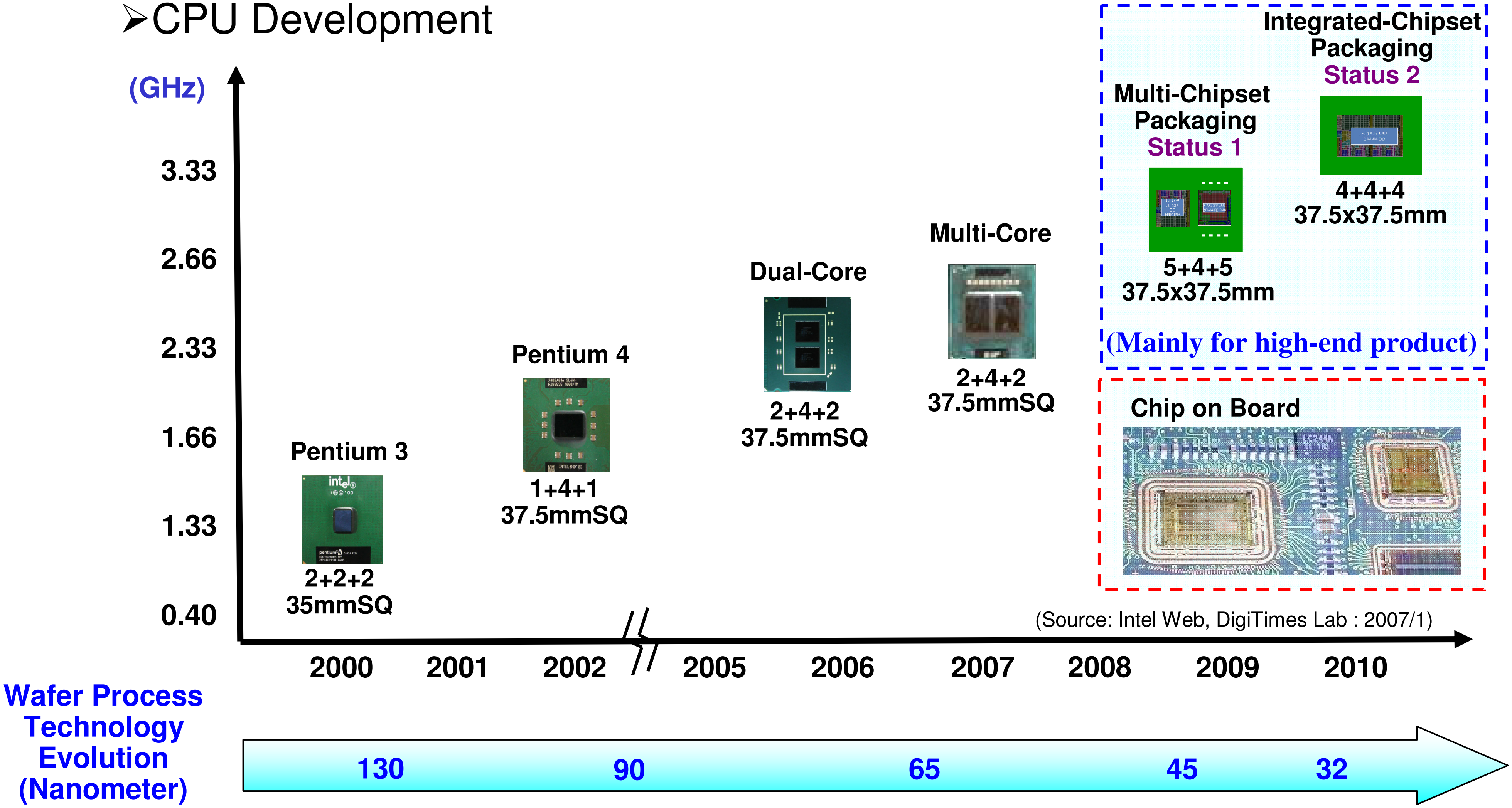


- FC-Ball Grid Array (FC-BGA)



FC Substrate Development Trend

- CPU Development



(Source: Intel Web, DigiTimes Lab : 2007/1)