

南亞電路板股份有限公司

NAN YA PRINTED CIRCUIT BOARD CORPORATION

COMPANY BRIEFING

September 2011

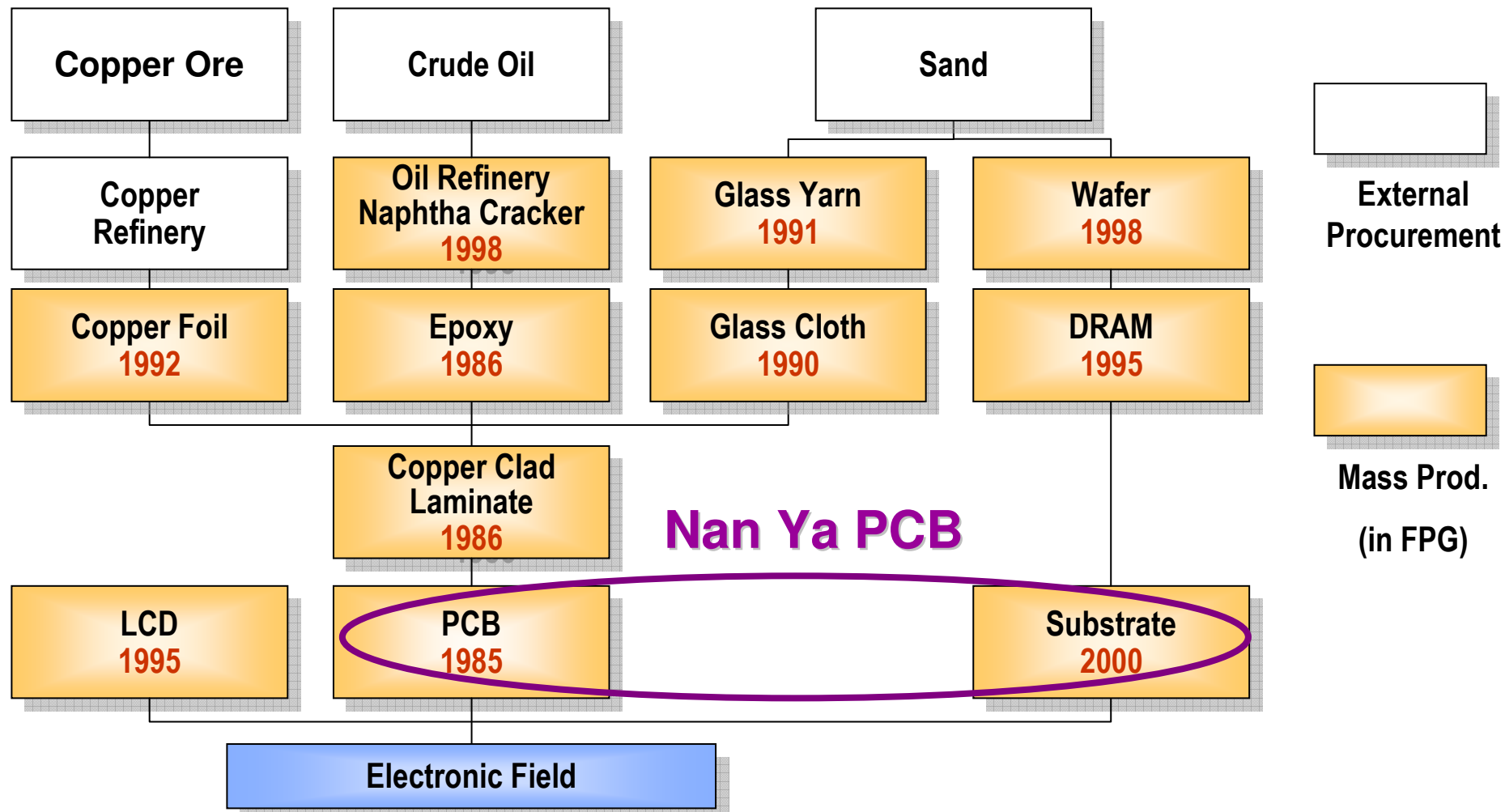


Safe Harbor Notice

- 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





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)
Year 2010	Start up flip chip substrate back-end process production for CPU products



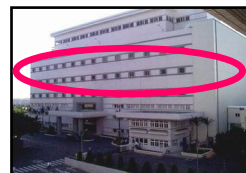
Production Allocation and Monthly Capacity



Flip Chip



P1+P5 15M Units



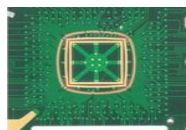
P6 8M Units



P7 7M Units



P8 (Potential
15M Units)



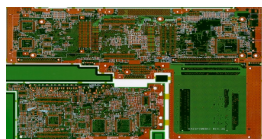
Wire Bond



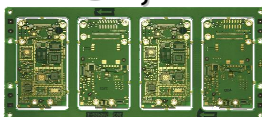
P2 180KSF



KS 300KSF



PCB, HDI



P3 145KSF

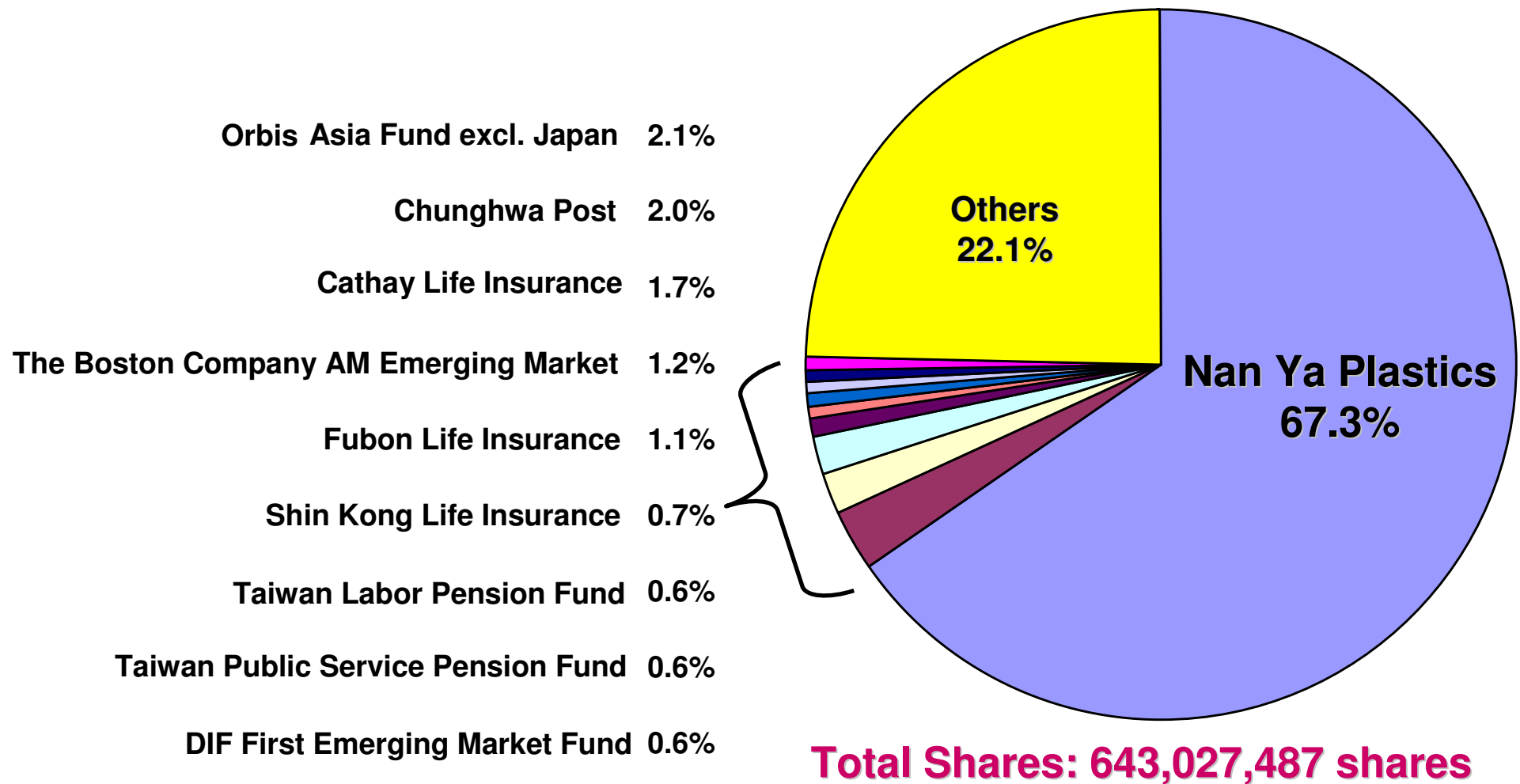


KS 1.65MSF

Note: KS=Kunshan China manufacturing campus



Structure of Shareholders

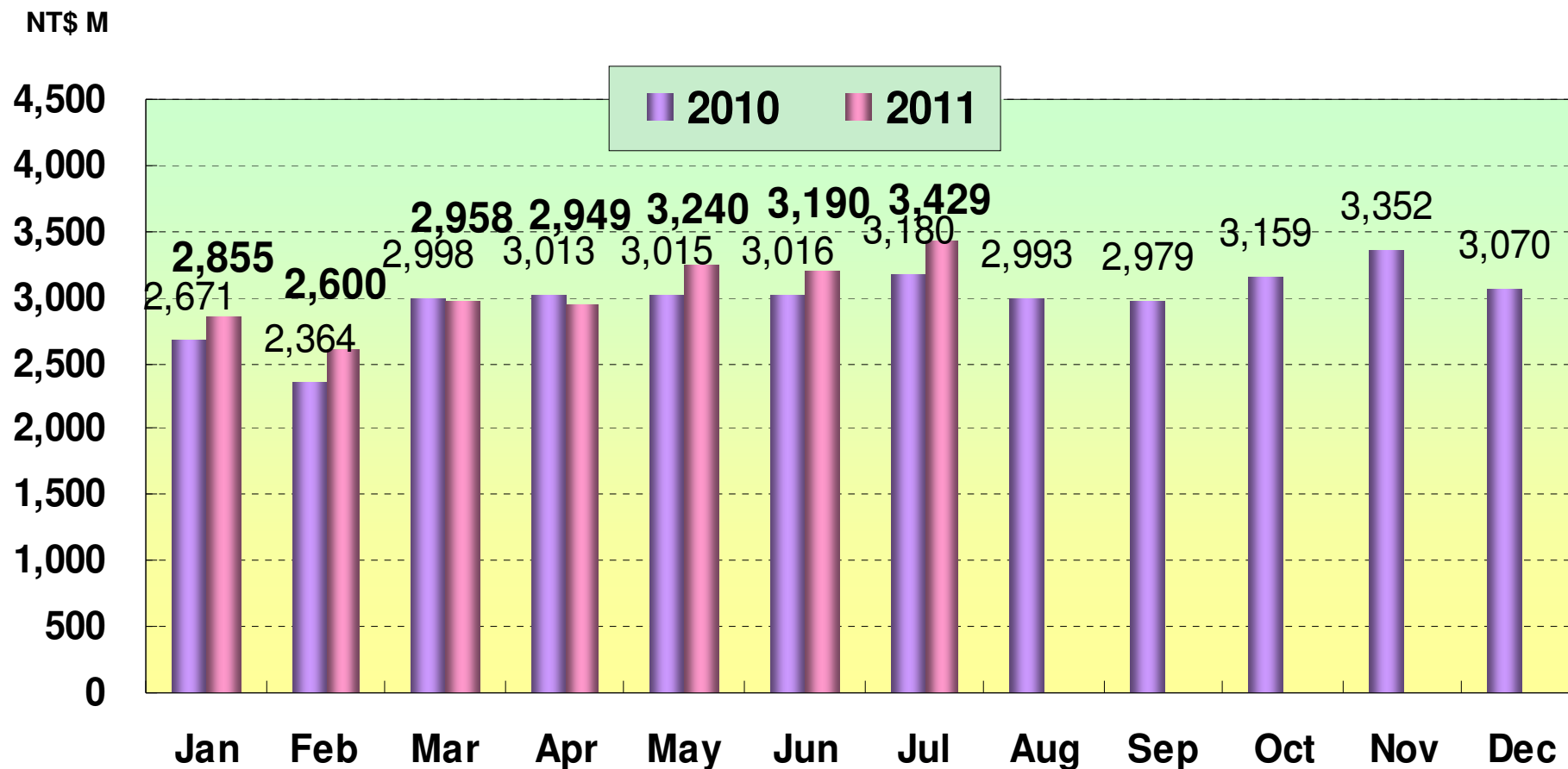


Total Shares: 643,027,487 shares

Date: August, 2011



2010~2011 Monthly Revenue in Taiwan

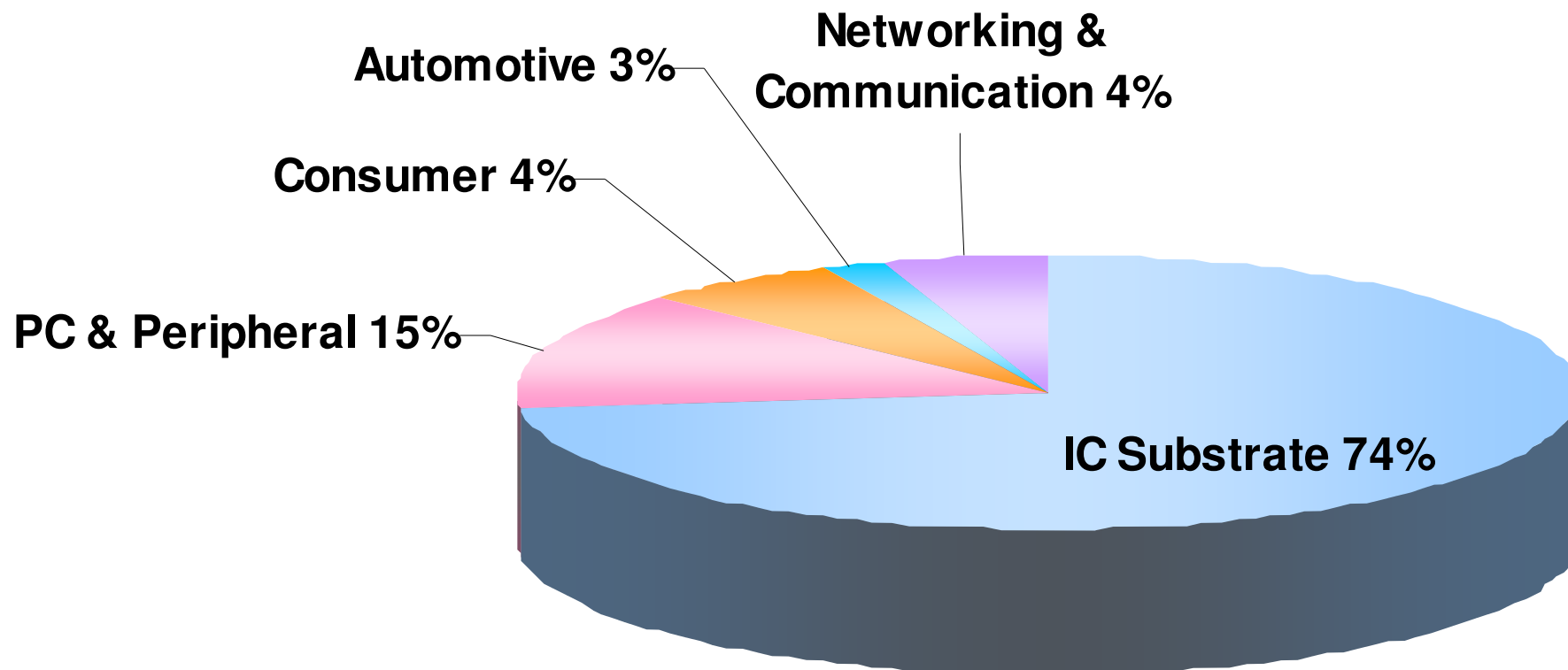


➤ 2011 July Sales = NT\$ 3.4 Billion ; MoM=+7.5% ; YoY=+7.8%

➤ Accumulated 2011 Sales = NT\$ 21.2 Billion ; YoY=+4.8%

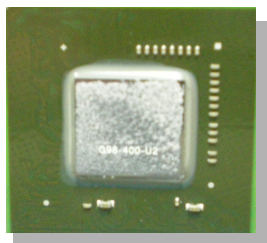


2011 Sales Breakdown by Application





Products & Applications-PC



GPU
FC-BGA
35mm*35mm



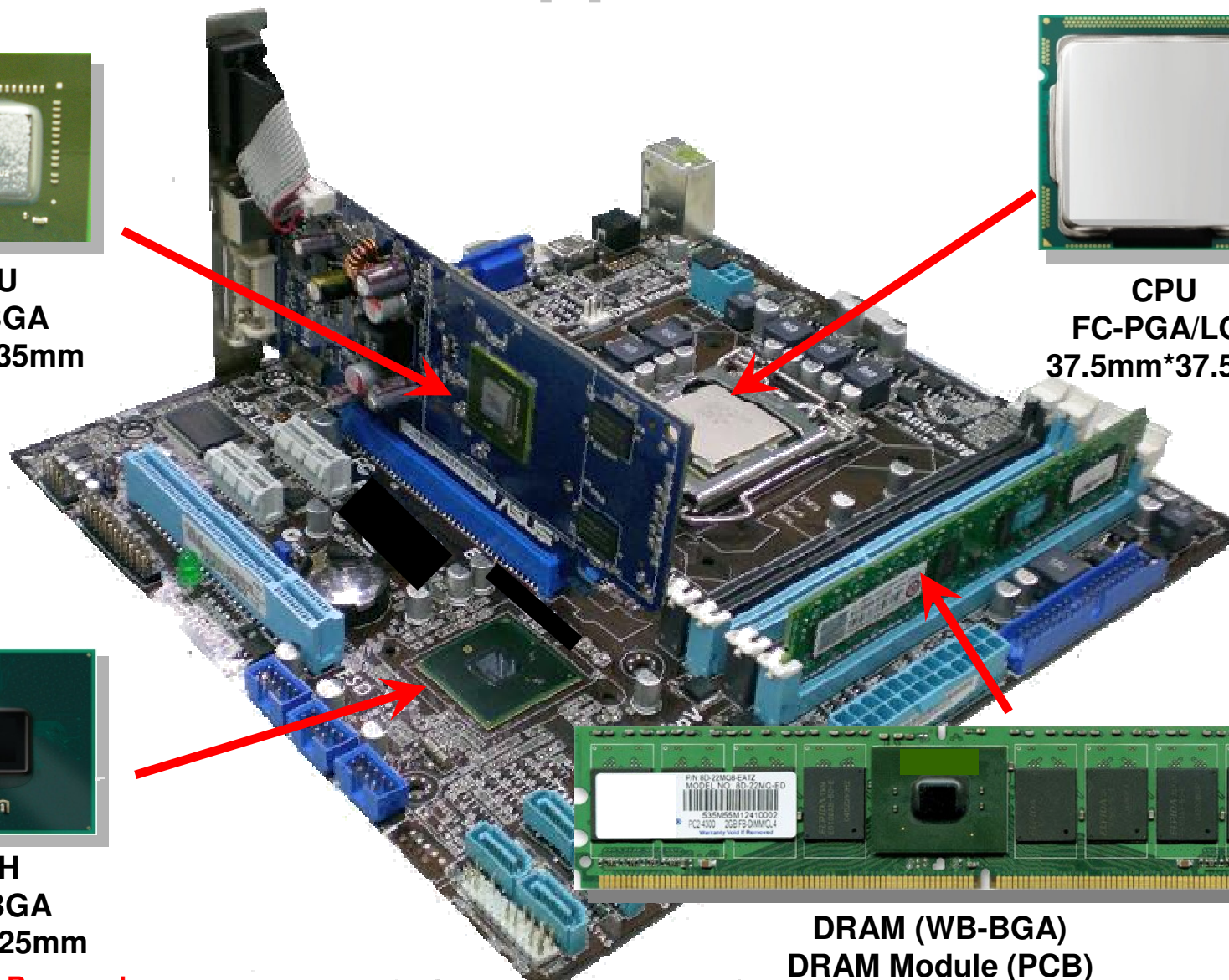
CPU
FC-PGA/LGA
37.5mm*37.5mm



PCH
FC-BGA
25mm*25mm



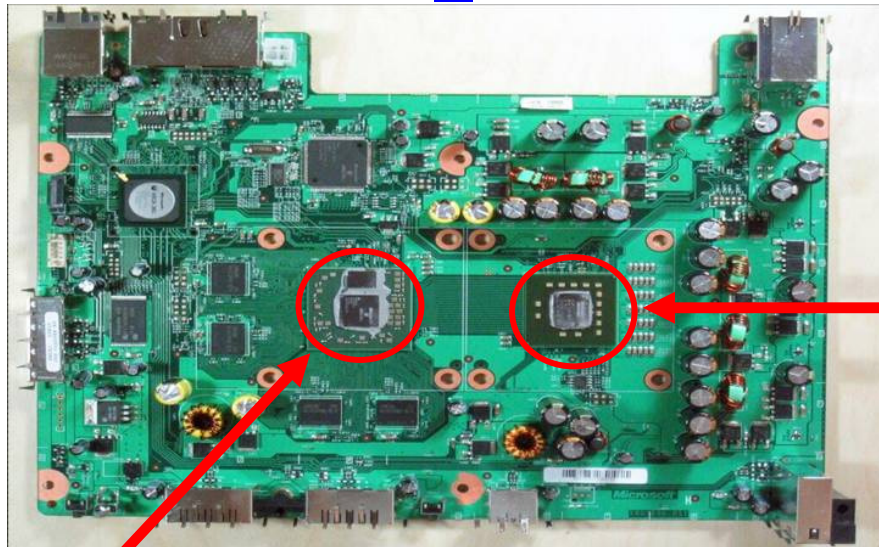
DRAM (WB-BGA)
DRAM Module (PCB)





Products & Applications-Game Console

A

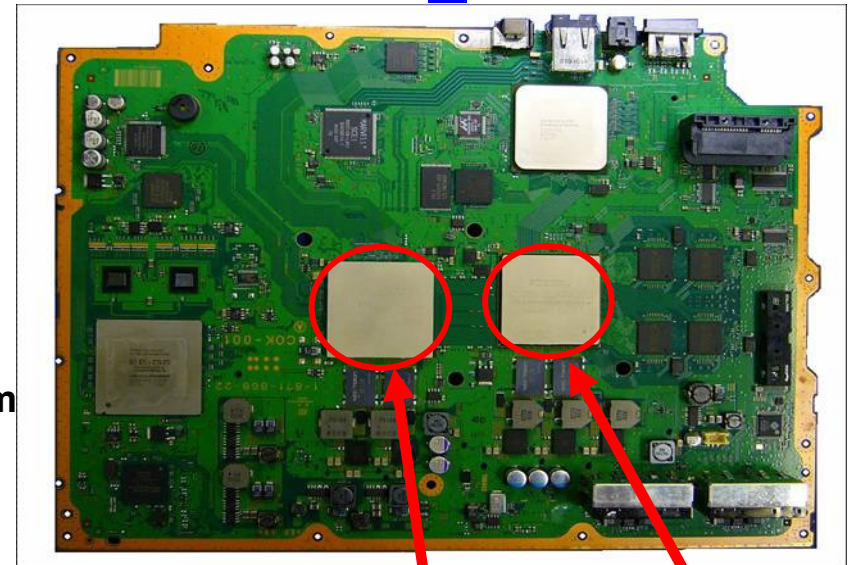


MPU
FC-BGA
27mm*27mm
2/2/2

Integrated Chipset
FC-BGA
35mm*35mm
3/2/3

MPU
FC-BGA
21mm*21mm
2/2/2

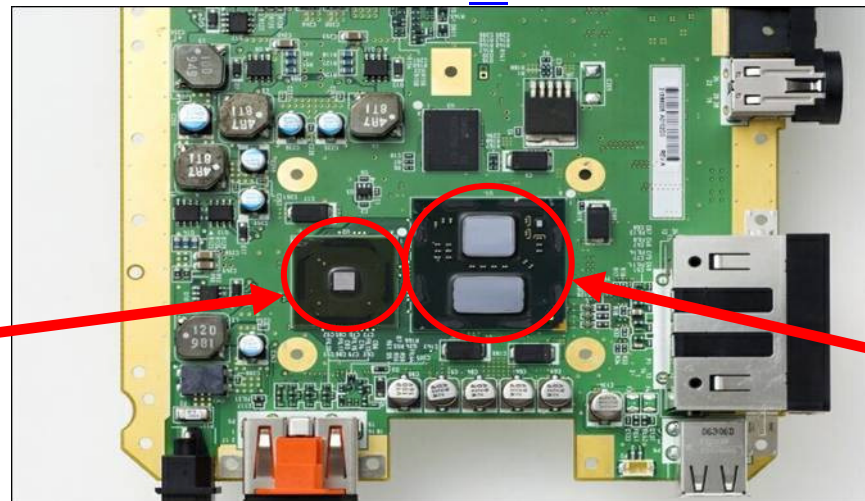
B



Integrated Chipset
FC-BGA
42.5mm*42.5mm
3/2/3

MPU
FC-BGA
33mm*33mm
2/2/2

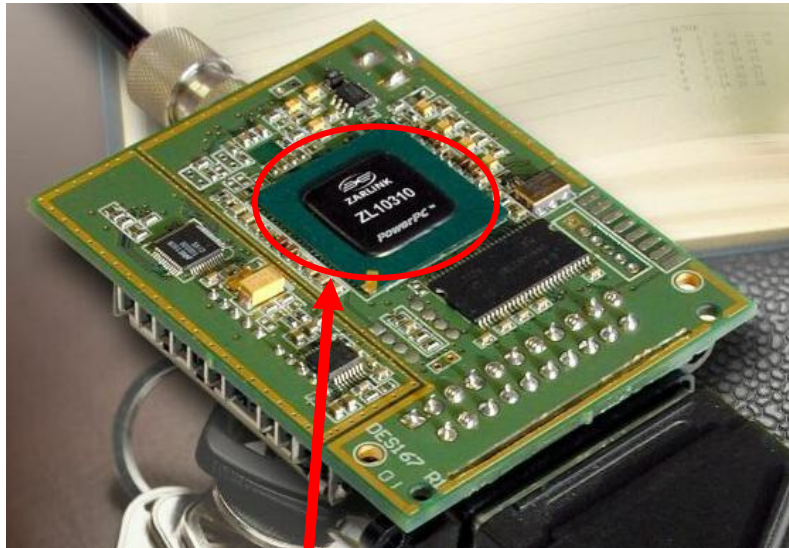
C



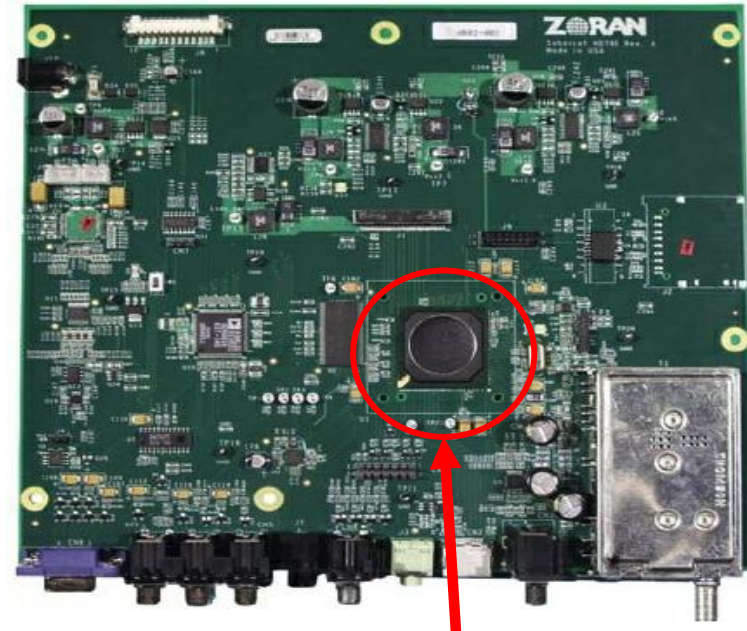
Integrated Chipset
FC-BGA
31mm*31mm
2/2/2



Products & Applications-Others

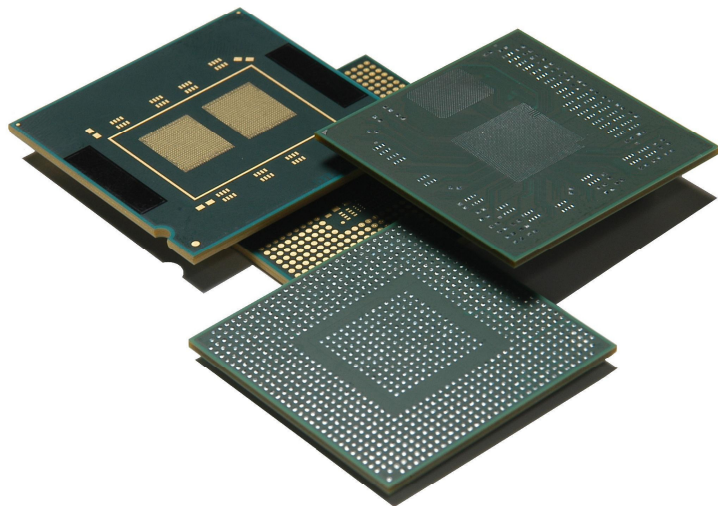


Set-Top Box
37.5mm*37.5mm
2/2/2



HDTV Chipset
35mm*35mm
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

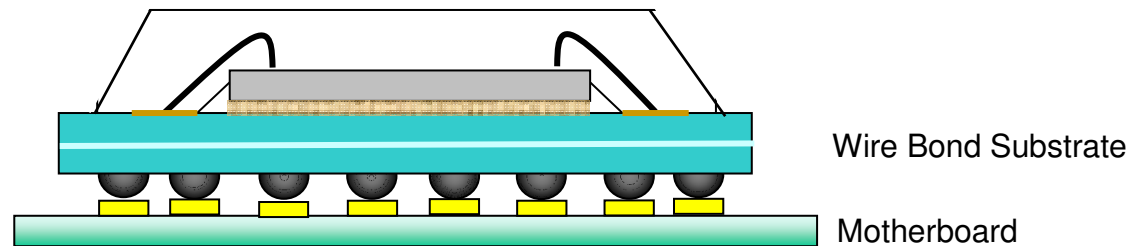
Q & A



IC Substrate Introduction

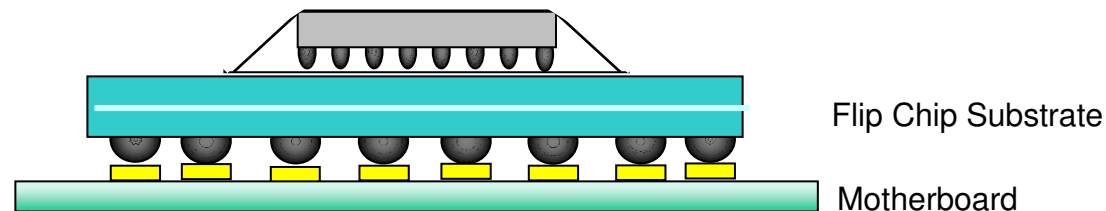
Wire Bonding Substrate Outline :

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 :

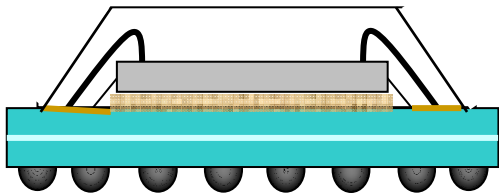
The die is directly attached to the substrate which plays as the connections between the chip and motherboard by using solder bumps rather than gold wires.



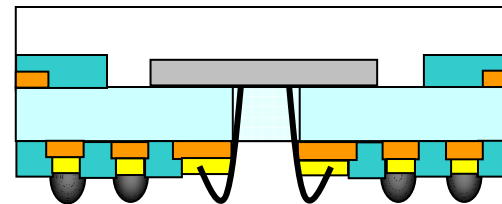


Types of Wire Bonding Substrates

•Ball Grid Array (BGA)

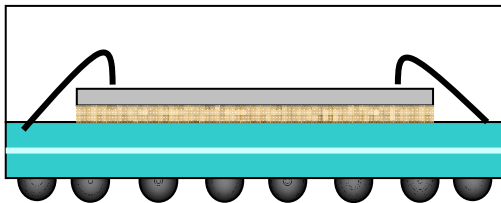


Plastic Ball Grid Array (PBGA)

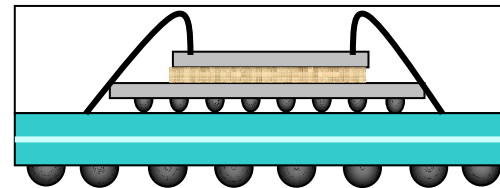


Window BGA

•Chip Scale Package (CSP)



Wire Bonding CSP (WB-CSP)

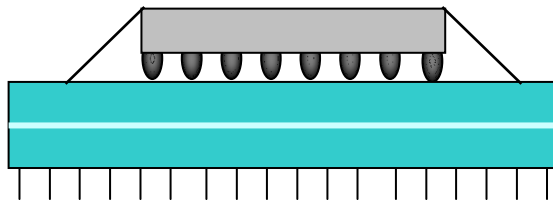


Flip Chip CSP (FC-CSP)

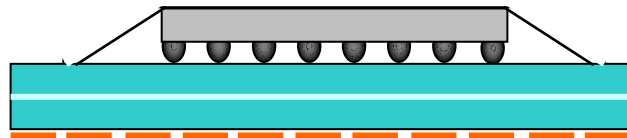


Types of Flip Chip Substrates

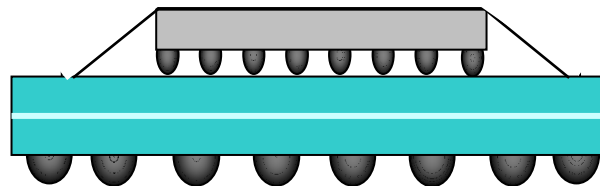
•FC-Pin Grid Array (FC-PGA)



•FC-Land Grid Array (FC-LGA)



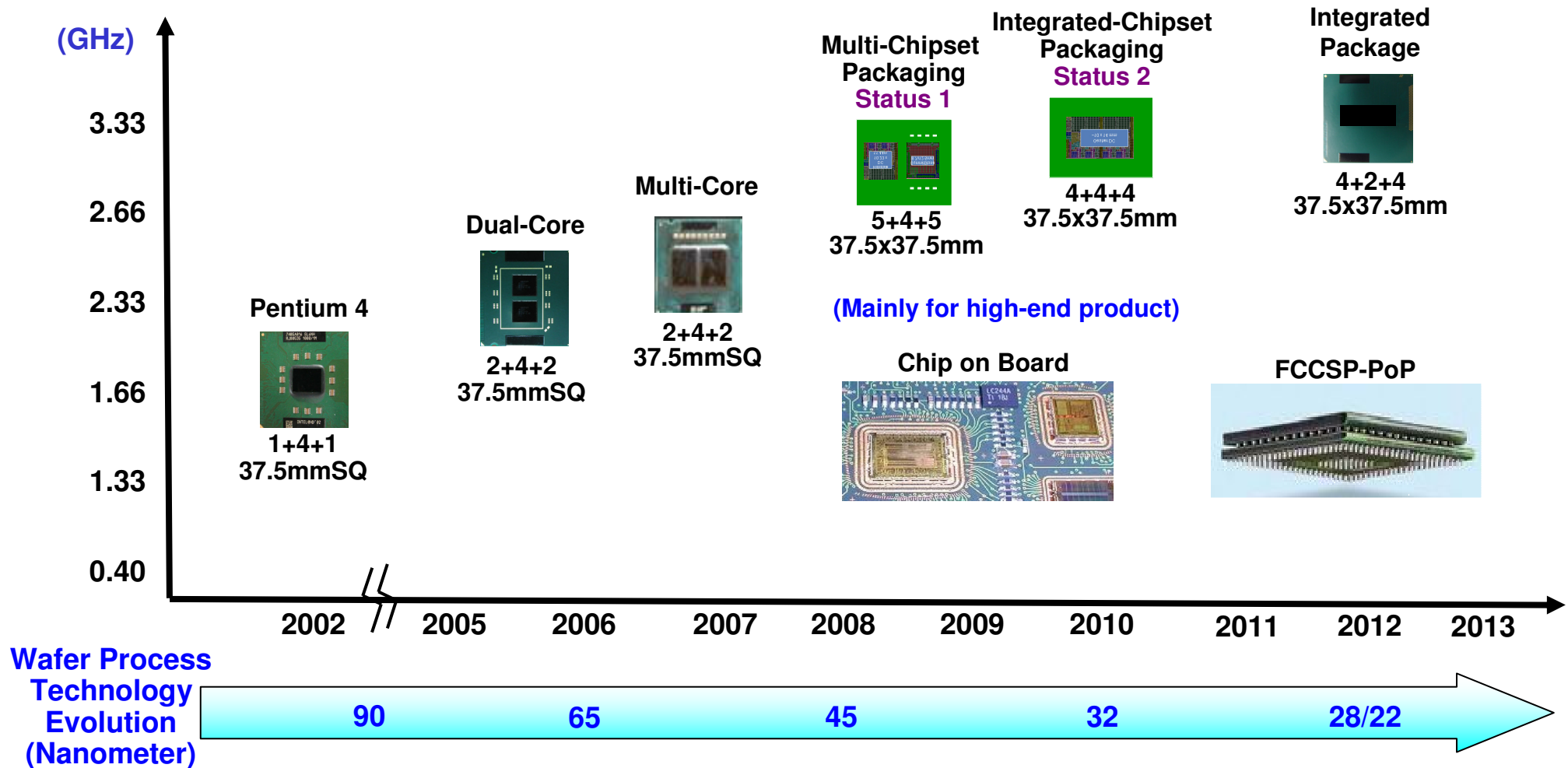
•FC-Ball Grid Array (FC-BGA)





FC Substrate Development Trend

➤ CPU Development



(Source: Intel Web, DigiTimes Lab)