

### 台灣積體電路製造股份有限公司 Taiwan Semiconductor Manufacturing Company, Ltd.

## 2001 第四季法人說明會 4th Quarter Results

**January 25th, 2002** 

## Agenda

Welcome

**■ 4Q'01 Financial Results** 

**Harvey Chang** 

Remarks

Rick Tsai

Q&A

Harvey Chang et. al.



### Safe Harbor Notice

- TSMC'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 any forward-looking statement.
- Information as to those factors that could cause actual results to differ materially from those indicated by TSMC's forward-looking statements can be found in TSMC's Registration Statement on Form F-3 filed with the United States Securities and Exchange Commission on December 21, 2001.



## 2001 Income Statement

	1Q'01		2Q'01		3Q'01		4Q'01		2001	
Amount:NT\$Billion	Amount	%								
Net Sales	39.52	100%	26.30	100%	26.94	100%	33.13	100%	125.89	100%
cogs	(26.04)	-66%	(21.30)	-81%	(20.12)	-75%	(22.04)	-67%	(89.51)	-71%
Gross Margin	13.48	34%	5.00	19%	6.82	25%	11.09	33%	36.38	29%
Operation Expense	(4.22)	-11%	(4.71)	-18%	(4.87)	-18%	(5.23)	-16%	(19.04)	-15%
Operation Income	9.26	23%	0.28	1%	1.94	7%	5.86	18%	17.34	14%
Net Non-operating Income (Exp.)	(0.30)	-1%	0.08	0%	(0.22)	-1%	0.19	1%	(0.25)	0%
Investment Income (Loss)	(1.52)	-4%	(1.23)	-5%	(1.93)	-7%	(1.75)	-5%	(6.43)	-5%
Income before Tax	7.43	19%	(0.87)	-3%	(0.20)	-1%	4.30	13%	10.66	8%
Income Tax Credit (Exp.)	0.99	3%	1.18	4%	1.44	5%	0.22	1%	3.82	3%
Net Income	8.42	21%	0.31	1%	1.24	5%	4.51	14%	14.48	12%
EPS (NT\$)	0.50		0.01		0.06		0.26		0.83	



# 4Q'01 Income Statement - YoY Comparison

#### TSMC w/o Affiliates

NT\$Billion	4Q2001	4Q2000					
Net Sales	30.56 100%	46.84 100%					
COGS	(19.58) -64%	(21.44) -46%					
Gross Margin	10.98 36%	25.40 54%	4Q'0	1	4Q'0	0	YOY
Amount:NT\$B	Billion		Amount	%	Amount	%	%
Net Sales			33.13	100%	53.82	100%	-38%
cogs			(22.04)	-67%	(28.25)	-52%	-22%
Gross Ma	argin		11.09	33%	25.57	48%	-57%
Operation	n Expense		(5.23)	-16%	(4.41)	-8%	18%
Operation	n Income		5.86	18%	21.16	39%	-72%
Net Non-	operating I	ncome (Exp.)	0.19	1%	(0.10)	0%	1 1
Investme	nt Income	(Loss)	(1.75)	-5%	(0.14)	0%	1195%
Income be	efore Tax		4.30	13%	20.92	39%	-79%
Income T	ax Credit (	Exp.)	0.22	1%	0.55	1%	-61%
Net Incon	ne		4.51	14%	21.47	40%	-79%
EPS (NT\$	5)		0.26		1.31		-80%



## 4Q'01 Balance Sheet & Cash Flow - YoY Comparison

	4Q'0	4Q'(	YOY		
Amount:NT\$Billion	Amount	%	Amount	%	%
Cash	33.4	10%	35.7	10%	-6%
LT Debt	24.0	7%	29.0	9%	-17%
Equity	277.2	83%	261.8	77%	6%
Total Assets	335.7	100%	341.0	100%	-2%
Depreciation	12.4	4%	10.7	3%	16%
Capital Expenditure	10.0	3%	27.7	8%	-64%
ROE	5.4%		31.5%		YX
ROA	4.8%		24.1%		



# 4Q'01 Income Statement - QoQ Comparison

#### **TSMC w/o Affiliates**

NT\$Billion	4Q2001	3Q2001					
Net Sales	30.56 100%	24.60 100%					
COGS	(19.58) -64%	(17.87) -73%					
Gross Margin	10.98 36%	6.73 27%	4Q'0	1	3Q'0	1/////	QOQ
Amount:NT\$B	illion		Amount	%	Amount	%	%
Net Sales			33.13	100%	26.94	100%	23%
COGS			(22.04)	-67%	(20.12)	-75%	10%
Gross Ma	rgin		11.09	33%	6.82	25%	63%
Operation	Expense		(5.23)	-16%	(4.87)	-18%	7%
Operation	Income		5.86	18%	1.94	7%	202%
Net Non-	perating I	ncome (Exp.)	0.19	1%	(0.22)	-1%	
Investme	nt Income	(Loss)	(1.75)	-5%	(1.93)	-7%	-9%
Income be	efore Tax		4.30	13%	(0.20)	-1%	
Income Ta	ax Credit (	Exp.)	0.22	1%	1.44	5%	-85%
Net Incom	ne		4.51	14%	1.24	5%	265%
EPS (NT\$	)		0.26		0.06		361%



## 4Q'01 Balance Sheet & Cash Flow - QoQ Comparison

	4Q'0	1	3Q'(	QOQ	
Amount:NT\$Billion	Amount	%	Amount	%	%
Cash	33.4	10%	30.7	9%	9%
LT Debt	24.0	7%	29.0	9%	-17%
Equity	276.5	82%	272.2	82%	2%
Total Assets	335.7	100%	333.6	100%	1%
Depreciation	12.4	4%	12.1	4%	3%
Capital Expenditure	10.0	3%	20.8	6%	-52%
ROE	5.4%		5.0%		
ROA	4.8%		4.4%		



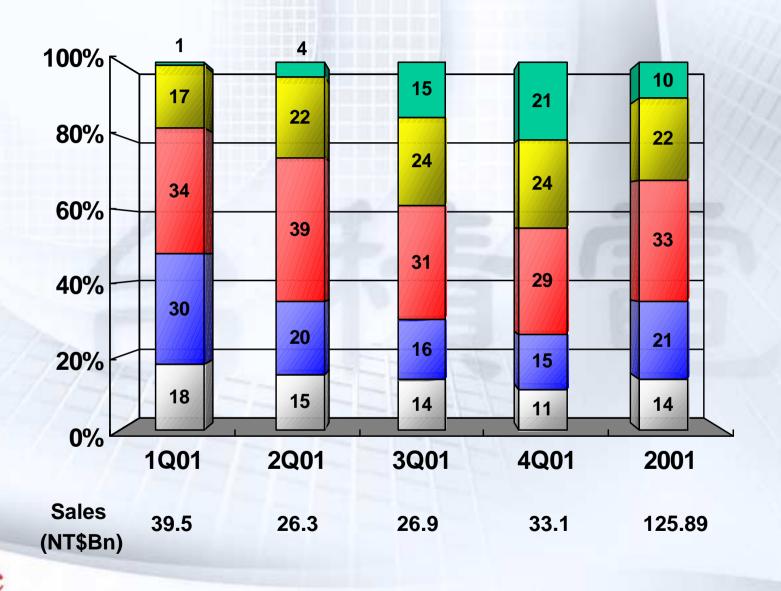
## 2001 Income Statement - Yearly Comparison

#### **TSMC w/o Affiliates**

NT\$Billion	2001	2000					
Net Sales	114.86 100%	136.52 100%					
COGS	(78.80) -69%	(62.04) -45%					
Gross Margin	36.06 31%	74.48 55%	2001		2000		YOY
Amount:NT\$E	Billion		Amount	%	Amount	%	%
Net Sales	3		125.89	100%	166.23	100%	-24%
COGS			(89.51)	-71%	(90.23)	-54%	-1%
Gross Ma	argin		36.38	29%	76.00	46%	-52%
Operation	n Expense		(19.04)	-15%	(15.46)	-9%	23%
Operation	n Income		17.34	14%	60.54	36%	-71%
Net Non-	operating I	ncome (Exp.)	(0.25)	0%	2.52	2%	
Investme	nt Income	(Loss)	(6.43)	-5%	0.78	0%	V V-
Income b	efore Tax		10.66	8%	63.84	38%	-83%
Income T	ax Credit (	Exp.)	3.82	3%	1.27	1%	201%
Net Incor	ne		14.48	12%	65.11	39%	-78%
EPS (NTS	5)		0.83		3.96		-79%



## Sales Breakdown by Technology







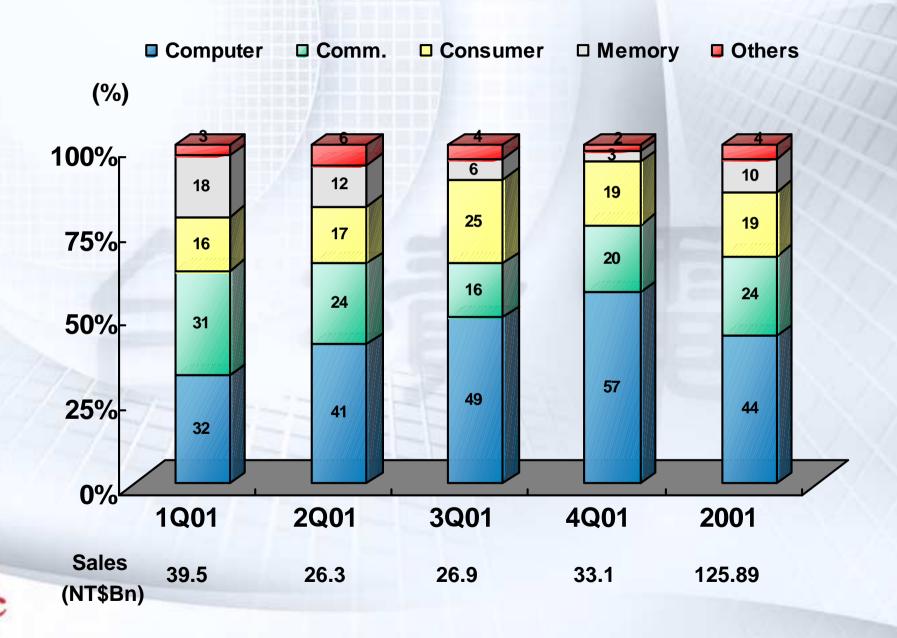


**□** 0.35 u

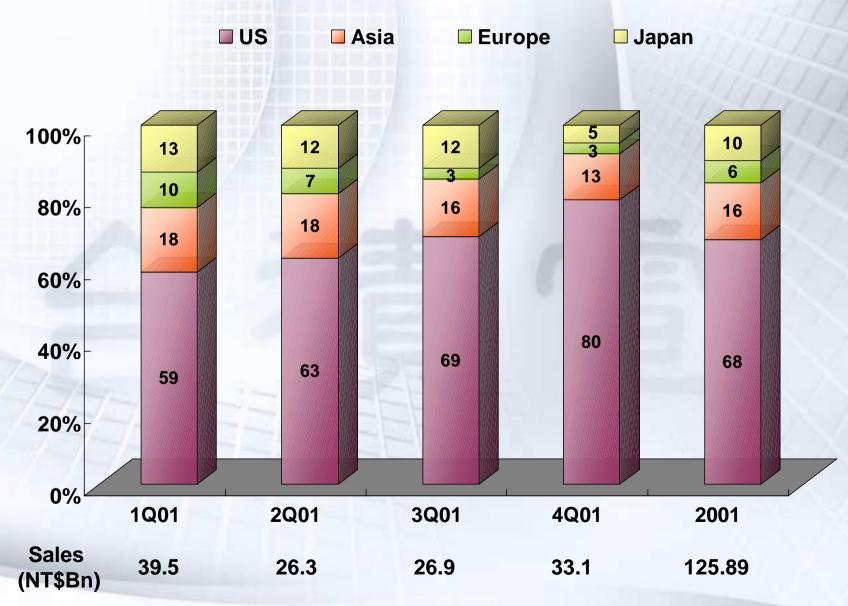
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## Sales Breakdown by Application

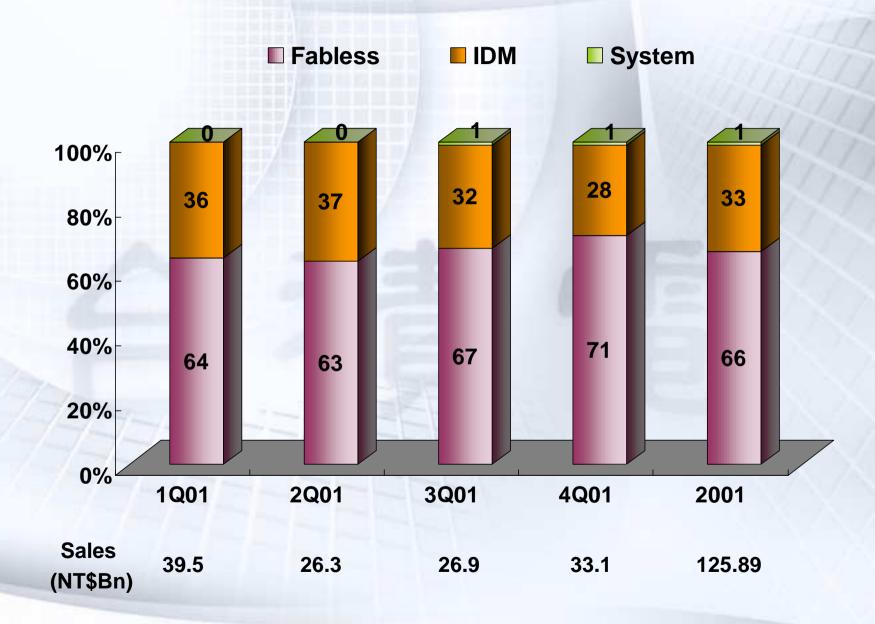


## Sales Breakdown by Geography



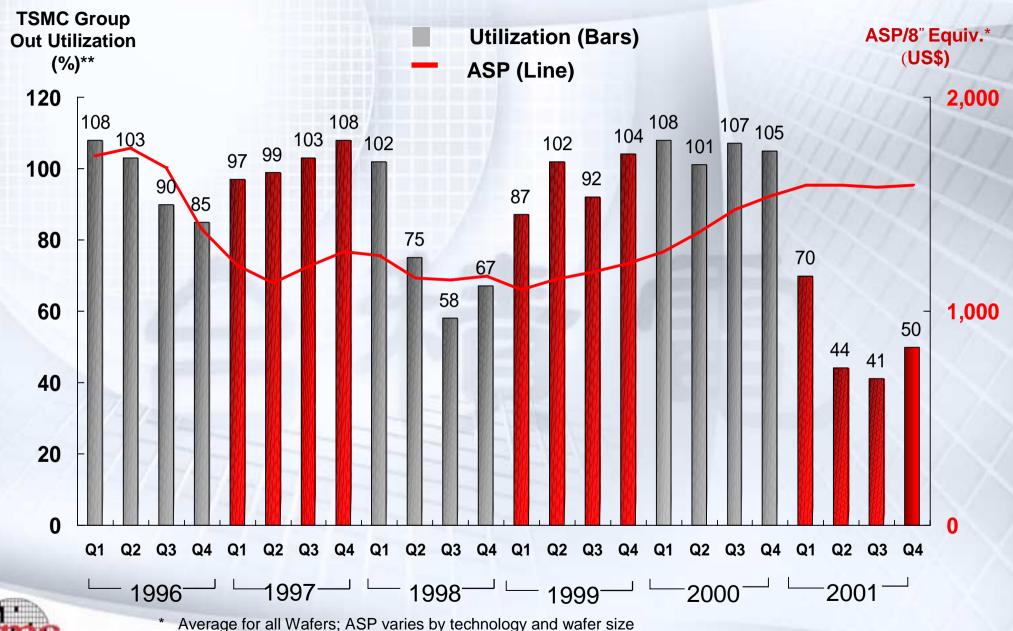


## Sales Breakdown by Customer





### Fab Utilization and ASP Trend



<sup>\*\*</sup> The utilization rates in 1999 and 2000 have been restated to include affiliates (WT, TASMC, WSMC, and VIS)

## Capital Commitment And Capacity

- > 2001 CAPEX(actual): US\$2.2 billion.
- > 2002 Estimated CAPEX: 25% decrease
- > 2001 Capacity:
  - √ 381K/per month as of December 2001
  - √ 4.379 million annually
- Estimated 2002 Capacity:
  - √ 332K/per month as of March 2002
  - √ 358K/per month as of December 2002



## Installed Capacity by Fabs

FAB	(Wafer Size)	2001		200	02
FAB-1*	(6")	Annual 236	Dec. 20	Mar.	Dec.
FAB-2	(6")	939	80	80	80
FAB-3	(8")	548	47	78	74
FAB-4**	(8")	440	36		
FAB-5	(8")	468	40	36	35
FAB-6	(8")	455	41	37	50
FAB-7	(8")	537	47	28	23
FAB-8	(8")	625	55	46	52
FAB-12	(12")	3	2	4	10
WaferTe	ech (8")	328	28	28	28
VIS	(8")	272	23	23	23
SSMC	(8")	40	5	3	6
	talled Capacity ivalent Kpcs)	4,379	381	332	358

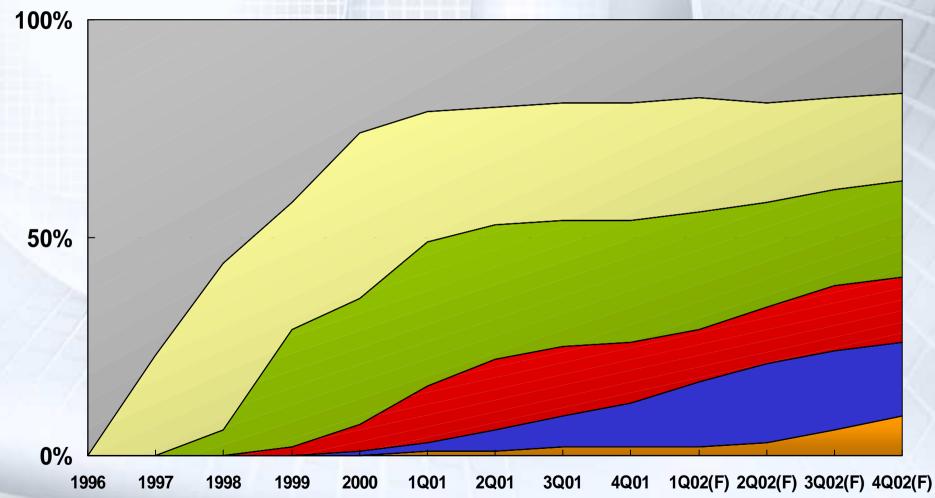


Note: \* Fab 1 is to be decommissioned on Mar. 31, 2002

\*\* Fabs 3 and 4 were consolidated during 4Q01

## Capacity Plan by Technology

■ 0.13 um ■ 0.15 um ■ 0.18 um ■ 0.25 um ■ 0.35 um ■ 0.50 um+





## Recap of Major Events in 4Q01

- Altera and TSMC Deliver Industry's First 0.13-Micron All-Copper Interconnect PLD (01/07)
- TSMC Named Taiwan's Best Managed Company between 1991 and 2001 by AsiaMoney Magazine (01/03)
- TSMC Appoints Mr. Harvey Chang as Spokesperson (12/27)
- PMC-Sierra and TSMC Collaborate to Develop System-on-Chip Products with Higher Levels of Integration (12/20)
- TSMC Appoints Dr. Dick Thurston as Vice President and General Counsel (12/19)
- TSMC Announces Its Updated 2001 Financial Forecast (12/03)
- TSMC Board of Directors Approves Issuance of Corporate Bond (11/06)
- TSMC Completed "The Analysis of the Effect of High Speed Rail Vibration on IC Fabrication" (10/25)
- TSMC Fab 12 Sets World Record for Delivery of 0.13-Micron Devices on 300mm Wafers with Production-Worthy Yields (10/22)
- TSMC to Set Up Liaison Office in Shanghai, China (10/05)



### 1Q02 Guidance

- Revenues are expected to grow by a single-digit (in the mid-to-high range) percentage rate sequentially.
  - ✓ Gross margin rate to remain at the same level.
  - ✓ Operating and net margins are expected to continue to improve.
- > Overall utilization rate is expected to improve to around 60%.
  - ✓ Utilization rate for our leading-edge process technologies to reach 90% at TSMC fabs (not including affiliates).
  - ✓ The utilization rate for our 0.25/0.22 node technologies is also expected to exceed 60%.
- Capital expenditures in 2002 are expected to be approximately 25% less than that in 2001.





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