

MEMC Electronic Materials (WFR)

BUY (1)

High Risk (H)

WFR: Humming Along With The Wind Still At Its Back

Mkt Cap: \$2,674 mil.

January 27, 2005

SUMMARY

- FQ4:04 (Dec) revenue of \$268MM (-2.5% Q/Q), in line with flat to -5% Q/Q guidance, but well ahead of our \$255MM and consensus \$262MM, yielding operating EPS of \$0.26 vs. our \$0.21 and consensus \$0.24.
- Positives: With the wind still at WFR's back in terms of customers (INTC/TXN) + DRAM + 300mm ASP kicker (~3-4x 200mm), WFR rapidly becoming an operational benchmark for companies in our coverage; de-levered balance sheet will add another kicker to earnings through C2005.
- Negatives: Low-hanging fruit in terms of cost reductions has been harvested; 300mm margins look dicey into C2006 given aggressive capacity expansion by WFR and competitors alike. Please see our 300mm raw wafer supply/demand model in this note.
- Raising estimates and price target: F2005 from \$0.86 to \$0.99, F2006 from \$0.99 to \$1.13, rolling out F2007 \$0.79. Upping price target from \$13 to \$15.

SEMICONDUCTOR EQUIPMENT

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FUNDAMENTALS

P/E (12/04A)	12.4x
P/E (12/05E)	12.2x
TEV/EBITDA (12/04A)	8.2x
TEV/EBITDA (12/05E)	7.2x
Book Value/Share (12/04A)	\$1.99
Price/Book Value	6.0x
Revenue (12/04A)	\$1,028.0 mil.
Proj. Long-Term EPS Growth	9%
ROE (12/04A)	70.9%
Long-Term Debt to Capital(a)	20.8%

(a) Data as of most recent quarter

SHARE DATA

Price (1/26/05)	\$12.04
52-Week Range	\$13.25-\$7.39
Shares Outstanding(a)	222.1 mil.
Div(E) (Cur/Prev)	\$0.00/\$0.00

RECOMMENDATION

Rating (Cur/Prev)	1H/1H
Target Price (Cur/Prev)	\$15.00/\$13.00
Expected Share Price Return	24.6%
Expected Dividend Yield	0.0%
Expected Total Return	24.6%

EARNINGS PER SHARE

FY ends		1Q	2Q	3Q	4Q	Full Year
12/03A	Actual	\$0.09A	\$0.13A	\$0.16A	\$0.15A	\$0.53A
12/04A	Current	\$0.16A	\$0.27A	\$0.27A	\$0.26A	\$0.97A
	Previous	\$0.16A	\$0.27A	\$0.27A	\$0.21E	\$0.91E
12/05E	Current	\$0.22E	\$0.21E	\$0.25E	\$0.30E	\$0.99E
	Previous	\$0.16E	\$0.19E	\$0.23E	\$0.28E	\$0.86E
12/06E	Current	\$0.33E	\$0.28E	\$0.25E	\$0.28E	\$1.13E
	Previous	\$0.23E	\$0.25E	\$0.27E	\$0.24E	\$0.99E

First Call Consensus EPS: 12/04A \$0.86; 12/05E \$1.07; 12/06E \$1.19

KEY THEMES

A Great Quarter – Raising Estimates/Price Target. Revenue of \$268MM, operating EPS of \$0.26 handily beat our \$255MM/\$0.21 and consensus \$262MM/\$0.24 as the 300mm

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ramp continues to help revenue given the step-up in average selling price (ASP) and as WFR's big improvements to its cost structure are bearing fruit. Also, with FQ1:05 (Mar) revenue guidance (flat to -5% Q/Q) significantly above our expectation of -14% Q/Q, we are increasing our F2005 and F2006 estimates to \$0.99 and \$1.13, from \$0.86 and \$0.99, respectively. As a result, and within the same valuation framework, our price target ratchets up to \$15 from \$13.

Accelerating FCF Margin – Enabling More De-Levering. In F2004, WFR impressively expanded its free cash flow (FCF) margin to 13% from just 4% in F2003, enabling it to de-lever its balance sheet to the tune of \$140MM in F2004. We are modeling a debt-free balance sheet by the beginning of F2006 – most of this coming in 2H:05, but given WFR's trajectory, a completely de-leveraged balance sheet is possible even sooner.

Transition to 300mm to Fuel Top Line Growth. WFR – much as competitors like SEH in the past several days - announced plans to, yet again, step up its 300mm raw wafer capacity. WFR is now targeting 150K wafers per month (wpm) by the end of FQ1:05 (Mar), increasing to 200K wpm mid-year, ultimately hitting an end goal of 350K wpm capacity by end of 2006, within its existing infrastructure. Although we are giving the company full credit for this target, we believe pricing will ultimately curtail some of this activity. As a result, we are revising our global 300mm raw wafer model to account for higher supply out of WFR, and raising the demand side of the equation to account for higher test/monitor wafer usage for 2006 (30% vs. 20% previously). We now see 300mm oversupplied – albeit slightly - in 2H:05 and C2006.

Figure 1. Our Global 300mm Raw Wafer Model

	YE2003	YE2004	YE2005	YE2006
Shin Etsu Chemical	200	320	420	475
% share	43%	39%	36%	32%
Sumitomo-Mitsubishi	140	200	300	375
% share	30%	25%	26%	26%
MEMC	10	125	225	325
% share	2%	15%	19%	22%
Siltronic	50	80	100	150
% share	11%	10%	9%	10%
Komatsu	45	60	75	95
% share	10%	7%	6%	6%
LG Siltron	20	30	40	50
% share	4%	4%	3%	3%
Toshiba Ceramics	3	15	40	50
% share	1%	2%	3%	3%
TOTAL supply	465	815	1160	1470
% y/y		75%	42%	27%
Fab demand		419	706	985
Test/Monitor		279	380	422
Test/Monitor, %		40%	35%	30%
TOTAL demand		698	1086	1407
Supply/Demand		117%	107%	104%

Source: Company Information, Smith Barney
Shin-Etsu Chemical (4063, ¥4,070, rated 1M covered by Takao Kanai)

With an estimated 20% of its current mix at 300mm, we see WFR's rotation towards 300mm (at a 3.5-4.0x ASP progression) as fueling top line growth over the next couple of years. Furthermore given expansion plans within its existing infrastructure, we still project WFR's capex within its stated 15% of sales model, and see its efficient build-out of 300mm capacity as a competitive edge that preserves margins longer term.

One of the Best Run Co's – Inexpensively Valued. WFR, in achieving >40% ROIC ex-cash, remains one of the best run companies in technology, but trades at only a 12x multiple

to our F2005 earnings estimate, vs. 17x for the S&P 500. Admittedly, TPG's majority ownership represents a big overhang, but we view WFR's 30% discount to the broader market as excessive, particularly in light of its profitability/cash generation achievements in F2004.

Fear of Pricing Backlash due to 300mm Race Weighs on Stock. If forced to put forth negatives to an otherwise stellar quarter, we view the 300mm arms race, exemplified by ever-escalating capacity targets from Shin-Etsu (4063, ¥4,070, rated 1M, covered by Takao Kanai) and SUMCO, as the biggest investor worry. While our 300mm raw wafer model suggests tightly balanced supply/demand reaching to the end of F2006, many factors could go awry, principally our end-demand assumption.

Low Hanging Fruit Picked In Terms of Cost Reduction – Margins Could Become A Concern. In terms of manufacturing cost reduction, we believe WFR has picked much of the low hanging fruit already, and argue that for now, gross margin expansion may be hitting a ceiling of sorts in the high 30% range. For example, after 30% cost reductions in C2004 in some facilities, we believe this sort of performance will be much more difficult to achieve. While internal targets are certainly higher, we prefer to remain conservative in our modeling as global 300mm supply ramps, with pricing pressure waiting in the wings.

RESULTS

MEMC Electronic Materials (WFR)

Rating/Price Target: 1H / \$15

	4Q:04 (Dec) A	4Q:04 (Dec) E	Consensus	Guidance	4Q:03 (Dec) A	3Q:04 (Sep) A
Revenue	\$268.4	\$255.0	\$262.0	flat to -5% Q/Q	\$205.0	\$275.3
Gross Margin	36.6%	37.0%		38.0%	31.4%	40.2%
Operating Margin	25.6%	26.4%			19.4%	30.4%
Net income*	\$58.0	\$47.4			\$34.4	\$59.7
Diluted Shares	222.1	223.4			223.0	220.4
EPS*	\$0.26	\$0.21	\$0.24		\$0.15	\$0.27

Source: Company Information, First Call, Smith Barney Estimates

* Net Income and EPS shown on an operating basis, excluding reversal of restructuring charges (\$1MM) and written-down NOLs (\$47.8MM) plus \$61.4MM loss related to early debt extinguishment

WFR reported FQ4 (Dec) operating EPS of \$0.26, better than our \$0.21 model and \$0.24 consensus due to slightly better revenue. On a GAAP basis, including a \$1MM reversal of restructuring charges, \$61.4MM loss related to early debt extinguishment and a \$47.8MM reversal of tax valuation allowances (previously written off NOLs), EPS amounted to \$0.31.

Revenue (\$268MM, -2.5% Q/Q) came in line with guidance (flat to down 5% Q/Q) but gross margin fell short of expectations for 38% owing to unfavorable product mix from inventory correction. In terms of operating expenses, both R&D and SG&A trended higher as a result of increased development activity for silicon-on-insulator (SOI) and 300mm, and higher consulting fees related to Sarbanes-Oxley requirements. On a diluted share count of 222 million, operating EPS came to \$0.26, after adjusting GAAP EPS by 1). Adding back \$0.23 post-tax impact from the \$61.4MM non-operating debt extinguishment loss, and 2). Subtracting out the \$0.28 impact from the \$47.8M reversal of previously written-off NOLs and the catch-up to yield a 17% effective tax rate for the full fiscal year. For the full year, review of near term forecasts and profitability allowed for recognition of \$73MM (including FQ2's reversal of \$25MM) of its \$207MM in off-balance sheet, deferred tax assets (NOLs), still leaving \$134MM for F2005 and F2006.

As a reminder, WFR announced the \$67.7MM full redemption of its 14% off-balance sheet debt to TPG at the tail end of FQ4 (Dec), sidestepping a ballooning interest accretion

(\$4MM in 2004, \$10MM in 2005, \$26.4MM in 2006) at no penalty. For the full year, WFR paid down roughly \$140MM in debt, a testament to its ability to expand its free cash flow margin from 4.5% in F2003 to 13% in F2004.

OUTLOOK

	1Q:05 (Jan)	SB New	Old SB
	Guidance	Estimate	Expectation
Revenue	\$255-268	\$260.0	\$230.0
% seq	flat to -5%	-3.1%	-9.8%
Gross Margin	~36-37%	36.0%	33.0%
OpEx	down slightly	\$28.7	\$26.2
EPS	NA	\$0.22	\$0.16

Source: Company information, Smith Barney estimates

With DRAM wafer starts staying strong (300mm), INTC and TXN starts ramping again, and the ASP kicker from 300mm, WFR was able to guide revenue flattish Q/Q together with flattish margins. SG&A will trend back down after FQ4's increase due largely to higher consulting fees associated with Sarbanes-Oxley. Given redemption of debt in F2004, the company also guided to \$600K in net interest expense per quarter, comprised of \$1.7MM in interest expense offset by \$1.1MM in interest income.

MODEL

Given the roughly \$30MM upside at the mid-point of guidance relative to our previous expectation for \$230MM, and accelerated build-out of 300mm raw wafer capacity over the next two years, we are raising our F2005 and F2006 estimates to \$0.99 and \$1.13, respectively. Despite revenues traversing well-beyond the \$300MM mark, we believe margins will likely experience difficulty sustaining much above the 40% level, given expectations for a greater pricing pressure at 300mm as supply grows.

Figure 2. New vs. Old SB Estimates

		Mar	Jun	Sept	Dec		Mar	Jun	Sept	Dec	
		FQ1:05E	FQ2:05E	FQ3:05E	FQ4:05E	F2005E	FQ1:06E	FQ2:06E	FQ3:06E	FQ4:06E	F2006E
SB New Est	Rev	\$260.0	\$255.0	\$280.0	\$310.0	\$1,105.0	\$340.0	\$330.0	\$320.0	\$340.0	\$1,330.0
	EPS	\$0.22	\$0.21	\$0.25	\$0.30	\$0.99	\$0.33	\$0.28	\$0.25	\$0.28	\$1.13
SB Old Est	Rev	\$230.0	\$245.0	\$270.0	\$300.0	\$1,045.0	\$290.0	\$305.0	\$320.0	\$310.0	\$1,225.0
	EPS	\$0.16	\$0.19	\$0.23	\$0.28	\$0.86	\$0.23	\$0.25	\$0.27	\$0.24	\$0.99
First Call Consensus	Rev	\$258.1	\$268.5	\$283.7	\$299.7	\$1,111.3	\$325.4	\$327.0	\$331.0	NA	\$1,235.1
	EPS	\$0.23	\$0.25	\$0.28	\$0.30	\$1.07	\$0.29	\$0.30	\$0.33	NA	\$1.19

Source: First Call, Smith Barney estimates

VALUATION

We rate WFR Buy, High Risk (1H) and raise our price target to \$15 from \$13.

Because a more moderated cycle is likely starting to form, we looked at a variety of small cap comps over the C1994 period which we believe is comparable to the current cyclical environment given a similar "rolling top" of fab capacity utilization. During that time, these small-cap stocks averaged 14X forward EPS. However, given the overhang that continues to exist in the ownership of the stock (Texas Pacific Group still owns just over 60% of the stock), we believe a slightly discounted multiple of 13x is appropriate on WFR. Thus, applying a 13x multiple to our estimated C2006 EPS of \$1.13 for WFR, we arrive at a \$15 price target.

Since WFR is more of a commodities player vs. its small cap comps such as LTXS that competes in a technology intense equipment market, we decided to compare WFR to other commodity cyclicals such as oil services companies like Schlumberger (SLB). We note that

while SLB has typically traded between 25x - 30x forward EPS over the past ten years (with a mean value of 30x), its historical low has been 15.5x forward EPS, thus making our choice of multiples seem more reasonable.

On a price/sales (TTM) basis, the stock has typically traded between 1x – 6x (excluding the C2000 bubble), with a mean value of 1.15x. Given that WFR has completely restructured its debt, reinvigorated its product offerings, and transformed on the whole since C2001, we choose a higher multiple of 2x, which is at a slight premium to the mid-1990s. Applying this 2x multiple to our CY2006 estimate of \$1.33B, we arrive at a \$11.50 price target.

As IC unit demand, and therefore wafer unit demand, will most likely continue to increase over time (we note that IC unit demand has only declined Y/Y twice in the past 25 years), we prefer a valuation methodology that most accurately reflects future earnings potential. Therefore, we revert to our earnings framework, applying a 13x multiple on our new F2006 estimate of \$1.13, arriving at a \$15 price target. Previously, our \$13 target was based on our prior F2006 estimate of \$0.99.

RISKS

We have set WFR's risk rating at High due primarily to improved restructuring, although we note its stock price volatility is in-line with semiconductor equipment stocks. The following are key risk factors:

1. WFR has heavy exposure to the cyclical semiconductor industry that typically has limited visibility and a high degree of uncertainty regarding the timing and duration of cycles. Silicon wafer demand is highly correlated to semiconductor units, and thus any falloff in chip demand would negatively affect wafer demand.
2. Our valuation methodology is based on the assumption that the current cycle is much like the extended cycle of the early 1990's. Our analysis suggests that the current environment is best approximated by the situation which existed in 1994, where fab capacity utilization exhibited a "rolling top" over several quarters. As fab utilization and stock performance are closely linked, any material differences to our supply/demand model (e.g., demand drops suddenly, or supply increases more rapidly than we predict) may cause our valuation methodology to be inaccurate.
3. The commodity nature of wafers subjects wafer suppliers to intense competitive pressures and aggressive pricing. In a cyclical downturn, pricing pressure is exacerbated and ASPs typically decline for both legacy and newer wafer technologies.
4. Although WFR's current debt/equity ratio is at a manageable level, we note that the company competes in an industry where there are few product differentiators, thus making capital spending one of the key differentiators.
5. TPG beneficially owns 62% of the outstanding shares of the company, subsequent to a restructuring transaction in November 2001 whereby TPG acquired its ownership interest in MEMC and has since completed several equity offerings. As both a creditor and an equity investor in the company, TPG's interests are generally aligned with that of shareholders, however, it does have significant control over the strategic direction taken by the company. We recognize the risk of this overhang if additional equity offerings aren't completed to further reduce TPG's ownership.

If the impact on the company from any of these factors proves to be greater than we anticipate, the stock will likely have difficulty achieving our target price.

INVESTMENT THESIS

We rate shares of WFR Buy, High Risk (1H). While WFR is one of the purest plays on semiconductor units, the basis for our recommendation is a combination of growing market share, a low cost structure that will enable the company to remain solidly profitable even in the downturn, and better commodity wafer pricing (particularly at 300mm). All of these factors combine to give us confidence that the company will have nearly \$1 in earnings power in 2006. In an industry with relatively little product differentiation and continued pricing pressure, we believe WFR's revamped business model is driving gross margins on certain products to near the 40% range. Further, we believe the company has a top customer

base that maps well with the top five chipmakers in the world. WFR's recent purchase of its remaining interest in Taisil strengthened its position in Taiwan (and thus with key Asian foundries) and also gained production floor space to further build out first 200 and then 300mm capacity.

COMPANY DESCRIPTION

MEMC Electronic Materials, Inc. is a leading supplier of raw silicon wafers to the semiconductor industry. With manufacturing facilities worldwide, MEMC includes virtually all major chipmakers in its customer base, with leading market share at several of the top 5 players. The company's products include 100mm, 125mm, 150mm, 200mm and 300mm prime polished wafers, epitaxial wafers, and test and monitor wafers. In 2003, we estimate that MEMC held 15% share of the \$6.2B silicon wafer market. MEMC was founded in 1959, and acquired by an affiliate of E.ON AG in 1989, later completing an initial public stock offering in July 1995. In 2001, an investor group led by Texas Pacific Group (TPG) purchased from E.ON all of its debt and equity holdings in MEMC, acquiring 72% ownership of MEMC. In 2002, TPG converted the debt to preferred stock resulting in an ownership stake of ~90%. Since that time, the debt has been significantly restructured and the company has undertaken equity offerings to reduce TPG's stake to approximately 60%.

ANALYST CERTIFICATION

I, Timothy Arcuri, hereby certify that all of the views expressed in this research report accurately reflect my personal views about any and all of the subject issuer(s) or securities. I also certify that no part of my compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

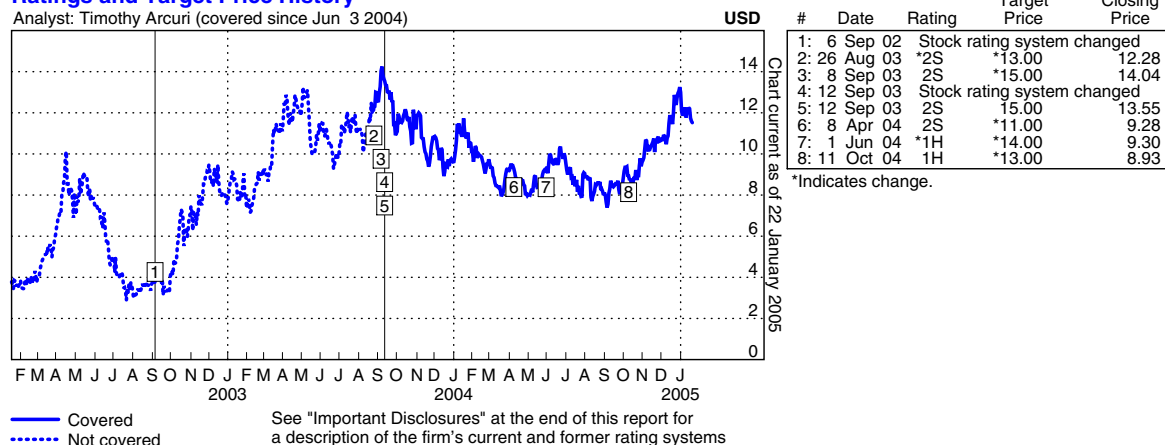
APPENDIX A-1

IMPORTANT DISCLOSURES

MEMC Electronic Materials (WFR)

Ratings and Target Price History

Analyst: Timothy Arcuri (covered since Jun 3 2004)



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for Speculative stocks); and Sell [3] (negative total return).

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Prior to September 9, 2002, the Firm's stock rating system was based upon the expected total return over the next 12 to 18 months. The total return required for a given rating depended on the degree of risk in a stock (the higher the risk, the higher the required return). A Buy (1) rating indicated an expected total return ranging from +15% or greater for a Low-Risk stock to +30% or greater for a Speculative stock. An Outperform (2) rating indicated an expected total return ranging from +5% to +15% (Low-Risk) to +10% to +30% (Speculative). A Neutral (3) rating indicated an expected total return ranging from -5% to +5% (Low-Risk) to -10% to +10% (Speculative). An Underperform (4) rating indicated an expected total return ranging from -5% to -15% (Low-Risk) to -10% to -20% (Speculative). A Sell (5) rating indicated an expected total return ranging from -15% or worse (Low-Risk) to -20% or worse (Speculative). The Risk ratings were the same as in the current system.

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