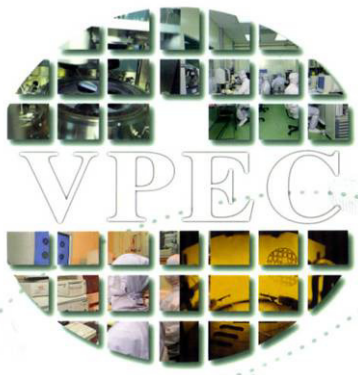




Company Profile

World-class leading edge with MOCVD

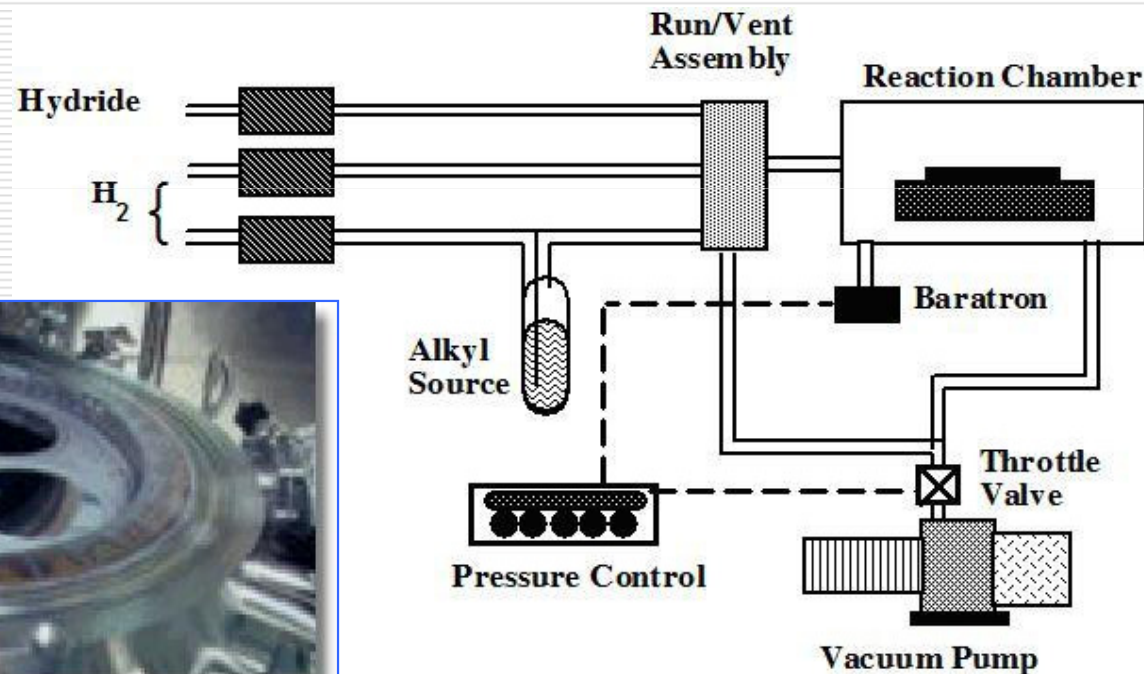


Core Technology

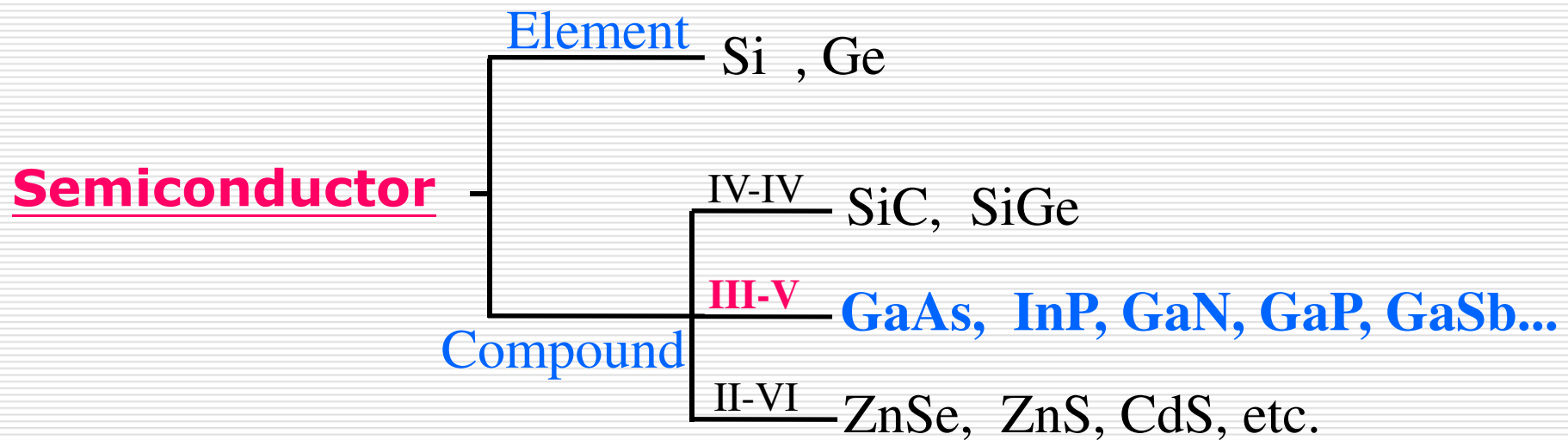


MOCVD(有機金屬氣相沉積法)

- Metal Organic Chemical Vapor Deposition



Semiconductor(*by Material*)



Period	Column II	III	IV	V	VI
2	Be 鈹 Beryllium	B 硼 Boron	C 碳 Carbon	N 氮 Nitrogen	O 氧 Oxygen
3	Mg 鎂 Magnesium	Al 鋁 Aluminum	Si 矽 Silicon	P 磷 Phosphorus	S 硫 Sulfur
4	Zn 鋅 Zinc	Ga 鎵 Gallium	Ge 鍺 Germanium	As 砷 Arsenic	Se 硒 Selenium
5	Cd 鎘 Cadmium	In 銦 Indium	Sn 錫 Tin	Sb 銻 Antimony	Te 碲 Tellurium
6	Hg 汞 Mercury	Tl 鉍 Thallium	Pb 鉛 Lead		

二元化合物 Binary : GaAs, InP, GaP, GaN, etc.

三元化合物 Ternary : InGaAs, InGaP, AlGaAs, etc.

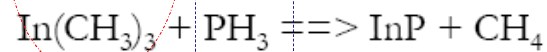
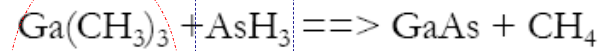
四元化合物 Quaternary : AlGaInP, InGaAsP, etc.

五元化合物 Pentanary : AlGaInAsN, etc.

Chemical Reaction During Epitaxy



化學反應式：



主要原物料：

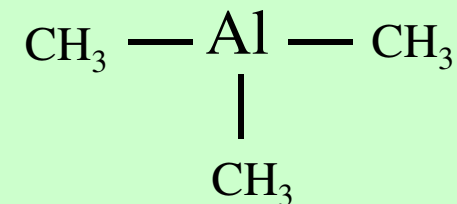
MO Source + **Hydride** + Carrier Gas : **H₂**

TEAl : Tri-ethyl-Aluminum (C_2H_5)₃Al
 TMGa : Tri-Methyl-Gallium (CH_3)₃ Ga
 TMIn : Tri-Methyl-Indium (CH_3)₃In
 DETe : Di-ethyl-Tellurium (C_2H_5)₂Te
 DEZn : Di-ethyl-Zinc (C_2H_5)₂Zn
 CP₂Mg : Bis (cyclo-penta-dienyl) Magnesium 環戊二烯鎂

AsH₃ : Arsine
 PH₃ : Phosphine
 SiH₄ : Silane
 Si₂H₆ : Disilane
 H₂Se : Hydrogen Selenide
 CBr₄ : Carbon Tetrabromide

TMAI Tri - Methyl - Aluminum (CH_3)₃Al

三 甲 基 鋁



Advantages of Compound Semiconductor



1. High Electron Mobility 高電子移動速率 (5.7x higher than CMOS)
2. High Frequency Response 高頻率響應
3. Wide Band Width 寬幅之頻寬
4. High Linearity 高線性度
5. High Power 高功率
6. Alternative Choice of Material 材料選擇多元性
7. 抗輻射

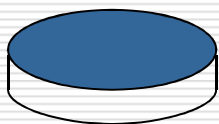
適用於無線通訊、光纖通訊、光顯示(LED)& 太陽能產業

GaAs in Wireless Communication Supply Chain



Sumitomo, Freiberg, AXT

4~6 "GaAs Substrate



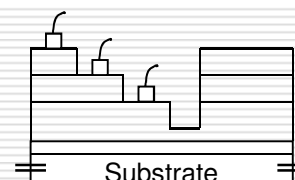
GaAs Epi- Wafer
磊晶片



MOCVD Reactor

IDM: Skyworks, RFMD,
TriQuint, Avago,
Anadigics

Microelectronics
IC Process



Foundry:

WIN, AWSC,
GCS



Wireless
Communication



IC Package & Testing

2012-2015Q1 Financial Result



	2015 Q1	%	2014	%	2013	%	2012	%
Revenue	524,804	100.00%	2,073,370	100.00%	2,150,393	100.00%	2,248,522	100.00%
Gross margin	204,777	39.02%	720,975	34.77%	704,050	32.74%	758,214	33.72%
Operating Profit	154,265	29.39%	524,484	25.30%	520,833	24.22%	568,505	25.28%
Financial Cost	(1,611)	-0.31%	40,133	1.94%	31,933	1.48%	(8,892)	-0.40%
Tax	(19,638)	-3.74%	(96,209)	-4.64%	(92,054)	-4.28%	(98,084)	-4.36%
Net income	133,016	25.35%	468,411	22.59%	460,712	21.42%	461,529	20.53%