



2Q02

Quarterly Release
July 25, 2002

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Topics in This Release

- Summary Operation Results
- Management Commentary
- Guidance & Forward-Looking Statements
- Conference Call/ Webcast Notice
8 A.M. Eastern/
8 P.M. Taiwan
- Management Report

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(Hsin-Chu, Taiwan, R.O.C., July 25, 2002)

Taiwan Semiconductor Manufacturing Company, Ltd. (TAIEX: 2330, NYSE: TSM) ("TSMC" or "the Company"), the world's largest dedicated semiconductor foundry company, today announced its unconsolidated results of operations for the quarter ended June 30, 2002. All figures were prepared in accordance with generally accepted accounting principles in Taiwan, which differ in some material respects from generally accepted accounting principles in the United States.

TSMC Announces 2Q02 Unconsolidated Results:

**Revenues NT\$44,182 Million, Net Income NT\$9,310 Million
Fully Diluted EPS NT\$0.49 (US\$0.072 per ADS)**

- Revenues grew 23% sequentially due to increased wafer shipments amidst improved business conditions.
- Net income increased 41% sequentially, benefiting principally from a higher utilization rate.
- Fully diluted EPS rose 42% sequentially.
- Financial indicators (cash flow generation, liquidity, debt service) improved overall along with the 2Q02 operating results.

Management Commentary

- Harvey Chang, SVP & CFO:

"We are very pleased to announce TSMC's results for the second quarter of 2002.

"TSMC's revenue continued to grow for the fourth consecutive quarter since we hit the bottom in the second quarter of last year. Net sales and net income in the second quarter of 2002 grew 23.5% and 41.3%, respectively, over the previous quarter. In addition, operating income for the second quarter of 2002 surpassed NT\$10 billion, increasing 46% to NT\$11,975 million compared to NT\$8,182 million for the first quarter of 2002. TSMC's operating margin for the second quarter of 2002 increased to 27.1% from 22.9% for the first quarter of 2002.

"Due to increasing customer demand, TSMC's average utilization rate for the second quarter of 2002 increased to 85% from 67% for the first quarter of 2002. Increased order activity was primarily attributable to the communication product segment and integrated device manufacturers (IDMs). Wafer shipments for the second quarter of 2002 totaled 719,000 eight-inch equivalent wafers, representing a 20% increase over the first quarter of 2002.

"As a result of the above, we closed the books for this quarter with earnings of NT\$0.49 per ordinary share, or the equivalent of US\$0.072 per ADR unit."



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Quarterly Management Report
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Topics in This Report

- Operation Results Review
- Financial Condition Review
- Cash Flow Strength Review
- Capital Commitment & Capacity
- New Measures & Major Changes
- Recap of Important Events

Operation Results Review:

Summary:

| (Amount in NT\$ Bn except for EPS) | <u>2Q02</u> | <u>1Q02</u> | <u>2Q01</u> | <u>Comparisons</u> | |
|------------------------------------|-------------|-------------|-------------|--------------------|------------|
| | | | | <u>QoQ</u> | <u>YoY</u> |
| EPS (NT\$ per com. sh.) | 0.49 | 0.35 | 0.01 | 42% | 4108% |
| (US\$ per ADR unit) | 0.072 | 0.050 | 0.002 | 40% | 3500% |
| Net Sales | 44.18 | 35.79 | 26.30 | 23% | 68% |
| Gross Profit | 16.42 | 12.03 | 5.00 | 37% | 229% |
| Operating Expenses | (4.45) | (3.85) | (4.71) | 16% | (6%) |
| Non-op Exp. & Invest. | (0.99) | (1.16) | (1.15) | (15%) | (14%) |
| Net Income | 9.31 | 6.59 | 0.31 | 41% | 2887% |
| Wafers Shipped (8"equiv.) | 719K | 599K | 450K | 20% | 60% |
| Capacity Utilization | 85% | 67% | 44% | | |

Remarks:

TSMC is pleased to announce EPS of NT\$0.49 (US\$0.072 per ADR unit) for the second quarter of 2002.

EPS figures in the latest quarter reflect a 41% increase in net income versus 1Q02 and the impact of TSMC's NT\$1.00 stock dividend distribution plan, which resulted in 10% more common shares outstanding.

The impressive operational results in 2Q02 are attributable to:

Net sales of NT\$44,182 million, an increase of 23% sequentially, due to strong wafer shipment growth in communication applications and to IDM clientele;

Gross profit of NT\$16,423 million, an increase of 37% sequentially, due to higher capacity utilization rate;

Operating expenses of NT\$4,448 million, up 16% sequentially, reflecting effective controls in administrative overhead and R&D expenditures;

A combined loss of NT\$989 million from net non-operating items and investment income/loss, which represents a 15% improvement sequentially. Both WaferTech and SSMC showed considerable operation improvements in this past quarter; and

Net income of NT\$9,310 million, representing a sequential improvement of 41%.

Table 1
Revenue Analyses (Incl. Outputs from Affiliates)

| By Application | 2Q02 | 1Q02 | 2Q01 |
|---------------------|------|------|------|
| Computer | 45% | 56% | 41% |
| Communication | 26% | 18% | 24% |
| Consumer | 23% | 21% | 17% |
| Industrial / Others | 3% | 3% | 6% |
| Memory | 3% | 2% | 12% |

| By Technology | 2Q02 | 1Q02 | 2Q01 |
|------------------------------|------|------|------|
| $X \leq 0.13 \mu$ | 1% | 1% | -% |
| $0.13 \mu < X \leq 0.15 \mu$ | 29% | 30% | 4% |
| $0.15 \mu < X \leq 0.18 \mu$ | 22% | 22% | 22% |
| $0.18 \mu < X \leq 0.25 \mu$ | 23% | 25% | 39% |
| $0.25 \mu < X \leq 0.35 \mu$ | 14% | 13% | 20% |
| $X \geq 0.50 \mu$ | 11% | 9% | 15% |

| By Customer Type | 2Q02 | 1Q02 | 2Q01 |
|------------------|------|------|------|
| Fabless | 73% | 78% | 63% |
| IDM | 26% | 21% | 37% |
| System | 1% | 1% | 0% |

| By Geography | 2Q02 | 1Q02 | 2Q01 |
|---------------|------|------|------|
| North America | 79% | 78% | 63% |
| Asia Pacific | 12% | 14% | 18% |
| Europe | 3% | 3% | 7% |
| Japan | 6% | 5% | 12% |

Revenue Analyses:

Net sales rose 23.5% sequentially to NT\$44,182 million. Communication and consumer applications were the principal revenue drivers in the quarter. Revenues derived from computer applications, in New Taiwan dollar terms, were 1% lower sequentially. As a percentage of total revenue, however, computer applications were considerably lower than in the previous quarter (45% versus 56%). We expect the strength propelling Communication applications to be sustained in the coming quarter.

Revenue mix in terms of technology was essentially unchanged from that of the previous quarter. Revenues contributed by leading-edge technology applications (0.18um or more advanced) continued to represent over half of TSMC's total revenue.

Revenue mix in terms of customer-type reflected a noticeable shift towards the IDM (integrated device manufacturer) sector. This shift was underscored by the recent announcement by prominent IDMs of their asset-light operating strategy. We expect the trend among IDMs to outsource from foundries to become more pronounced going forward.

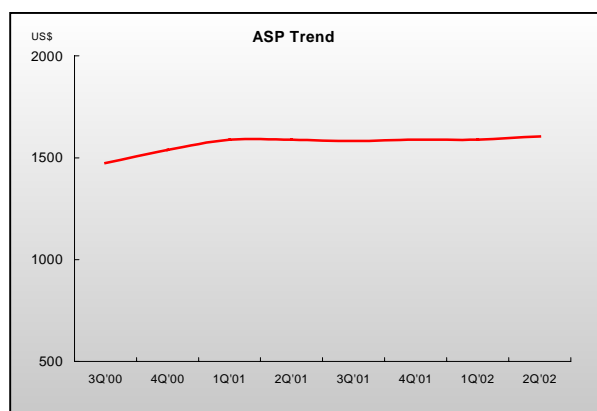
In terms of geography, the revenue mix was little changed from the previous quarter.

Wafers manufactured by TSMC's affiliates contributed 11.6% (NT\$5,125 million) to net sales during the quarter versus 10.7% (NT\$3,842 million) in 1Q02.

Wafer shipments increased by 20% to 719K units sequentially.

ASP Trend

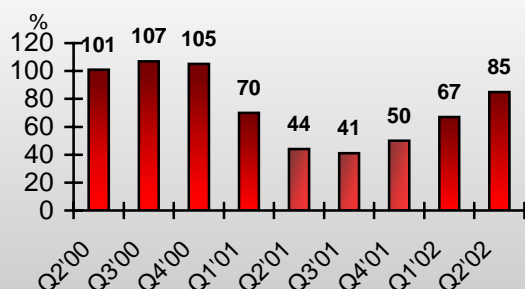
ASP in U.S. dollars improved 1% versus the previous quarter, while ASP in NT dollars declined a marginal 0.6%, primarily due to the U.S. dollar's depreciation against the NT dollar (down 1.5% to NT\$34.51/\$ from NT\$35.05/\$).



Gross Margin Analysis

| (Amount: NT\$ Bn) | <u>2Q02</u> | <u>1Q02</u> | <u>2Q01</u> | <u>Comparisons</u> | |
|-------------------|-------------|-------------|-------------|--------------------|------------|
| | | | | <u>QoQ</u> | <u>YoY</u> |
| COGS | 27.8 | 23.8 | 21.3 | 17% | 30% |
| Depreciation | 13.0 | 11.9 | 11.2 | (9%) | (16%) |
| Other MFG Cost | <u>14.8</u> | <u>11.9</u> | <u>10.1</u> | <u>24%</u> | <u>47%</u> |
| Gross Profit | 16.4 | 12.0 | 5.0 | 37% | 229% |
| Gross Margin | | | | | |
| - TSMC+Aff | 37% | 34% | 19% | | |
| - TSMC alone | 42% | 37% | 20% | | |

Utilization Rate Trend



Operating Expenses Analysis

| (Amount: NT\$ Bn) | <u>2Q02</u> | <u>1Q02</u> | <u>2Q01</u> | <u>Comparisons</u> | |
|-------------------|-------------|-------------|-------------|--------------------|------------|
| | | | | <u>QoQ</u> | <u>YoY</u> |
| Total Op. Exp. | 4.4 | 3.8 | 4.7 | 16% | (6%) |
| Gen'l & Admin. | 1.3 | 1.1 | 1.6 | 16% | (14%) |
| Selling & Mktng. | 0.4 | 0.2 | 0.6 | 164% | (33%) |
| R & D | <u>2.7</u> | <u>2.5</u> | <u>2.5</u> | 6% | 6% |

Non-Operating Items & Investment

| (Amount: NT\$ Bn) | <u>2Q02</u> | <u>1Q02</u> | <u>2Q01</u> | <u>Comparisons</u> | |
|-----------------------|-------------|-------------|-------------|--------------------|------------|
| | | | | <u>QoQ</u> | <u>YoY</u> |
| Net Int. Inc./ (Exp.) | (0.3) | (0.4) | (0.0) | (8%) | n.m. |
| Other Non-Ops. | 0.1 | 0.1 | 0.1 | (10%) | 76% |
| Invest. Inc./ (Loss) | (0.8) | (0.9) | (1.2) | (17%) | (36%) |
| • Wafertech* | 0.2 | 0.2 | (0.3) | 45% | n.m. |
| • SSMC | (0.3) | (0.4) | (0.5) | (14%) | (31%) |
| • Vanguard | (0.2) | (0.1) | (0.5) | 49% | (64%) |
| • Others | (0.5) | (0.6) | 0.0 | (14%) | n.m. |

* Operation results only; does not include amortization of goodwill resulting from minority interest acquisition.

Gross Margin Analysis:

Gross profit increased 36.6% sequentially to NT\$16,423 million owing to higher capacity utilization.

Gross margin improved substantially to 37.2% from 33.6% in 1Q02. If wafers manufactured by TSMC affiliates were excluded, the gross margin from TSMC's manufacturing activities (on a stand-alone basis) would have been 41.7%.

Utilization Rate Trend:

Capacity utilization rate improved to 85% in the last quarter from 67% in 1Q02 due to a higher level of throughput propelled by strong customer demand.

We expect the capacity utilization rate to ease off in 3Q02, as the rate of capacity additions is likely to exceed the wafer shipment growth rate.

Operating Expenses:

Operating expenses rose 15.7% sequentially. General and administrative expenses rose 16% due to escalating business activities. Higher selling and marketing expenses mainly reflected additional receivables provisions relating to more active sales activities. Moderate R&D growth reflected continued development activities in 0.13um and 90nm technologies.

Non-Operating Items & Investment:

Net Non-Operating items improved by a marginal NT\$16 million versus 1Q02. The benefits of higher insurance claim proceeds in the quarter and improved net interest expense were largely offset by the foreign exchange loss due to depreciation of the US\$ against the NT\$.

Investment losses were 17% lower on a sequential basis, largely reflecting improved operational results at WaferTech and SSMC. Vanguard's performance, however, was affected by unfavorable DRAM price movements.

Financial Condition Review:

Liquidity Analysis

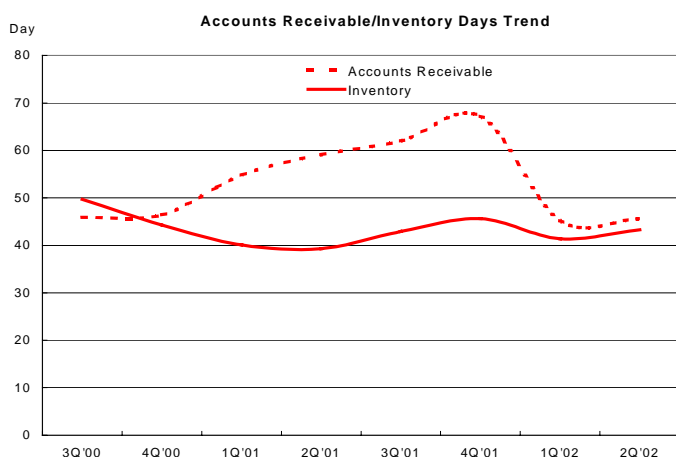
| (Amount: NT\$ Bn) | <u>2Q02</u> | <u>1Q02</u> | <u>2Q01</u> |
|---------------------------|-------------|-------------|-------------|
| Cash & Equiv. | 66.4 | 60.8 | 38.5 |
| Accounts Receivable | 20.7 | 16.4 | 14.3 |
| Inventories | 11.7 | 9.7 | 6.7 |
| Total Current Assets | 106.4 | 92.4 | 64.8 |
| Accounts Payable | 31.5 | 20.9 | 28.9 |
| Total Current Liabilities | 40.5 | 29.9 | 28.9 |

Liquidity Analysis:

TSMC's financials continue to reflect the Company's strong liquidity. Net working capital (current assets less current liabilities) increased to NT\$65.9 billion from NT\$62.6 billion in the previous quarter.

TSMC's current ratio remained at a highly liquid 2.6x as of 2Q02, albeit slightly lower than 3.1x as of 1Q02.

Cash reserves of NT\$66.4 billion as of 2Q02 represent a record high level at TSMC.



Receivable/Inventory Days Trend:

TSMC continues to closely manage its receivables and inventories. As of the end of 2Q02, receivables amounted to the equivalent of 45 days revenue, and inventory amounted to the equivalent of 42 days cost-of-goods sold.

The build-up in receivables during the 2001 downturn was quickly corrected as soon as market conditions stabilized at the beginning of the year.

Debt Service

| (Amount: NT\$ Bn) | <u>2Q02</u> | <u>1Q02</u> | <u>2Q01</u> |
|-------------------|-------------|-------------|-------------|
| Cash & Equiv. | <u>66.4</u> | <u>60.8</u> | <u>38.5</u> |
| S-T Credit Instr. | 9.0 | 9.0 | --- |
| Bonds Payable | <u>35.0</u> | <u>35.0</u> | <u>29.0</u> |
| Total Debts | <u>44.0</u> | <u>44.0</u> | <u>29.0</u> |
| Net Cash Reserves | <u>22.4</u> | <u>16.8</u> | <u>9.5</u> |

Debt Service:

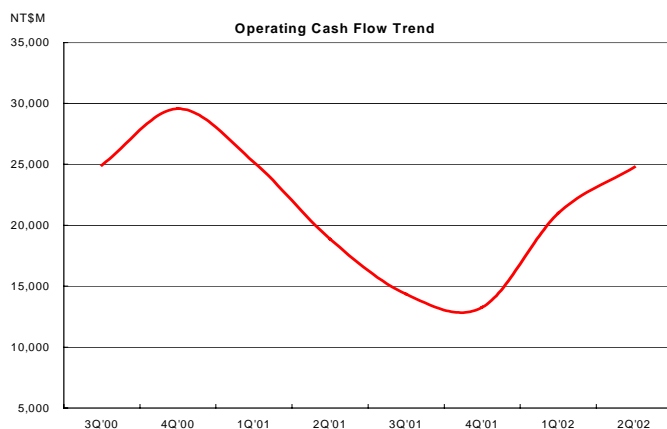
TSMC remains an essentially debt-free company. Its debt service ability was further strengthened in the latest quarter as a result of the improvement in its operational performance.

Net cash reserves (cash reserves minus interest-bearing debt) increased to NT\$22.4 billion in this past quarter from NT\$16.8 billion one quarter earlier.

The increase was primarily due to the build-up of cash and equivalents to NT\$66.4 billion (from NT\$60.8 billion in the earlier quarter). The debt level remained unchanged at NT\$44 billion.

Cash Flow Analysis

| (Amount: NT\$ Bn) | <u>2Q02</u> | <u>1Q02</u> | <u>2Q01</u> |
|------------------------------|---------------|---------------|---------------|
| Net Income | 9.3 | 6.6 | 0.3 |
| Deprec. & Amort. | 14.0 | 12.8 | 11.9 |
| Other OP Sources/(Uses) | <u>1.4</u> | <u>1.6</u> | <u>6.7</u> |
| Total OP Sources/(Uses) | <u>24.8</u> | <u>21.0</u> | <u>18.9</u> |
| Net Investing Sources/(Uses) | <u>(15.8)</u> | <u>(10.8)</u> | <u>(20.0)</u> |
| Net Financing Sources/(Uses) | <u>(0.9)</u> | <u>14.8</u> | <u>(0.3)</u> |
| Net Cash Position Changes | <u>8.0</u> | <u>25.0</u> | <u>(1.5)</u> |



Capital Commitment and Capacity Highlights

- Capital expenditure in 2002 will be less than US\$2.0 billion
- Estimated 2002 Capacity (on the basis of 8-inch equivalent wafers):
 - 315K/monthly – as of June 2002
 - 345K/monthly – as of September 2002
 - 391K/monthly – as of December 2002

Summary Cash Flow Analysis:

During 2Q02, TSMC generated NT\$24.8 billion in cash from operating activities.

Net cash used in investing activities totaled NT\$15.8 billion. Acquisitions of fixed assets amounted to NT\$10.4 billion, and an additional long-term investment of NT\$7.4 billion was made to meet WaferTech's financing needs. This was offset in part by NT\$2.45 billion that TSMC realized from the disposal of a money market investment in the period.

TSMC ended this quarter with NT\$8.0 billion more cash on hand than the previous quarter.

Operating Cash Flow Trend:

Operating cash flow continued its rising trend during 2Q02, reflecting the improving operational results.

Quarterly operating cash flow of NT\$24.8 billion compares with an historical high of NT\$29.6 billion recorded in 4Q00. Although still at the early stage of a secular growth cycle, TSMC's operating cash flow generating power is notably almost at par with its cash flow generating power at the peak of the previous cycle.

Capital Commitment and Capacity in 2002:

TSMC's 2002 capital expenditure is likely to be less than US\$2.0 billion, this is lower than the US\$2.5 billion forecasted previously.

We expect CAPEX in 2002 to be reduced by about US\$0.4 billion in view of a recently updated customer demand outlook.

We also expect that CAPEX in 2002 will fall short of the earlier forecast by a further US\$0.1 billion due to variances in capital equipment installation schedules.

Table 2
Capacity Managed by TSMC

| Fab Unit/(wafer size) | Estimated Installed Monthly Capacity (8" equiv. Wafers, K pcs.) | | |
|---|--|------------|------------|
| | Jun. | Sept. | Dec. |
| Fab 2 (6") | 78 | 75 | 76 |
| Fab 3 (8") ¹ | 68 | 67 | 71 |
| Fab 5 (8") | 33 | 34 | 35 |
| Fab 6 (8") | 37 | 44 | 53 |
| Fab 7 (8") | 24 | 22 | 23 |
| Fab 8 (8") | 41 | 55 | 63 |
| Fab12 (12") | 5 | 5 | 10 |
| WaferTech (8") | 27 | 29 | 30 |
| VIS (8") | 28 | 33 | 41 |
| SSMC (8") | 4 | 8 | 10 |
| Total Capacity (8" Equiv.)² | 315 | 345 | 391 |

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.

Apart from these adjustments, TSMC remains firmly committed to providing the production capacity at desirable technology nodes to meet both the fabrication and the technological needs of our customers.

The construction of Fab 14 (our second 300mm fab) will be completed soon as scheduled. Fab 14 will be ready to receive new tools and equipment towards the end of this year. Following earlier ceremonial groundbreakings, the construction of Fab 12 (Phase II) and Fab 14 (Phase II) are now formally under way.

New Measures & Major Changes:

- **External Auditor**

T.N. Soong & Co., TSMC's external auditor, became an associated member firm of Deloitte Touche Tohmatsu as of April 22, 2002. T.N. Soong ceased to be affiliated with Arthur Andersen Worldwide, S.C. on the same day.

Recap of Important Events & Announcements:

- Motorola Expands TSMC Manufacturing Ties – Agreement Signals Next Milestone in Chipmaker's Asset-Light Strategy (06/26)
- TSMC Appoints Mr. Hisao Baba as President of TSMC Japan (06/25)
- New TSMC CMOS Transistor Sets Performance Record – New CMOS Transistor Provides 10x Size Reduction with Higher Current and Lower Leakage (06/12)
- TSMC Stock Dividend Details for ADSs (06/06)
- TSMC Stock Dividend Details for Common Shares (06/05)
- TSMC Shareholders Elected Messrs. Lester Thurow and Peter Bonfield to Serve as Independent Directors; Mr. Michael Porter Elected to Serve as Board Supervisor (05/07)
- TSMC Board of Directors Approves Capital Appropriation for Projects (05/07)
- TSMC Shareholders Approve NT\$1.00 Stock Dividend (05/07)

Guidance & Forward-Looking Statements:

Based upon the current business outlook, guidance for 3Q02 operational results is as follows:

- The shift in customer demand to communications and consumer applications during 2Q02 is expected to continue into 3Q02.
- We expect the amount of wafers shipped to be off moderately (by a low single-digit percentage rate) on a sequential basis.
- We expect that ASP will be 5% lower sequentially due to product mix shift.
- We expect that our gross margin will be adversely impacted by the depreciating U.S. dollar. Assuming the U.S. dollar depreciates by 5% in 3Q02, our gross margin may be reduced by about 2.2% due to this factor alone.
- We expect TSMC's overall capacity utilization rate to be in the low 70% range due to softening demand on the back of an 11.5% higher capacity level than in 2Q02.
- We expect that CAPEX in 2002 will be less than US\$ 2 billion.
- We expect that July revenue will be seasonally lower.

Safe Harbor Notice:

The statements included in this press release that are not historical in nature are "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. TSMC cautions readers that forward-looking statements are subject to significant risks and uncertainties and are based on TSMC's current expectations. Actual results may differ materially from those contained in such forward-looking statements for a variety of reasons including, among others, risks associated with cyclical and market conditions in the semiconductor industry; demand and supply for TSMC's foundry manufacturing capacity in particular and for foundry manufacturing capacity in general; intense competition; the failure of one or more significant customers to continue to place the same level of orders with us; TSMC's ability to remain a technological leader in the semiconductor industry; TSMC's ability to manage expansion of its capacity; TSMC's ability to obtain, preserve and defend its intellectual property rights; natural disasters and other unexpected events which may disrupt production; and exchange rate fluctuations. Additional information as to these and other risk factors that may cause TSMC's actual results to differ materially from TSMC's forward-looking statements may be found in TSMC's Annual Report on Form 20-F, filed with the United States Securities and Exchange Commission on May 9, 2002, and such other documents as the Company may file with, or submit to, the SEC from time to time.

Conference Call at 8 A.M.
Eastern Time on July 25,
2002 (Thursday)

Dial-in Access (listen only):

United States
888- 928-9527

Other Locations
1-630-395-0040

(Code: "TSMC")

Webcast Access:
<http://www.tsmc.com>

Conference Call & Webcast Notice:

- TSMC's quarterly review conference call will be held at 8 A.M. Eastern Time (8 P.M. Taiwan Time) on Thursday, July 25, 2002.
- The conference call will also be Webcast live on the Internet.
- Investors wishing to access the live Webcast should visit TSMC's Web site at <http://www.tsmc.com> at least 15 minutes prior to the broadcast.
Instructions will be provided on the Web site to facilitate the downloading and installation of necessary audio applications.
- Investors without Internet access may listen to the conference call by dialing 888-928-9527 in the U.S. and 1-630-395-0040 in other locations (Security Code: TSMC).
- An archived version of the Webcast will be available on the TSMC Web site for six months following the Company's quarterly review conference call and Webcast.

**Corporate
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TSMC Profile:

TSMC is the world's largest dedicated semiconductor foundry, providing the industry's leading manufacturing capacity, process technology, library and IP options, and other leading-edge foundry services. TSMC currently operates one twelve-inch wafer fab, five eight-inch wafer fabs and one six-inch fab. The Company also has substantial capacity commitments at a wholly owned U.S. subsidiary (WaferTech) and two joint-venture fabs (Vanguard and SSMC). TSMC's 300mm wafer fab (Fab 12), the first of its kind in Taiwan, commenced commercial production in January 2002. TSMC's corporate headquarters are in Hsin-Chu, Taiwan. More information about TSMC is available through the World Wide Web at <http://www.tsmc.com>.