

13 October 2005

# MEMC Electronic Materials

Reuters: **WFR.N** Bloomberg: **WFR UN** Exchange: **NYSE** Ticker: **WFR.N**

## Positive fundamentals and valuation

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### WFR pullback a buying opportunity

We view the recent pullback in WFR as a buying opportunity. We believe that operational performance, a polysilicon shortage and MEMC's captive polysilicon production, the continued mix shift to 300mm, and the company's sole 300mm manufacturing capability in Taiwan will converge positively over coming quarters. We reiterate our Buy rating and \$24 price target.

### Where will pricing strength come from?

We believe that wafer ASP strength should materialize in 2006 and not before. We expect the semiconductor wafer ASP trend in 2006 to improve over 2005 as industry utilization tightens and solar demand exacerbates polysilicon shortages. We expect the majority of pricing strength to come from spot market sales, 2006 contracts with smaller chipmakers, and possibly long term wafer supply contracts with solar panel manufacturers. This could add upside to 2006 estimates.

### Cost and supply advantages

As a manufacturer of polysilicon, MEMC has a materials cost advantage, and should not be hampered by limited aggregate polysilicon supply. We believe this could lead to opportunistic incremental sales should spot shortages for semiconductor grade wafers occur over the next several quarters. We believe that MEMC could ramp internal polysilicon capacity by ~35% over the next one to two years. Should MEMC secure a long term wafer supply agreement(s) with a solar panel manufacturer(s), we believe product gross margin on this smaller business (~10% to 15% of revenue) could increase substantially from the <20% gross margin (DB estimate) for raw polysilicon, as well as guarantee consumption of increased polysilicon output. (See detailed valuation discussion on pages 2/3.)

### Risks

Risk factors include (1) a high degree of industry cyclicality, (2) competitive pressures and market share shifts, (3) delayed adoption of new technologies, (4) operational execution missteps, and (5) general economic risk.

### Forecasts and ratios

Year End Dec 31	2004A	2005E	2006E
1Q EPS (USD)	0.16	<b>0.23</b>	0.32
2Q EPS (USD)	0.20	<b>0.26</b>	0.33
3Q EPS (USD)	0.27	<b>0.29</b>	0.36
4Q EPS (USD)	0.25	<b>0.31</b>	0.39
FY EPS (USD)	0.89	<b>1.09</b>	1.40
P/E (x)	10.6	<b>17.5</b>	13.6
Revenue (USDm)	1,028.0	<b>1,126.6</b>	1,286.9

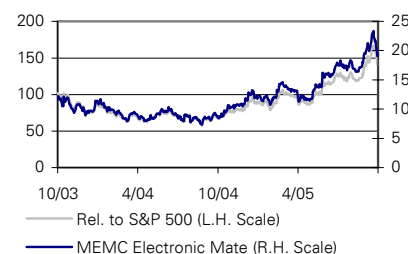
Source: Company, Deutsche Securities

## Company Review

### Buy

Price at 13 Oct 2005 (USD)	<b>19.07</b>
Price target	<b>24.00</b>
52-week range	<b>23.39 - 8.46</b>

### Price/price relative



Performance (%)	1m	3m	12m
Absolute	-2.1	7.3	118.2
S&P 500	-4.3	-3.7	5.7

### Stock data

Market Cap (USDm)	<b>3,995.5</b>
Shares outstanding (m)	<b>209.5</b>
Volume	<b>5,304,700</b>
S&P 500	<b>1,177.68</b>

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DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1

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## Other considerations

### SUMCO's ~\$1.3B to \$1.5B IPO

We believe some concerns center around SUMCO's \$1.3B to \$1.5B IPO scheduled for November, 2005; SUMCO is the second largest supplier of silicon wafers. A better capitalized competitor is always a greater threat; however, we believe the principle concern is one of polysilicon availability rather than wafer production capacity. We do not expect to see a shortage in wafer production capacity, and should announced wafer production capacity plans be expanded, effective utilization of those assets would be the question. SUMCO is primarily involved in the manufacture of silicon wafers, and whether it ventures aggressively into the solar panel market is as yet unclear. We believe SUMCO likely sources polysilicon from either or both Mitsubishi and Sumitomo conglomerates, joint-venture parents of SUMCO. Given inter-company linkages we would anticipate that SUMCO's polysilicon cost is likely better than market pricing, but not necessarily better than MEMC's.

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## A closer look at valuation

Below we reiterate valuation related issues first highlighted in our Sep19 note on MEMC.

### Asset write downs

MEMC's asset write downs totaling nearly \$1.8B in the gross PPE asset base in 2001 coupled with periods of over/under investment resulted in depreciation and amortization expenses currently running ~10% below capital expenditures as a percentage of sales. This has raised the question of earnings quality as the perception exists that MEMC's earnings benefit unduly from these past asset write-offs, and that earnings multiples appear artificially low. We believe this is a valid argument up to a point, but given that lower D&A expenses are a business reality, that the underlying operational improvement in MEMC is unmistakable, and is clearly reflected in the earnings growth trend, we do not see it as a major issue. We see the lower D&A issue more as a relic of the past, and one that needed to be scrutinized and adjusted while the company was in a turnaround stage. Although D&A being close to capital expenditures may be an ideal investor preference, we note that the disparity is unlikely to be bridged anytime soon as the asset intensity of the business has come down from write-offs.

### Tax rate

MEMC currently has ~\$113M in valuation allowance (of which roughly 75% is realizable) that serves as a tax offset and reduces the company's tax rate. We expect MEMC's C2005 tax rate to hover around 13.5%, and to track to ~15% over the next couple of years when considering tax planning and deferred tax assets. We estimate MEMC's deferred tax assets will be mostly utilized by C2007, and we expect tax rates to hover in the 20% to 25% range in C2008 and beyond before eventually reaching a more normal corporate tax rate in-line with other operating companies. MEMC's tax rates are unlikely to see a sharp increase due to tax planning opportunities, tax holidays, and the business mix from lower tax jurisdictions that can help offset the eventual rise in the company's effective tax rate.

### Free cash flow valuation

Given the asymmetry in MEMC's capital expenditures (that are reflected in the cash flow statement), its D&A expenses (which flow through the income statement and cash flow statement), and its lower tax rate versus peers, we believe a fair way to resolve any earnings valuation controversy is to look at free-cash flow multiples. On a free cash flow basis, MEMC trades in-line with peers, and at a 4% discount to ATMI, a smaller company with more specialty products that completed a major restructuring in 2004.

All things considered, our \$24 price target implies at ~12% premium to peers on a free cash flow basis, which we believe is not a stretch given MEMC's unique position to be able to

leverage positively converging company and industry fundamentals (i.e. 2006 pricing strength and cost advantages, as well as lower D&A and lower tax rates). As a commodity manufacturer driven by operational efficiency this may become a more applicable valuation metric to employ, and as such could temper upside expectations defined by a P/E metric.

**P/E multiple expansion**

Over the past year MEMC's P/E multiple has expanded from ~9x forward year earnings to ~14x currently as the company has transitioned from a turnaround story to a solid operating story. We believe MEMC's operating catalysts and earnings power are well aligned for a sustained period of growth for the near to medium term. We do note the commodity nature of MEMC's business, and believe a valuation multiple discount of 5%-10% to peers, or ~17x is justifiable.

**TPG ownership**

Texas Pacific Group (TPG) recently reduced its ownership in MEMC to ~25%. Often cited as an overhang to the stock, considering company and industry fundamentals we believe present TPG ownership no longer presents a meaningful concern.

**Valuation**

At \$19.20 WFR trades at ~14x our 2006 EPS estimate of \$1.40, a 21% discount to peers. We believe MEMC's operational turnaround, model operating performance and near term catalysts (i.e. polysilicon shortage and improving industry fundamentals) warrant a more inline valuation. Accordingly, our \$24 target price implies ~17x C2006 EPS estimate versus the 15x to 21x range that we assign for the broader semiconductor capital equipment and materials group.

# Appendix 1

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Additional information available upon request

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Company	Ticker	Recent price	Disclosure
MEMC Electronic Materials	WFR.N	19.07 (USD) 11 Oct 05	13

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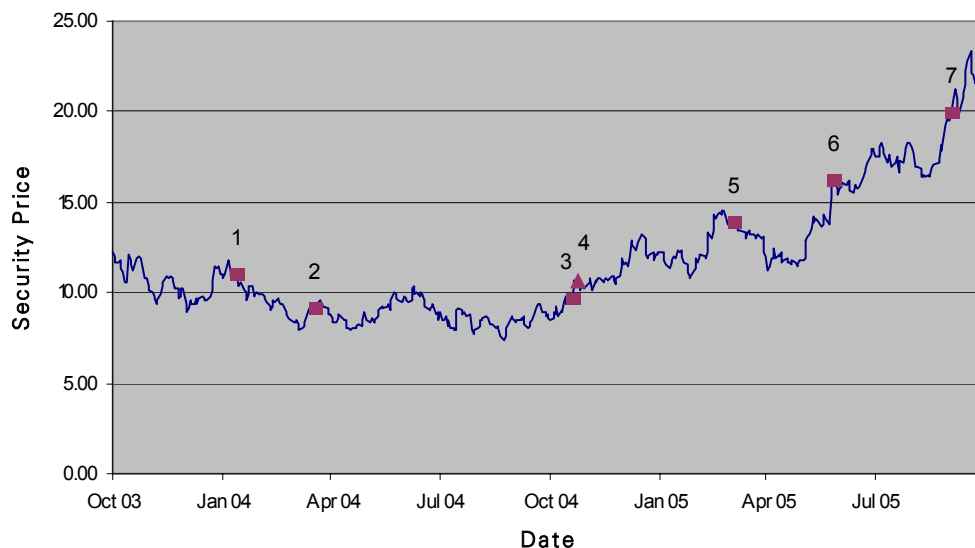
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**Historical recommendations and target price: MEMC Electronic Materials (WFR.N)**

(as of 10/13/2005)

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Strong Buy  
Buy  
Market Perform  
Underperform  
Not Rated  
Suspended Rating

Current Recommendations

Buy  
Hold  
Sell  
Not Rated  
Suspended Rating

\*New Recommendation Structure  
as of September 9, 2002

- |  |   |
|--|---|
| 1. 1/27/2004: Buy, Target Price Change USD14.00            | 5. 3/18/2005: Buy, Target Price Change USD16.00 |
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| 3. 11/2/2004: Hold, Target Price Change USD10.00           | 7. 9/17/2005: Buy, Target Price Change USD24.00 |
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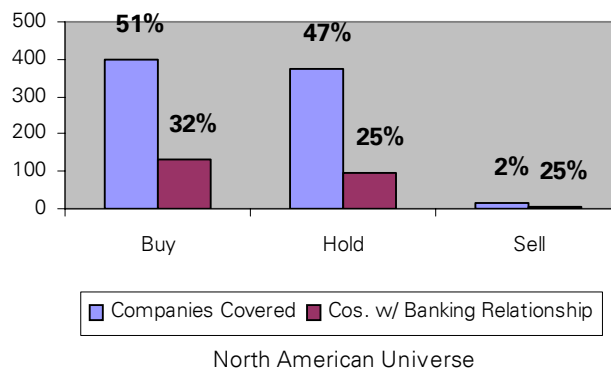
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