



***TSMC***

***2002 Fourth Quarter Results  
Investor Conference***

***January 28th, 2003***



# Agenda

- **Welcome**
- **4Q'02 Financial Results  
(unconsolidated)** **Harvey Chang**
- **Remarks** **Morris Chang**
- **Q&A** **Morris 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 Annual Report on Form 20F filed with the U.S. Securities and Exchange Commission on May 9, 2002.**



# 2002 Income Statement

	1Q'02		2Q'02		3Q'02		4Q'02		2002	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Amount: NT\$Billion										
<b>Net Sales</b>	<b>35.79</b>	<b>100%</b>	<b>44.18</b>	<b>100%</b>	<b>39.84</b>	<b>100%</b>	<b>41.15</b>	<b>100%</b>	<b>160.96</b>	<b>100%</b>
<b>COGS</b>	<b>(23.76)</b>	<b>-66%</b>	<b>(27.76)</b>	<b>-63%</b>	<b>(27.00)</b>	<b>-68%</b>	<b>(30.47)</b>	<b>-74%</b>	<b>(108.99)</b>	<b>-68%</b>
<b>Gross Profit</b>	<b>12.03</b>	<b>34%</b>	<b>16.42</b>	<b>37%</b>	<b>12.84</b>	<b>32%</b>	<b>10.68</b>	<b>26%</b>	<b>51.97</b>	<b>32%</b>
<b>Operating Expense</b>	<b>(3.85)</b>	<b>-11%</b>	<b>(4.45)</b>	<b>-10%</b>	<b>(4.47)</b>	<b>-11%</b>	<b>(5.03)</b>	<b>-12%</b>	<b>(17.79)</b>	<b>-11%</b>
<b>Operating Income</b>	<b>8.18</b>	<b>23%</b>	<b>11.98</b>	<b>27%</b>	<b>8.37</b>	<b>21%</b>	<b>5.65</b>	<b>14%</b>	<b>34.18</b>	<b>21%</b>
<b>Non-operating Income (Exp.)</b>	<b>(0.22)</b>	<b>-1%</b>	<b>(0.20)</b>	<b>0%</b>	<b>(0.52)</b>	<b>-1%</b>	<b>(0.41)</b>	<b>-1%</b>	<b>(1.35)</b>	<b>-1%</b>
<b>Investment Income (Loss)</b>	<b>(0.95)</b>	<b>-3%</b>	<b>(0.79)</b>	<b>-2%</b>	<b>(1.82)</b>	<b>-5%</b>	<b>(2.16)</b>	<b>-5%</b>	<b>(5.72)</b>	<b>-4%</b>
<b>Income before Tax</b>	<b>7.02</b>	<b>19%</b>	<b>10.99</b>	<b>25%</b>	<b>6.03</b>	<b>15%</b>	<b>3.08</b>	<b>7%</b>	<b>27.11</b>	<b>17%</b>
<b>Income Tax Credit (Exp.)</b>	<b>(0.43)</b>	<b>-1%</b>	<b>(1.68)</b>	<b>-4%</b>	<b>(2.87)</b>	<b>-7%</b>	<b>(0.53)</b>	<b>-1%</b>	<b>(5.50)</b>	<b>-3%</b>
<b>Net Income</b>	<b>6.59</b>	<b>18%</b>	<b>9.31</b>	<b>21%</b>	<b>3.16</b>	<b>8%</b>	<b>2.55</b>	<b>6%</b>	<b>21.61</b>	<b>13%</b>
<b>EPS (NT\$)</b>	<b>0.35</b>		<b>0.50</b>		<b>0.16</b>		<b>0.13</b>		<b>1.14</b>	



# 2002 Income Statement - Yearly Comparison

## TSMC w/o Affiliates

NT\$Billion	2002		2001	
Net Sales	143.9	100%	114.9	100%
COGS	(92.8)	-64%	(78.8)	-69%
Gross Margin	51.1	36%	36.1	31%

Amount: NT\$Billion

	2002		2001		YOY
	Amount	%	Amount	%	%
<b>Net Sales</b>	<b>160.96</b>	<b>100%</b>	<b>125.89</b>	<b>100%</b>	<b>28%</b>
<b>COGS</b>	<b>(108.99)</b>	<b>-68%</b>	<b>(89.51)</b>	<b>-71%</b>	<b>22%</b>
<b>Gross Profit</b>	<b>51.97</b>	<b>32%</b>	<b>36.38</b>	<b>29%</b>	<b>43%</b>
<b>Operating Expense</b>	<b>(17.79)</b>	<b>-11%</b>	<b>(19.04)</b>	<b>-15%</b>	<b>-7%</b>
<b>Operating Income</b>	<b>34.18</b>	<b>21%</b>	<b>17.34</b>	<b>14%</b>	<b>97%</b>
<b>Net Non-operating Income (Exp.)</b>	<b>(1.35)</b>	<b>-1%</b>	<b>(0.25)</b>	<b>0%</b>	<b>430%</b>
<b>Investment Income (Loss)</b>	<b>(5.72)</b>	<b>-4%</b>	<b>(6.43)</b>	<b>-5%</b>	<b>-11%</b>
<b>Income before Tax</b>	<b>27.11</b>	<b>17%</b>	<b>10.66</b>	<b>8%</b>	<b>154%</b>
<b>Income Tax Credit (Exp.)</b>	<b>(5.50)</b>	<b>-3%</b>	<b>3.82</b>	<b>3%</b>	<b>-</b>
<b>Net Income</b>	<b>21.61</b>	<b>13%</b>	<b>14.48</b>	<b>12%</b>	<b>49%</b>
<b>EPS (NT\$)</b>	<b>1.14</b>		<b>0.75</b>		



# 4Q 2002 Result Highlights

Amount:NT\$Billion	<u>4Q'02</u> <u>Amount</u>	<u>3Q'02</u> <u>Amount</u>	<u>4Q'01</u> <u>Amount</u>
<b>Net Sales</b>	<u>41.15</u>	<u>39.84</u>	<u>33.13</u>
<b>Net Income</b>	<u>2.55</u>	<u>3.16</u>	<u>4.51</u>
<b>EPS (NT\$)</b>	<b>0.13</b>	<b>0.16</b>	<b>0.24</b>
<b>Cash and Equivalent</b>	<b>61.66</b>	<b>64.52</b>	<b>33.40</b>
<b>Debt</b>	<b>39.00</b>	<b>44.00</b>	<b>29.00</b>
<b>Shareholders' Equity</b>	<b>295.85</b>	<b>293.61</b>	<b>277.19</b>
<b>Wafers Shipped (Kpcs)</b>	<b>682</b>	<b>677</b>	<b>558</b>
<b>Utilization (%)</b>	<b>61%</b>	<b>79%</b>	<b>50%</b>



# 4Q 2002 Income Statement - YoY Comparison

## TSMC w/o Affiliates

NT\$Billion	4Q'02		4Q'01	
Net Sales	36.9	100%	30.6	100%
COGS	(26.4)	-72%	(19.6)	-64%
Gross Margin	10.5	28%	11.0	36%

	4Q'02		4Q'01		YOY
	Amount	%	Amount	%	%
Amount:NT\$Billion					
<b>Net Sales</b>	<b>41.15</b>	<b>100%</b>	<b>33.13</b>	<b>100%</b>	<b>24%</b>
<b>COGS</b>	<b>(30.47)</b>	<b>-74%</b>	<b>(22.04)</b>	<b>-67%</b>	<b>38%</b>
<b>Gross Profit</b>	<b>10.68</b>	<b>26%</b>	<b>11.09</b>	<b>33%</b>	<b>-4%</b>
<b>Operating Expense</b>	<b>(5.03)</b>	<b>-12%</b>	<b>(5.23)</b>	<b>-16%</b>	<b>-4%</b>
<b>Operating Income</b>	<b>5.65</b>	<b>14%</b>	<b>5.86</b>	<b>17%</b>	<b>-4%</b>
<b>Net Non-operating Income (Exp.)</b>	<b>(0.41)</b>	<b>-1%</b>	<b>0.19</b>	<b>1%</b>	<b>-</b>
<b>Investment Income (Loss)</b>	<b>(2.16)</b>	<b>-6%</b>	<b>(1.75)</b>	<b>-5%</b>	<b>24%</b>
<b>Income before Tax</b>	<b>3.08</b>	<b>7%</b>	<b>4.30</b>	<b>13%</b>	<b>-28%</b>
<b>Income Tax Credit (Exp.)</b>	<b>(0.53)</b>	<b>-1%</b>	<b>0.21</b>	<b>1%</b>	<b>-</b>
<b>Net Income</b>	<b>2.55</b>	<b>6%</b>	<b>4.51</b>	<b>14%</b>	<b>-43%</b>
<b>EPS (NT\$)</b>	<b>0.13</b>		<b>0.24</b>		



# 4Q 2002 Balance Sheet & Cash Flow - YoY Comparison

Amount:NT\$Billion	4Q'02		4Q'01		YOY
	Amount	%	Amount	%	%
Cash	61.7	17%	33.4	10%	85%
LT Debt	35.0	9%	24.0	7%	46%
Equity	295.9	80%	277.2	83%	7%
<b>Total Assets</b>	<b>370.0</b>	<b>100%</b>	<b>335.7</b>	<b>100%</b>	<b>10%</b>
Depreciation & Amort.	16.1		12.4		29%
Capital Expenditure	17.9		10.0		79%
ROE	7.5%		5.4%		
ROA	6.7%		4.8%		





# 4Q 2002 Income Statement - QoQ Comparison

## TSMC w/o Affiliates

NT\$Billion	4Q'02		3Q'02	
Net Sales	36.9	100%	36.0	100%
COGS	(26.4)	-72%	(23.3)	-65%
Gross Margin	10.5	28%	12.6	35%

Amount:NT\$Billion

	4Q'02		3Q'02		QOQ
	Amount	%	Amount	%	%
<b>Net Sales</b>	<b>41.15</b>	<b>100%</b>	<b>39.84</b>	<b>100%</b>	<b>3%</b>
<b>COGS</b>	<b>(30.47)</b>	<b>-74%</b>	<b>(27.00)</b>	<b>-68%</b>	<b>13%</b>
<b>Gross Profit</b>	<b>10.68</b>	<b>26%</b>	<b>12.84</b>	<b>32%</b>	<b>-17%</b>
<b>Operating Expense</b>	<b>(5.03)</b>	<b>-12%</b>	<b>(4.47)</b>	<b>-11%</b>	<b>13%</b>
<b>Operating Income</b>	<b>5.65</b>	<b>14%</b>	<b>8.37</b>	<b>21%</b>	<b>-32%</b>
<b>Net Non-operating Income (Exp.)</b>	<b>(0.41)</b>	<b>-1%</b>	<b>(0.52)</b>	<b>-1%</b>	<b>-20%</b>
<b>Investment Income (Loss)</b>	<b>(2.16)</b>	<b>-6%</b>	<b>(1.82)</b>	<b>-5%</b>	<b>19%</b>
<b>Income before Tax</b>	<b>3.08</b>	<b>7%</b>	<b>6.03</b>	<b>15%</b>	<b>-49%</b>
<b>Income Tax Credit (Exp.)</b>	<b>(0.53)</b>	<b>-1%</b>	<b>(2.87)</b>	<b>-7%</b>	<b>-82%</b>
<b>Net Income</b>	<b>2.55</b>	<b>6%</b>	<b>3.16</b>	<b>8%</b>	<b>-19%</b>
<b>EPS (NT\$)</b>	<b>0.13</b>		<b>0.16</b>		



# Inventory Status Analysis

Amount:NT\$Billion	4Q'02		3Q'02		2Q'02	
	Amount	%	Amount	%	Amount	%
<b>Inventory</b>	<b>10.3</b>	<b>100%</b>	<b>13.3</b>	<b>100%</b>	<b>11.7</b>	<b>100%</b>
<b>Raw Material</b>	<b>1.0</b>	<b>10%</b>	<b>1.1</b>	<b>8%</b>	<b>1.1</b>	<b>9%</b>
<b>WIP</b>	<b>7.5</b>	<b>73%</b>	<b>8.7</b>	<b>65%</b>	<b>9.6</b>	<b>82%</b>
<b>Finish Goods</b>	<b>1.8</b>	<b>17%</b>	<b>3.5</b>	<b>26%</b>	<b>1.0</b>	<b>9%</b>

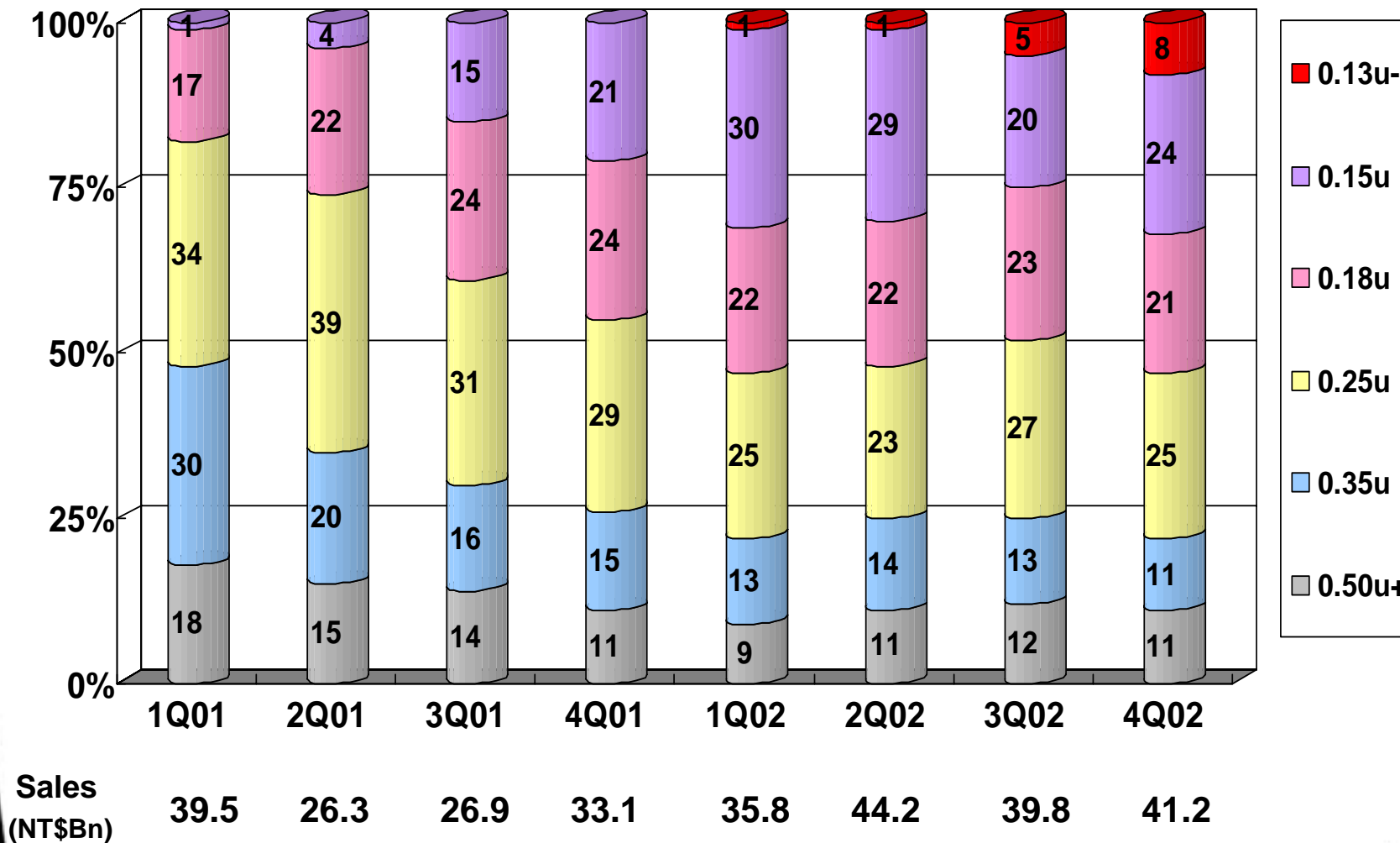


# 4Q 2002 Balance Sheet & Cash Flow - QoQ Comparison

Amount:NT\$Billion	4Q'02		3Q'02		QOQ
	Amount	%	Amount	%	%
Cash	61.7	17%	64.5	17%	-4%
LT Debt	35.0	9%	35.0	9%	0%
Inventory	10.3	3%	13.3	4%	-23%
Equity	295.9	80%	293.6	78%	1%
Total Assets	370.0	100%	377.4	100%	-2%
Depreciation & Amort.	16.1		14.7		9%
Capital Expenditure	17.9		19.6		-9%
ROE	7.5%		8.9%		
ROA	6.7%		7.7%		



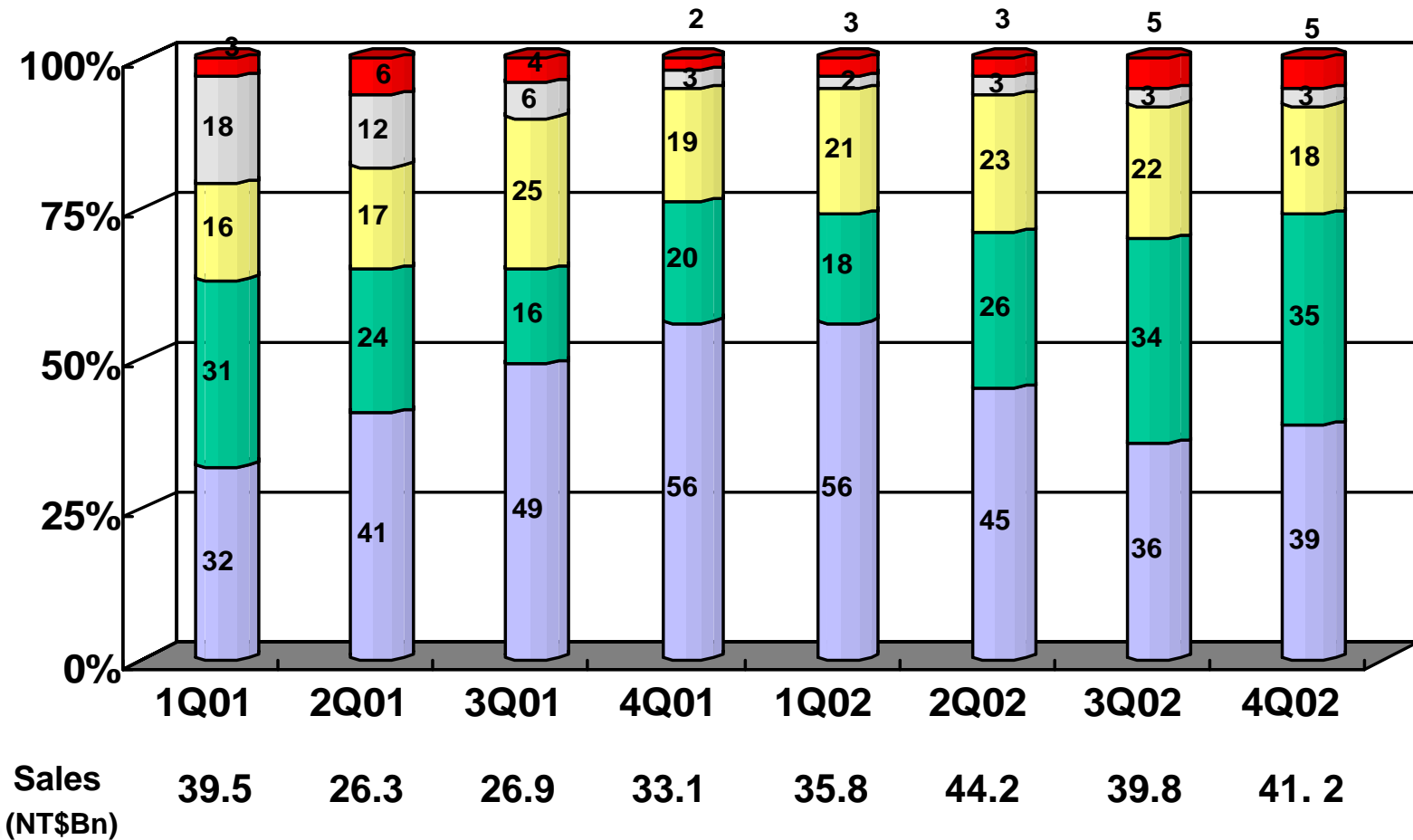
# Sales Breakdown by Technology





# Sales Breakdown by Application

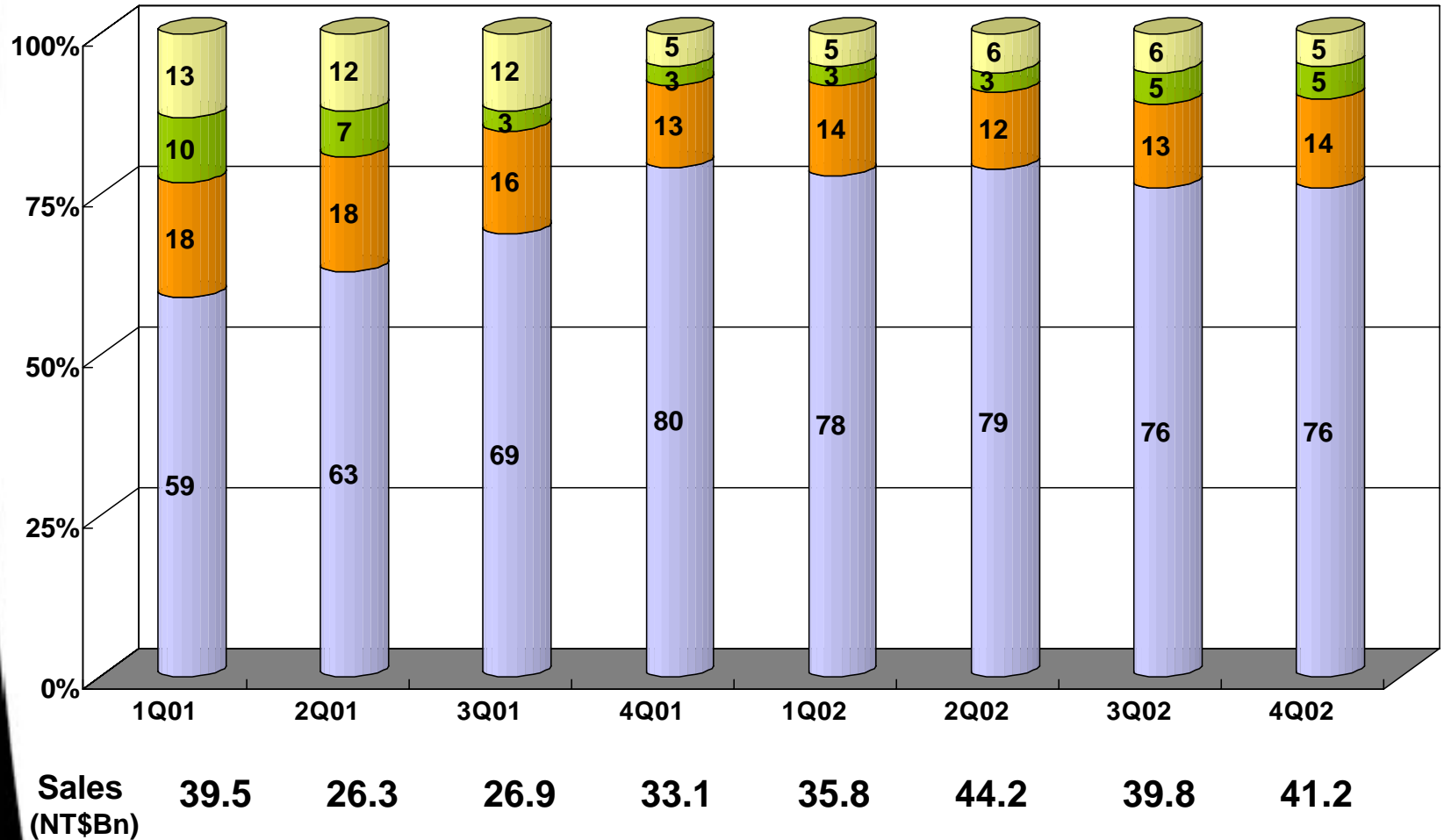
Computer    Comm.    Consumer    Memory    Others





# Sales Breakdown by Geography

US Asia Europe Japan

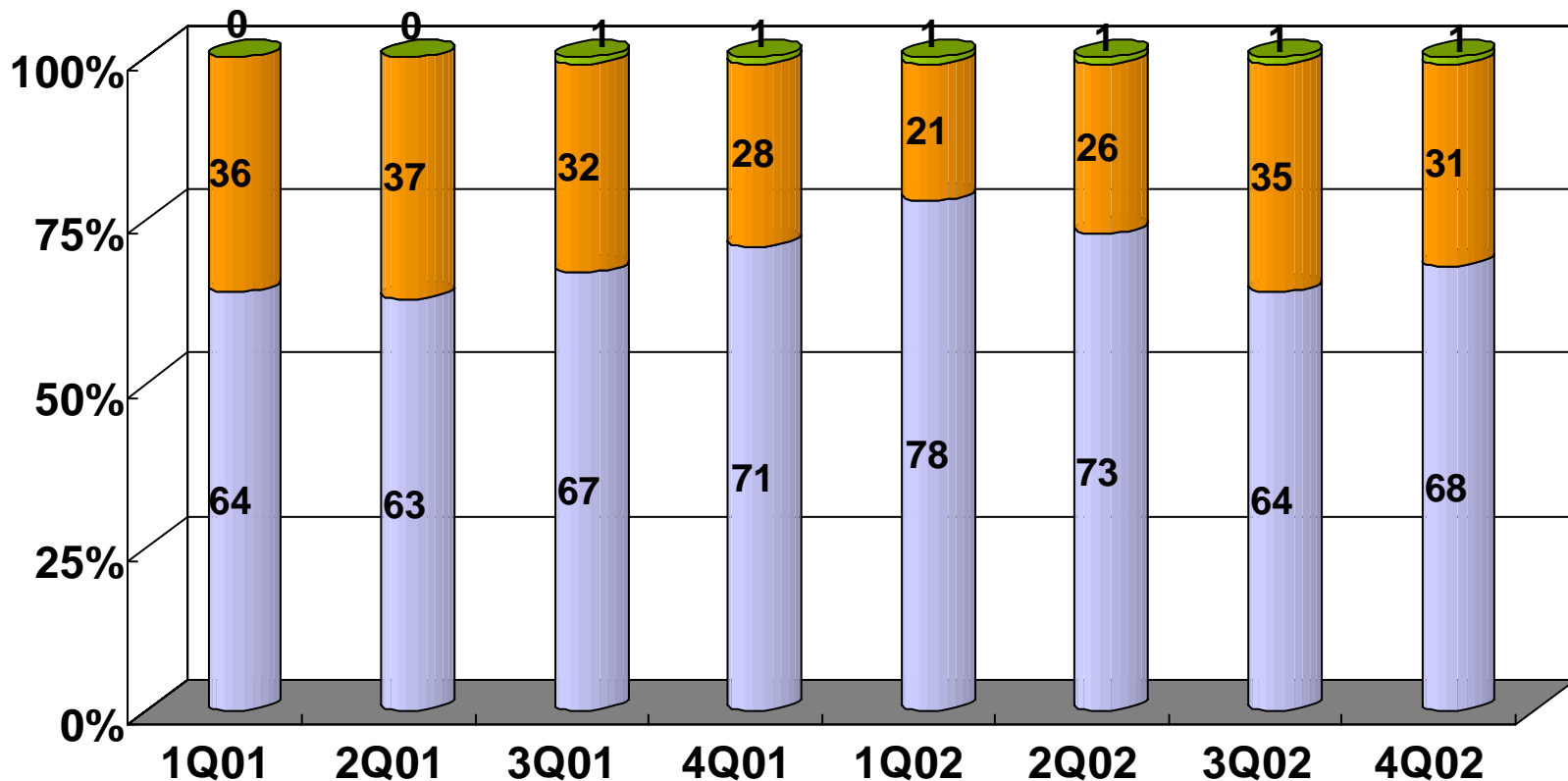


Note: This chart does not reflect the actual shipment destination of sales.



# Sales Breakdown by Customer

Fabless      IDM      System



Sales  
(NT\$Bn)

39.5

26.3

26.9

33.1

35.8

44.2

39.8

41.2

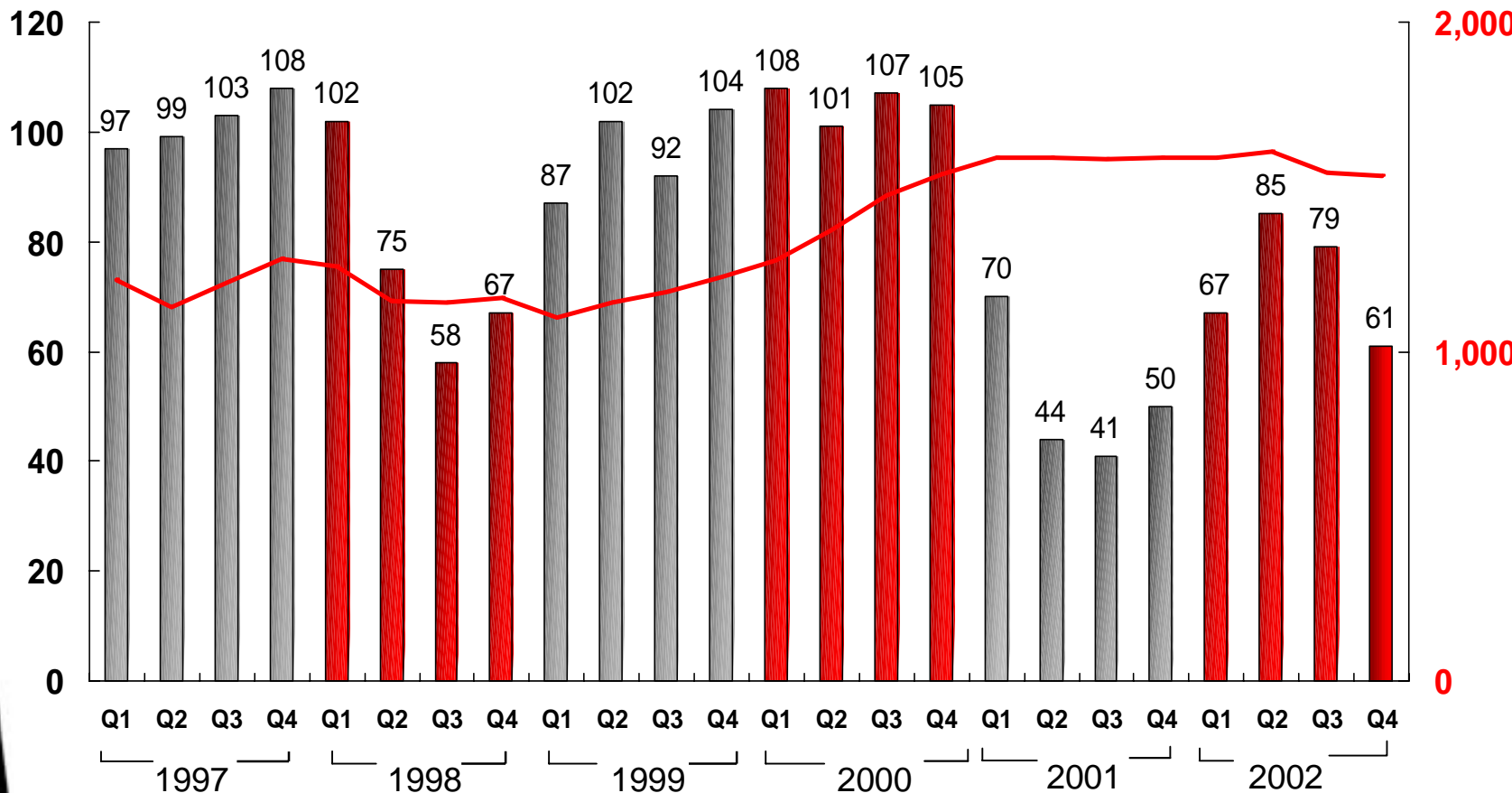


# Fab Utilization and ASP Trend

TSMC Group  
Out Utilization  
(%)\*\*

■ Utilization (Bars)  
— ASP (Line)

ASP/8" Equiv.\*  
(US\$)



\* Average for all Wafers; ASP varies by technology and wafer size

\*\* The utilization rates in 1999 and 2000 have been restated to include affiliates (WT, TSMC, WSMC, and VIS)





# Installed Capacity by FAB

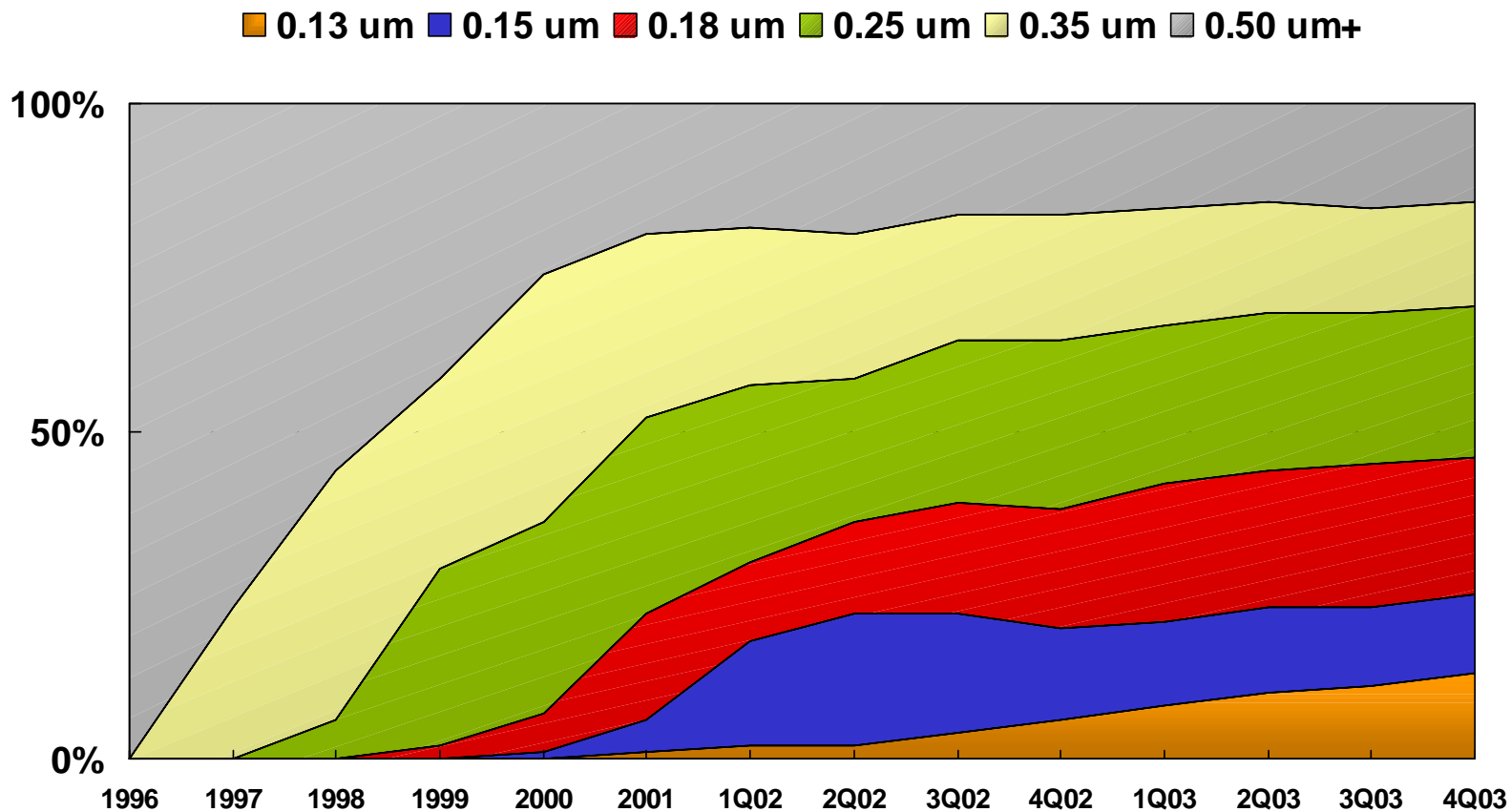
FAB	Wafer Size	4Q02	1Q03
Fab-2	6"	230	206
Fab-3	8"	211	193
Fab-5	8"	104	106
Fab-6	8"	137	157
Fab-7	8"	67	65
Fab-8	8"	156	161
Fab-12	12"	14	17
Wafer Tech	8"	89	87
VIS	8"	119	120
SSMC	8"	23	24
<b>Total Installed Capacity (8" Equivalent Kpcs)</b>		<b>1067</b>	<b>1,068</b>

Note:

1. Fabs 3 and 4 were consolidated into a single fab during 1Q02.
2. 6"-wafer is converted into 8"-equivalent wafer by dividing by 1.78;  
12"-wafer by multiplying by 2.25.



# Capacity Plan by Technology



➤ 0.18um and more advanced technology capacity will be over 45% of total capacity by 2003 year-end, up from 38% at end of 2002.



# Recap of Major Events in 4Q02

- **TSMC Unveils Industry's First Viable 25 Nanometer Transistors (12/11)**
- **TSMC Expands Advanced Technology Libraries, Enhances Distribution Program to Accelerate Availability (12/10)**
- **TSMC Revises Upwards Its Guidance for the Fourth Quarter of 2002 (11/22)**
- **TSMC Board of Directors Approves Subscription of New Shares to Be Issued by Vanguard International Semiconductor Corporation (11/05)**



# 1Q03 Guidance

**We continue to expect TSMC revenues to bottom out during the course of the first quarter. We also expect 2003 semiconductor industry revenue growth to be around 8%, while TSMC revenue growth continues to exceed that.**

**In 1Q03, we expect :**

- Wafer shipments to decline by a low single-digit percentage rate on a sequential basis;**
- ASP to decline by about 7% due to essentially flat percentage shipments of advanced technology wafers (0.18u and below) and a general price decline. The percentage shipments of advance technology will rise again in 2Q03.**
- An overall utilization rate around 60%;**
- Customer demand mix by product applications to remain similar to that in 4Q02, with communications showing a slight improvement.**

**We Expect 2003 Capex to be in the range of US\$1.0 to 1.5 billion.**



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