

Chip Industry Looks East for Growth

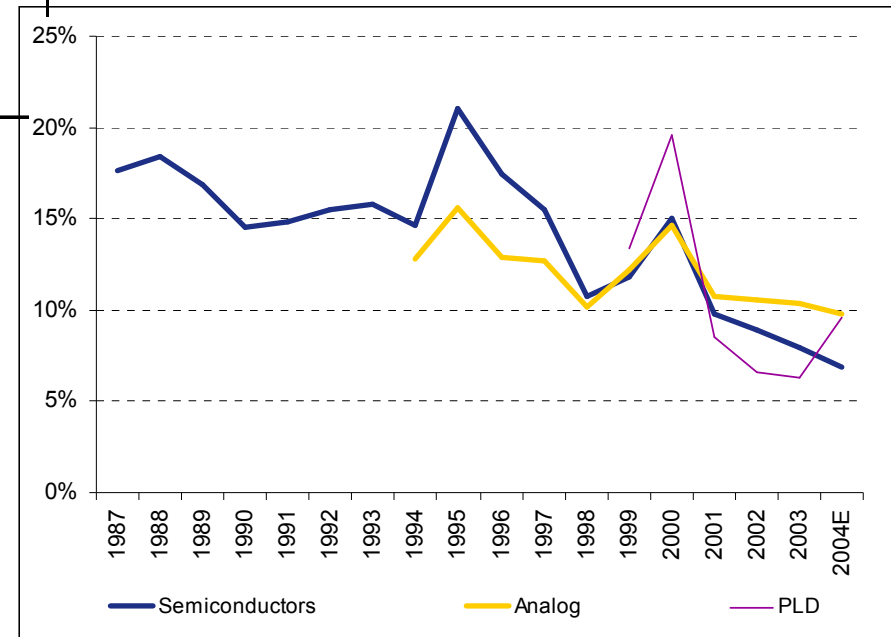
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Slowing Industry Growth

The Times, They Are A' Changing... 'Semi-Growth' is Slowing

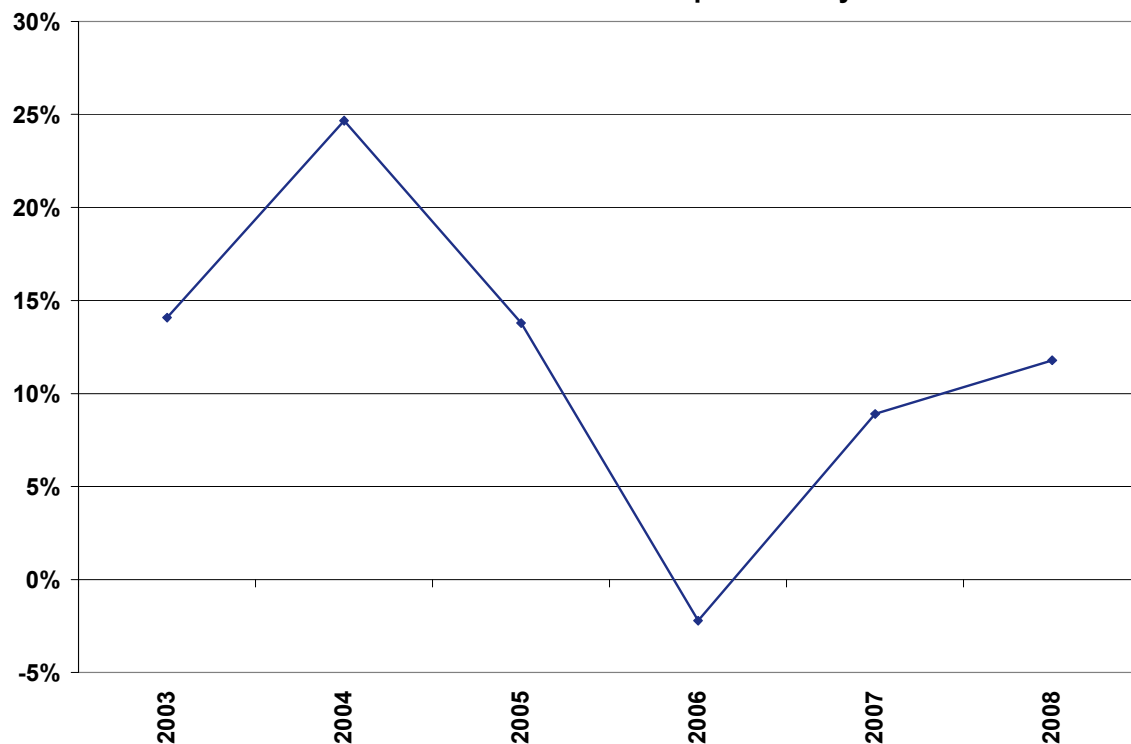
Peak - Peak		Semi Revenue CAGR	US GDP CAGR
1959 - 2000	(41 Yrs.)	17%	3%
1974 - 2000	(26 Yrs.)	15%	3%
1984 - 2000	(16 Yrs.)	14%	3%
1995 - 2000	(5 Yrs.)	7%	4%
2000 - 2005E	(5 Yrs.)	4%*	2%

* Estimates are based upon 25% growth expectations



Semiconductor Consumption Forecast – Worldwide

Worldwide Semiconductor Consumption Yearly Growth

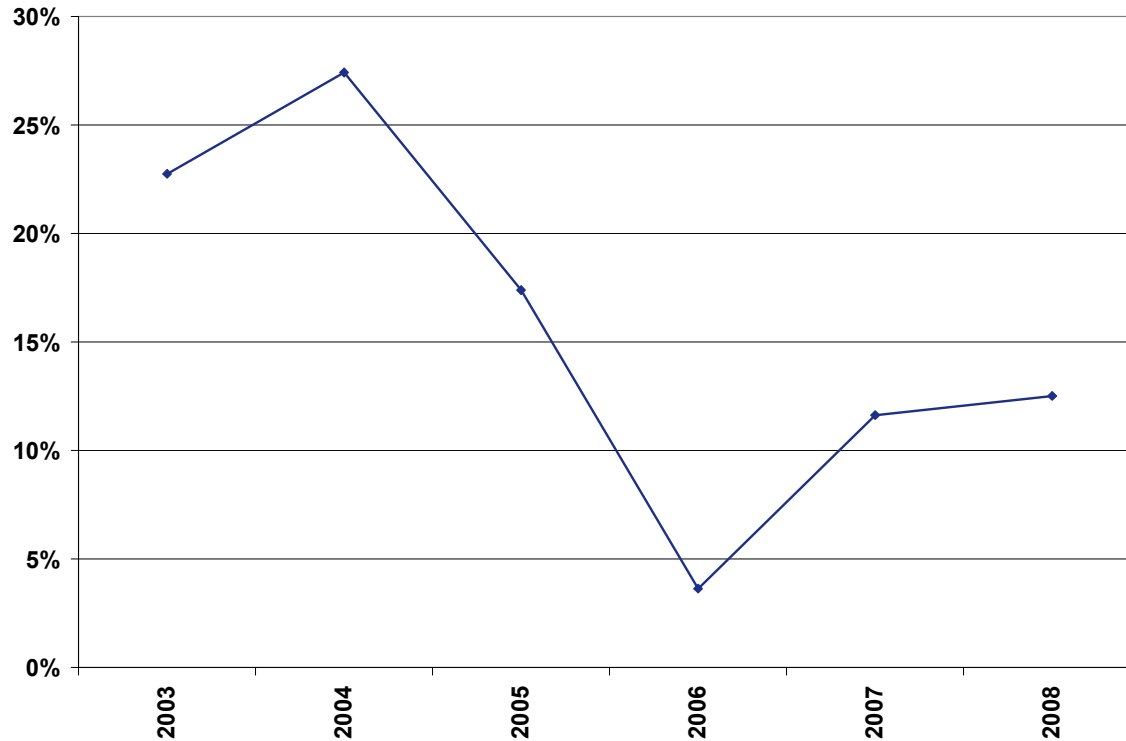


	CAGR 2003 - 2008
Data Processing Electronics	9.5%
Computer Electronics	9.6%
Storage Electronics	8.4%
Communication Electronics	13.4%
Wired Communications Electronics	9.8%
Wireless Communication Electronics	15.0%
Consumer Electronics	12.3%
Automotive Electronics	10.5%
Industrial Electronics	10.9%
Military and Civil Aerospace Electronics	6.3%
Total	11.0%

Source: Gartner Dataquest

Semiconductor Consumption Forecast – Asia/Pacific

Asia/Pacific Semiconductor Consumption Yearly Growth

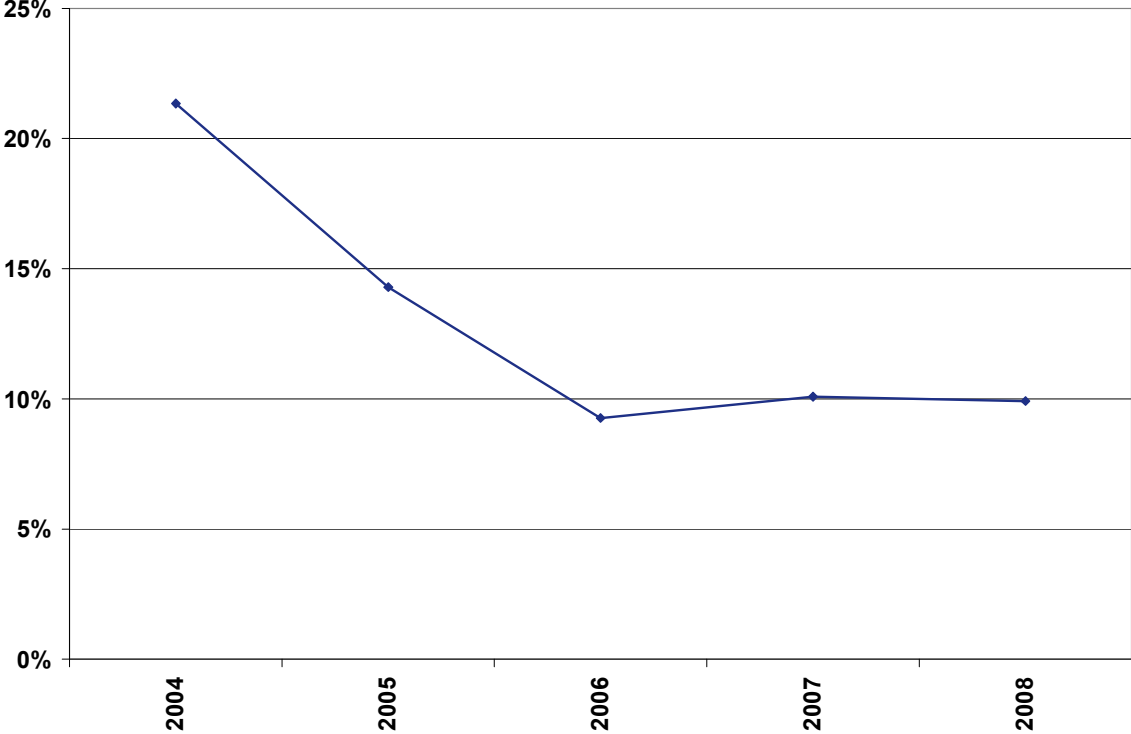


	CAGR 2003 - 2008
Data Processing Electronics	10.9%
Computer Electronics	11.3%
Storage Electronics	9.5%
Communication Electronics	18.3%
Wired Communications Electronics	8.9%
Wireless Communication Electronics	20.1%
Consumer Electronics	14.7%
Automotive Electronics	14.9%
Industrial Electronics	22.2%
Military and Civil Aerospace Electronics	11.6%
Total	14.3%

Source: Gartner Dataquest

Electronic Equipment Forecast – China/Hong Kong

China/Hong Kong Electronic Equipment Production Yearly Growth



	CAGR 2003 - 2008
Data Processing Electronics	13.0%
Communications Electronics	15.5%
Consumer Electronics	9.5%
Automotive Electronics	13.4%
Industrial Electronics	29.3%
Military/Civil Aerospace Electronics	8.3%
Total Electronics	12.9%

Source: Gartner Dataquest

Taiwan-China dominate foundry

2003 Pure Play Foundry Rankings

Rank	Company	2003 Revenue	2002 Revenue	% Change	Market Share
1	TSMC	\$5,855,000	\$4,655,000	26%	52.2%
2	UMC	\$2,740,000	\$2,154,000	27%	24.4%
3	Chartered	\$725,000	\$485,000	49%	6.5%
4	SMIC	\$365,000	\$50,000	630%	3.3%
5	DongbuAnam	\$330,000	\$260,000	27%	2.9%
6	Jazz	\$185,000	\$160,000	16%	1.6%
7	HHNEC	\$170,000	\$150,000	13%	1.5%
8	SSMC	\$155,000	\$85,000	82%	1.4%
9	X Fab	\$127,000	\$100,000	27%	1.1%
10	ASMC	\$125,000	\$90,000	39%	1.1%
11	CSMC-HJ	\$120,000	\$80,000	50%	1.1%
12	Silterra	\$87,000	\$62,000	40%	0.8%
13	PolarFab	\$85,000	\$70,000	21%	0.8%
14	1st Silicon	\$83,000	\$60,000	38%	0.7%
15	Tower	\$65,000	\$47,000	38%	0.6%
	Total	\$11,217,000	\$8,508,000		

Source: Gartner Dataquest

Integrated vs. Dis-aggregate Industry Model

