FIN 925/Analytical Finance Practicum/Spring 2006
Ravi Jagannathan

Homework 4

Suppose you were in Peter Grondin's seat in November 2005 when he first looked at MEMC Electronics (company website, http://www.memc.com/, ticker: WFR). He had the following information available to him.

1. Abbreviated valuation model prepared by Peter Grondin: p1-7
2. Semiconductor, MEMS &FPD Industry Information, p8-9
3. Barron's news item, September 19, 2005, p10-14
4. Note on Risk Factors, p15-17
5. FBR report, September 13, 2005. p18-28
6. FBR report, October 13, 2005. p18-28, p29-38
7. Princeton Tech Research Report, September 29, 2005, p39-46
8. Analysis by Paul Leming of Soleil Securities, October 2, 2005, 39-46
9. 8K filed on November 16, 2005, website, can be downloaded from the firm's website, http://www.memc.com/, or from SEC/Edgar
10. 10K for 2004, filed March 2005, website, can be downloaded from the firm's website, http://www.memc.com/, or from SEC/Edgar
11.

Provide a one page summary valuation report on MEMC, along with as many exhibits as you may consider necessary to support you conclusions in the summary report.

Among other things, your analysis should answer the following questions.

What is your assessment of the Value of MEMC? Is there enough margin of safety to recommend taking a position in MEMC's shares? Would you take a long or short position?

What are the drivers of value for the Polysilicon industry and MEMC? Analyze the competitive forces at work. What do you make of the Barron's article? Do you agree with the conclusions of the FBR analyst?

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MEMC Electronics
Valuation Summary Sheet

Current price	$19.07
Shares outstanding	215.0
Market capitalization	4,100.1

Discounted Cash Flows-EBITDA	
Cash on balance sheet	143.2
Gross debt	122.2
Stock options	12.0
Strike	$7.61
Cash from exercise	91.3
Current price less strike price	$11.46
Tax rate	4.3%
Tax shield	5.9
Common stock outstanding	215.0
Stock options	12.0
Fully diluted shares outstanding	227.0

Multiple Analysis	
Market capitalization	4,100.1
Gross debt	122.2
Cash on hand	143.2
Current enterprise value	4,079.0
TTM net income	265.8
TTM EBITDA	338.7
TTM capex	182.9
Multiple of:	
TTM net income	15.4x
TTM EBITDA	12.0x
TTM free cash flow (EBITDA-capex)	26.2x
2005 projected net income	15.9x
2005 projected EBITDA	11.9x
2005 projected free cash flow	23.5x

MEMC Electronics
Income Statement

(Figures in Millions, Except Price Per Square Inch)

MEMC Silicon Wafer Detail				0.25
	2002	**2003**	**2004**	**2005E**
Total industry square inches shipped	**4,681**	**5,149**	**6,262**	**6,385**
% change	*NA*	*10.0%*	*21.6%*	2.0%
300mm wafer shipments (% of total square inches shipped)				19.0%
300mm wafer shipments (total square inches shipped)				1,213.2
MEMC 300mm shipments (% of industry square inches)				14.0%
MEMC 300mm shipments (total square inches shipped)				169.9
% of total MEMC square inches shipped				*18.6%*
MEMC 100mm and 200mm shipments (total square inches shipped)				743.3
MEMC square inches	569.7	655.2	897.6	913.1
% market share	*12.2%*	*12.7%*	*14.3%*	*14.3%*
Price per square inch, 300mm				$2.15
Revenues from 300mm wafers				365.2
Blended price per square inch, 100mm and 200mm				$0.80
Revenues from 100mm and 200mm wafers				594.6
MEMC wafer revenues	$643.8	$728.6	$978.4	$959.8
MEMC price per square inch	$1.13	$1.11	$1.09	$1.05
% change	*-16%*	*-1%*	*-2%*	*-3.6%*
Estimated cash cost per square inch	$0.76	$0.71	$0.64	$0.60

MEMC Polysilicon Detail				
	2002	**2003**	**2004**	**2005E**
Estimated revenues per kilogram	$25.00	$28.00	$35.00	$50.00
Estimated cash cost per kilogram	$27.00	$27.00	$27.00	$27.00
Estimated kilograms sold	1,735	1,875	1,415	2,000
Estimated total polysilicon revenues	$43.4	$52.5	$49.5	$100.0

MEMC Electronics
Income Statement

Annual Income Statement
(Dollars in Millions, except per share data)

	2002	2003	2004	2005E
Wafer revenues	$643.8	$728.6	$978.4	$959.8
Other (polysilicon sales)	43.4	52.5	49.5	100.0
% revenues	*6.3%*	*6.7%*	*4.8%*	*9.4%*
Total revenues	687.2	781.1	1,028.0	1,059.8
% change	*NA*	*13.7%*	*31.6%*	*3.1%*
Wafer COGS	432.7	466.7	576.2	547.9
% wafer revenues	*67.2%*	*64.0%*	*58.9%*	*57.1%*
Polysilicon COGS	46.8	50.6	38.2	54.0
% polysilicon revenues	*108.0%*	*96.4%*	*77.1%*	*54.0%*
Total COGS	479.6	517.3	614.4	601.9
Gross profit	207.6	263.8	413.6	457.9
% revenues	*30.2%*	*33.8%*	*40.2%*	*43.2%*
SG&A	65.8	57.2	71.9	74.2
% revenues	*9.6%*	*7.3%*	*7.0%*	*7.0%*
R&D	27.4	32.9	38.0	40.3
% revenues	*4.0%*	*4.2%*	*3.7%*	*3.8%*
EBITDA	114.4	173.7	303.6	343.5
% revenues	*16.6%*	*22.2%*	*29.5%*	*32.4%*
Depreciation (COGS)	28.9	27.0	40.0	54.5
Depreciation (other)	0.0	0.8	2.0	2.0
Amortization	5.2	3.2	2.1	2.1
Total D&A	34.2	31.0	44.1	58.6
% revenues	*5.0%*	*4.0%*	*4.3%*	*5.5%*
Restructuring costs	15.3	0.0	(1.0)	0.0
Stock option expense	NA	NA	NA	NA
Operating income	64.9	142.6	260.5	284.8
% revenues	*9.5%*	*18.3%*	*25.3%*	*26.9%*
Interest expense	73.4	12.9	13.5	7.7
Interest income	(6.8)	(7.3)	(5.0)	(3.4)
Royalty income	(3.2)	(4.1)	(0.1)	0.0
Currency gains/(losses)	(11.2)	(13.9)	1.9	3.1
Loss on extinguishment of debt	0.0	0.0	61.4	0.0
Other income	(6.8)	(0.9)	(9.8)	0.9
Total non-operating income	45.4	(13.3)	62.0	8.4
Pretax income	19.6	155.9	198.5	276.5
Income taxes	16.7	36.9	(40.1)	11.8
% of pre-tax	*85.4%*	*23.6%*	*-20.2%*	*4.3%*
Income after taxes	2.9	119.0	238.7	264.7
Equity in income of joint ventures	1.2	6.2	(1.7)	0.0
Minority interest	(9.2)	(8.6)	(10.7)	(7.6)
Net income	(5.1)	116.6	226.2	257.1
Preferred dividends	(17.0)	0.0	0.0	0.0
Net income to common shareholders	**(22.1)**	**116.6**	**226.2**	**257.1**
% revenues	*-3.2%*	*14.9%*	*22.0%*	*24.3%*
Basic shares outstanding	129.8	202.4	207.7	210.0
Diluted shares outstanding	129.8	218.7	221.0	225.2
Net income per share	($0.17)	$0.58	$1.09	$1.22
% change		*NA*	*89.0%*	*12.4%*
Net income per share (diluted)	($0.17)	$0.53	$1.02	$1.14
% change		*NA*	*91.9%*	*11.6%*

MEMC Electronics
Income Statement

EBITDA Exit	2002	2003	2004	2005E	
EBITDA	114.4	173.7	303.6	343.5	733.3
Cash interest	18.7	12.8	13.1	7.7	9.0x
Cash taxes	11.6	32.1	14.6	11.8	
Maintenance capex	22.0	85.2	149.8	170.0	
% revenues	*3.2%*	*10.9%*	*14.6%*	*16.0%*	
Working capital adjustment	(21.2)	(39.9)	(24.5)	(28.5)	
Free cash flow	40.9	3.6	101.7	125.4	6,599.4
% revenues	*5.9%*	*0.5%*	*9.9%*	*11.8%*	
Free cash flow per share (diluted)	$0.31	$0.02	$0.46	$0.56	
Present value of free cash				122.5	5,325.7
Sum of present values	5,948.0				

P/E Exit	2002	2003	2004	2005E	
EBITDA	114.4	173.7	303.6	343.5	545.5
Cash interest	18.7	12.8	13.1	7.7	15.0x
Cash taxes	11.6	32.1	14.6	11.8	
Maintenance capex	22.0	85.2	149.8	170.0	
Working capital adjustment	(21.2)	(39.9)	(24.5)	(28.5)	
Free cash flow	40.9	3.6	101.7	125.4	8,183.0
% revenues	*5.9%*	*0.5%*	*9.9%*	*11.8%*	
Free cash flow per share (diluted)	$0.31	$0.02	$0.46	$0.56	
Present value of free cash				122.5	6,603.6
Sum of present values	7,225.9				

MEMC Electronics
Balance Sheet

	2002	2003	2004	Q305
Cash	119.7	96.9	92.3	143.2
Short term investments	46.0	33.8	0.0	0.0
AR	95.0	103.0	140.7	126.8
Inventories	85.1	109.5	127.6	132.4
Prepaid & other	17.9	22.1	29.7	37.3
Total current assets	363.7	365.3	390.3	439.8
PP&E	184.9	270.4	444.7	510.5
Investment in jv	16.8	24.2	0.0	0.0
Deferred tax assets	33.7	20.2	119.8	174.7
Other assets	32.6	46.6	55.1	51.6
Total assets	631.7	726.8	1,009.9	1,176.5
Current debt	123.6	71.8	24.4	15.4
AP	68.0	95.2	124.1	103.9
Accrued liabilities	41.8	35.5	36.0	15.0
Accrued wages	23.4	22.8	19.1	28.0
Customer deposits	15.1	15.7	1.8	7.3
Income taxes payable	14.2	3.0	10.3	15.1
Total current liabilities	286.1	244.1	215.6	184.9
Long term debt	161.0	59.3	116.1	106.7
Pension	104.9	126.4	116.4	106.5
Customer deposits	19.6	3.6	0.0	0.0
Other liabilities	26.8	35.7	72.4	72.2
Total liabilities	598.4	469.0	520.6	470.2
Minority interests	58.0	64.1	46.5	51.7
Shareholders' equity	(24.7)	193.6	442.9	654.6
Total liabilities and shareholders' equity	631.7	726.8	1,009.9	1,176.5
Difference in balance sheet	*0.0*	*0.0*	*0.0*	*0.0*

TTM revenues				1,076.9
TTM COGS				622.6
TTM average AR				135.5
TTM average inventory				123.7
Receivable days		46.3	43.3	45.9
Inventory turns		5.3x	5.2x	5.0x

	Q104	Q204	Q304	Q404	Q105	Q205
Raw materials	17.7	21.7	18.4	20.3	17.1	14.7
% inventories	*14.3%*	*19.2%*	*15.3%*	*15.8%*	*12.6%*	*10.8%*
Goods in process	53.5	53.0	54.0	54.2	53.1	55.6
% inventories	*43.3%*	*46.8%*	*44.9%*	*42.3%*	*39.1%*	*41.0%*
Finished goods	51.9	37.9	47.3	53.1	65.1	64.6
% inventories	*41.9%*	*33.5%*	*39.3%*	*41.4%*	*47.9%*	*47.7%*
Total inventories	123.6	113.2	120.4	128.1	135.8	135.4

MEMC Electronics
Comparables

Japanese currencies are in yen

Company	Ticker	Date	FYE	Price	Shares Out.	Market Cap	Debt	Cash	Enterprise Value	2005 Revenues	Net			EBITDA			2005 Capex
											2005A	2006E	2007E	2005A	2006E	2007E	
Shin-Etsu Chemical	4063.JP	10/5/2005	MAR	5,170	431.81	2,232,473	33,150	176,821	2,088,802	967,486	93,160	107,800	120,400	242,640	272,000	291,000	110,277
Tokuyama	4043.JP	10/5/2005	MAR	1,171	254.97	298,572	73,669	10,150	362,091	251,000	10,300	9,000	9,400	34,400	34,700	35,900	20,000
MEMC Electronics (1)	WFR	10/5/2005	DEC	$19.07	209.99	4,004.5	122.2	143.2	3,983.5	1,059.8							

	P/E			EV/EBITDA		
	2005A	2006E	2007E	2005A	2006E	2007E
	24.0x	20.7x	18.5x	8.6x	7.7x	7.2x
	29.0x	33.2x	31.8x	10.5x	10.4x	10.1x
High	29.0x	33.2x	31.8x	10.5x	10.4x	10.1x
Low	24.0x	20.7x	18.5x	8.6x	7.7x	7.2x
Average	26.5x	26.9x	25.2x	9.6x	9.1x	8.6x

(1) 2005 numbers are estimates

MEMC Electronics
Comparables

2003 Forecast	**2002A**	**2003F**	**2004F**	**2005F**	**2006F**
MSI	4,681	5,141	5,916	6,377	6,637
% growth		*9.8%*	*15.1%*	*7.8%*	*4.1%*

2004 Forecast	**2003A**	**2004F**	**2005F**	**2006F**	**2007F**
MSI	5,149	6,313	6,596	6,784	7,201
% growth		*22.6%*	*4.5%*	*2.9%*	*6.1%*
Over/under	0.2%	6.7%	3.4%	2.2%	NA

2005 Forecast	**2004A**	**2005F**	**2006F**	**2007F**	**2008F**
MSI	6,262	6,385	6,862	7,287	8,192
% growth		*2.0%*	*7.5%*	*6.2%*	*12.4%*
Over/under	-0.8%	-3.2%	1.1%	1.2%	NA

SEMI SILICON MANUFACTURERS GROUP ANNOUNCES SILICON WAFER SHIPMENT CONSENSUS FORECAST

Wafer Shipments Forecast to Grow Two Percent in 2005

SAN JOSE, Calif., October 10, 2005 – The leading suppliers of silicon wafers forecast year-end wafer shipments for 2005 to be two percent higher than 2004 shipments. According to the SEMI Silicon Manufacturers Group (SMG) Consensus Forecast, total wafer shipments will increase by about seven percent in 2006. The Consensus Forecast, obtained through surveying SMG members, provides a silicon wafer shipment outlook for 2005 through 2008.

The survey results forecast silicon shipments to reach 6,385 million square inches in 2005, 6,862 million square inches in 2006, 7,287 million square inches in 2007, and 8,192 million square inches in 2008.

"While 2004 was a record year for silicon shipments, volumes decreased significantly in the fourth quarter of last year. Now, we are seeing a recovery from that slowdown and we expect to see incremental year-on-year growth continuing to 2007, with anticipated growth in 2008 reaching double digits," said Makoto Tsukada, chairman SEMI SMG and general manager of Shin-Etsu Handotai Co., Ltd. "This strong growth will be driven by 300 mm, which by 2006 could represent 25 percent of total volume of silicon shipments."

2005 Consensus Forecast
Total Electronic Grade Silicon Slices
(Millions of Square Inches)

	Actual	Forecast	Forecast	Forecast	Forecast
	2004	2005	2006	2007	2008
MSI	6,262	6,385	6,862	7,287	8,192
Annual Growth	22%	2%	7%	6%	12%

Silicon wafers are the fundamental building material for semiconductors, which in turn, are vital components of virtually all electronics goods, including computers, telecommunications products, and consumer electronics. The highly engineered thin round disks are produced in various diameters (from one inch to 12 inches) and serve as the substrate material on which more than 95 percent of today's semiconductor devices or "chips" are fabricated.

All data cited in this release is inclusive of polished silicon wafers, including virgin test wafers, epitaxial silicon wafers, and non-polished silicon wafers shipped by the wafer manufacturers to the end-users.

The Silicon Manufacturers Group acts as an independent special interest group within the SEMI structure and is open to all SEMI members involved in manufacturing polycrystalline silicon, monocrystalline silicon or silicon wafers (e.g., as cut, polished, epi, etc.) not including reclaimed wafers. The purpose of the group is to facilitate collective efforts on issues related to the silicon industry including the acquisition of market information and statistics about the

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silicon industry and the semiconductor market.

SEMI is a global industry association serving companies that provide equipment, materials and services used to manufacture semiconductors, displays, nano-scaled structures, micro-electromechanical systems (MEMS) and related technologies. SEMI maintains offices in Austin, Beijing, Brussels, Hsinchu, Moscow, San Jose (Calif.), Seoul, Shanghai, Singapore, Tokyo and Washington, D.C. For more information, visit www.semi.org.

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BARRON'S Online

Monday, September 19, 2005

A Place in the Sun

By ERIC J. SAVITZ

SUNSHINE IS FREE. That simple fact is what gives the solar-power business so much allure. You don't have to extract it from the ground, it's not subject to embargos, it's nonpolluting and if the supply ever ran out, we'd have a bigger problem than high gasoline prices. On the surface, at least, it certainly seems like an obvious way to address some of the economy's ongoing energy problems.

It's also well understood: America has been tinkering with solar power for decades. In a symbolic act during the 1979 energy crisis, Jimmy Carter installed solar panels on the roof of the White House. (He also urged us to wear more sweaters.) But as the crisis faded, so did interest in solar. After Ronald Reagan and his brown suits moved into 1600 Pennsylvania Ave., the White House solar panels were removed -- and solar power resumed its previous position as a technology considered more suitable for calculators and pool heaters than powering the grid.

But with talk growing of a new energy crisis, thanks to record prices for crude oil and gasoline, solar companies have been attracting renewed attention. Michael Rogol, an analyst with CLSA Asia-Pacific Markets who tracks the global solar market, says the stocks in the sector are up about 150% over the past 12 months. Wall Street is ramping up to slake the thirst for solar stocks with more supply: SunPower, a subsidiary of chip-maker **Cypress Semiconductor**, has filed to come public, as has Q-Cells, a large, fast-growing German solar-cell company that Rogol calls "the Netscape of the solar sector." Another large player, Norway's Renewable Energy Corp., or REC, has also said it plans an IPO.

Encouraged by this new enthusiasm for the sector in the public markets, venture capitalists have been funding a steadily increasing number of solar-related start- ups, sinking more than $100 million into new solar companies in the first half of 2005. (See table: The Next Generation.) The recently passed energy bill provides some modest incentives for solar power, and many states have installed solar-friendly tax incentives of their own.

While solar represents a tiny percentage of global power generation, it is growing rapidly. Worldwide, solar power production this year should reach 1.5 gigawatts, double the 2003 level. By 2010, according to CLSA, the total should quadruple to six gigawatts. Industrywide revenue, the firm predicts, will grow from $11 billion this year to $36 billion in 2010.

Now that's some nice, Google-style growth. But investing in the sector isn't easy. Many of the biggest producers of solar cells are actually divisions of much larger companies -- **BP**, **Sharp**, **Shell**, **General Electric** -- that you'd hardly consider pure plays. And most of the more focused solar companies, with a

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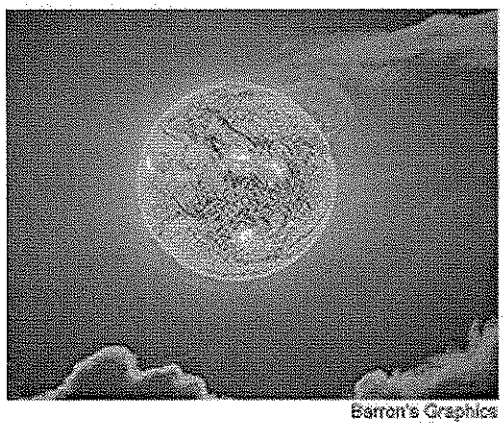
few exceptions, are still private or trade outside the U.S.

Meanwhile, just as demand seems poised to take off, the solar industry finds itself grappling with a shortage of polysilicon, the raw material used to create both silicon cells and semiconductors. At least for the next few years, the industry's growth rate will be muffled not by any shortage of demand, but rather by insufficient supply. In all, finding good investments will require ingenuity.

The basic idea of solar power is simple. Energy from the sun strikes a silicon panel, releasing electrons and creating electricity. Those panels are connected together in modules, which can provide power standing alone or hooked into the electrical grid. One of the standard, but magical, pitches made by solar equipment providers is the image of your electricity meter running backwards: When the sun is shining and demand for power is high, you can be selling power back to the grid, while others buy it.



Barron's Graphics

The Bottom Line: Though solar stocks have surged over the past year or so, some could rise further. Some analysts think MEMC, the largest-capitalization play on solar, could jump another 50%.

What's not so simple is the economics of solar power. For starters, while the sun's energy is abundant, it isn't available 24/7. (You may be familiar with a fascinating natural phenomenon known as "night," and another frequent but less predictable factor called "clouds.") Ergo, solar power is more practical in some places than others. Also, silicon panels are rather inefficient: Most of the potential energy in sunshine is lost. So to create meaningful amounts of electricity from solar panels, you need lots of them.

The good news is that as the industry has grown, the retail cost of solar energy has dropped an average of 6%-7% a year for the past 15 years, says Rhone Resch, director of the Solar Energy Industries Association, a trade group. Within 10 years, Resch says, solar should reach parity with the average retail electricity price.

"This is not your grandpa's solar," says Ron Pernick, the principal of Clean Edge, a Portland, Ore.-based research firm. He figures the costs of production have been dropping about 18% for every doubling of output -- and output is doubling every two or three years. Still, the industry isn't at parity yet. Resch says solar power, at 22-23 cents per kilowatt, costs about twice as much as the average retail price of electricity in the U.S.

Keep in mind, too, that installing a solar system requires a large upfront capital investment that may require some creative financing. Putting a solar system on your roof with enough cells to run your house could set you back $25,000-$30,000. You do get to lock in costs, though: Resch likens it to buying a car and paying for 25 or 30 years of gasoline upfront.

One small company, Sun Edison, has set up an intriguing scheme where it places solar systems on the flat roof of a supermarket or big-box retailer, then sells the power back to them. The equipment itself is owned by an investor -- in each of the four installations they've completed, it's Goldman Sachs -- which benefits from tax incentive programs. Sun Edison's payoff comes years from now as it gradually buys back the equity and associated income in the equipment.

Fortunately for the solar-power industry, a number of state and national governments have decided that there is a public good in developing alternatives to fossil-fuel based energy production, and have installed lucrative subsidy programs designed to overcome the cost differential.

The most substantial incentives have been offered by Japan and Germany. While neither country is among the world's sunnier climes, both have become the global leaders in solar power. So it should be

no surprise that many of the more successful publicly held solar companies are traded in Frankfurt or Tokyo, not New York. (See table: Sunny Prospects)

For domestic solar advocates, that situation is a source of no little frustration. "Our resources are orders of magnitude better," sighs the trade group's Resch. "But Germany has created the best incentives in the world." Germany's policy, designed to reduce the country's reliance on fossil fuels, provides a fixed payout of about 54 cents per kilowatt hour for as much power as you can produce.

Rick Feldt, CEO of **Evergreen Solar**, a Marlboro, Mass., solar-cell company, complains that the incentives in the recently passed federal energy bill provides little help. He notes that the bill offers only two years of tax credits, with no assurances after that -- not enough to get manufacturers to commit investment capital in the business.

In the U.S., the industry suffered a blow recently from the demise of California Gov. Arnold Schwarzenegger's so-called Million Solar Roofs initiative, which would have provided substantial incentives in the nation's largest state for both residential and commercial buildings. Though the measure passed easily in the state Senate, it fizzled after the governor threatened a veto over amendments to the bill in the state Assembly that would have required solar-installation work to be handled by licensed electricians at the prevailing union wage rate. The governor lately has talked about stepping around the legislature via the adoption of similar incentives through the state's Public Utility Commission.

WHILE THE STATUS OF THE CALIFORNIA MEASURE is important, the talk of the solar industry is the ongoing shortage of polysilicon, the raw stuff used to manufacture photovoltaic cells. For many years, the only real use for that particular material was to make silicon wafers for the semiconductor industry; the solar industry's needs were minimal. But not anymore.

Thanks in no small measure to the incentive programs in Germany and Japan, solar-cell demand has expanded 40% or more for several years running, versus 20%-25% in the past. The result is that by 2006 almost half of the world's polysilicon supply will be soaked up by the solar-cell makers. Richard Winegarner, proprietor of consulting firm Sage Concepts, says the market is about 10% short this year, with the solar-cell industry, and not chip makers, absorbing most of the resultant pain.

"I can't find a data point anywhere that shows anything other than a very real shortage of polysilicon that is going to get worse over the next two or three years," says Paul Leming, an analyst with Princeton Tech Research. "It would take a solar-panel market collapse to bring any slack capacity to the polysilicon business any- time soon."

Not surprisingly, polysilicon prices have soared: Winegarner says contract pricing has moved from about $32 a kilogram to $45 since 2003. Spot pricing, depending on whom you ask, is running $60-$80 a kilogram, though Winegarner notes that there is "essentially no volume" in the spot market. "The industry has already wrung out every nook and cranny of inventory and scrap," he says.

The world's polysilicon makers are working frantically to add capacity, but supply is unlikely to catch up for a while. Optimists think the shortage could be cured by 2007. Neil Gayle, coordinator of the Critical Materials Council of Sematech, a chip-industry consortium, thinks there could be shortages though 2009.

Tables: Sunny Prospects[1] and The Next Generation[2]

The bottom line is that there won't be enough solar cells to meet demand for at least the next several years, potentially triggering a supply crisis for some smaller players that lack contractual supply arrangements with polysilicon producers.

The chip industry has expressed its own concerns about the potential for the shortage to slow the

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electronics business. But this is a lot bigger problem for solar-cell companies than for the chip industry: While silicon represents less than 1% of the cost of semiconductor products, they account for more than 30% of the raw-material costs for solar cells. A doubling of silicon pricing wouldn't mean much for chip makers, but it would be a big problem for the solar business, which must hold down costs to compete with conventional power.

The obvious play on the polysilicon shortage is **MEMC Electronic Materials** (ticker: WFR), a St. Peters, Mo., company that is one of the world's largest producers of silicon wafers. Unlike some of its rivals, MEMC produces most of its own silicon feedstock, and in fact sells some excess supply back into the market. The result is that MEMC benefits from soaring wafer pricing without suffering the associated increase in raw-material pricing. MEMC shares have doubled over the past year, to a recent $19.79, boosting the company's market capitalization to about $4 billion. That makes MEMC the largest-cap play on solar growth.

And there may still be some juice left in MEMC shares. Leming of Princeton Tech Research thinks the stock could move up another 50%, and says he can "sketch a scenario where it can double or triple from here," noting that the company trades for only about 12 times expected 2006 earnings of $1.56 a share. Profits at that level would be up 39% from an expected $1.12 a share this year. And this, by the way, is for a company that does not yet do much direct business with the solar industry. Leming thinks MEMC could eventually cut a deal with solar-panel makers to provide dedicated wafer supplies. If so, Lemming says, the growth could lift the stock to $50.

MEMC ranks fourth in the world in polysilicon capacity, behind Hemlock Semiconductor, which is partially owned by **Dow Corning**. Third on the list is the other potential wafer investment, Japan-based **Tokuyama**. Also in the top five are Wacker Chemie, a privately held German chemical conglomerate, and Advanced Silicon Materials, which was recently sold by Japan's **Komatsu Electronic Metals** to Renewable Energy Corp., the Norwegian solar-panel maker. The purchase of Advanced Silicon by REC, which as noted is planning an IPO, assures the company of sufficient silicon supplies.

Then there's SunPower, the Cypress subsidiary now in registration to come public. It is losing gobs of money -- for the first half of this year, it lost $13.6 million on revenues of $27.3 million. But the company is attracting considerable interest for its highly efficient solar cells: The company claims in its SEC filings that it generates up to 50% more power per unit of area than conventional cells. In an industry where driving costs lower is a key to long-term success, SunPower should attract eager buyers.

The only current domestic pure-play solar option is Evergreen Solar (ESLR) of Marlboro, Mass. -- and it has some similar attractions. Evergreen shares have increased sixfold over the past 18 months. The company uses a novel process for generating solar cells that it claims uses 35% less silicon than conventional manufacturing processes. That should give Evergreen an edge in the race to reduce costs. And CEO Rick Feldt says the company has a pilot project that would cut the silicon used per wafer by another 50%.

WHILE CERTAINLY THE STREET IS ENAMORED of Evergreen's technology, analysts are equally enthused about its joint venture with Germany's Q-Cells. The two companies are building a new solar-cell manufacturing plant near Q-Cells' headquarters in Thalheim, in eastern Germany. The plant will dramatically increase Evergreen's capacity, adding 30 megawatts of cell production to the 15 megawatts it can produce at its own factory in Massachusetts. Feldt thinks the German plant will be far more efficient than the company's domestic plant, perhaps generating $100 million a year in revenue with gross margins of 30%-35%. Assuming the plant comes on stream as expected, Feldt says, the company should turn profitable on a run-rate basis sometime in 2006.

Moreover, Feldt says that if the German venture is successful, the partners would increase their production to as much as 120 megawatts. And if that happens, he says, the joint venture could add additional capacity in other locations. If that all plays out, says J. Michael Horwitz, an analyst at Pacific Growth Equities, "it could be one of the better stocks in 2006." And if the German project has problems?

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Then so will the stock.

CLSA's Michael Rogol, a big Evergreen fan, in a report earlier this year, listed a total of 15 solar stocks to buy. Many are outside the U.S.: **Kyocera**, **Sharp** and **Sekisui Chemical** of Japan; Thailand-based **Solartron**; **Motech** of Taiwan; **Carmanah** and **ATS** in Canada; and Germany's **Conergy** and **SolarWorld**.

The global range is a reflection of the fact that, unlike oil or gas or coal, producing energy from the sun is about creative engineering and -- at least for the moment -- bold government policy, not geographic advantage. No one is going to discover a new source of sunlight, but it's possible to figure out better ways to use it. Anyone can get in the game. Even America.

E-mail comments to editors@barrons.com[3]

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Suntech Prospectus

RISK FACTORS

An investment in our ADSs involves significant risks. You should carefully consider the risks described below and the other information in this prospectus, including our consolidated financial statements and related notes, before you decide to buy our ADSs. If any of the following risks actually occur, our business, prospects, financial condition and results of operations could be materially harmed, the trading price of our ADSs could decline and you could lose all or part of your investment.

Risks Related to Our Company and Our Industry

Our limited operating history may not serve as an adequate basis to judge our future prospects and results of operations.

We have a limited operating history. We completed our first PV cell manufacturing line in August 2002 and began commercial shipment of PV cells in September 2002. With the rapid growth of the PV industry, we have experienced a high growth rate since 2002. As such, our historical operating results may not provide a meaningful basis for evaluating our business, financial performance and prospects. We may not be able to achieve a similar growth rate in future periods. Accordingly, you should not rely on our results of operations for any prior periods as an indication of our future performance.

We have incurred losses in prior periods and may incur losses in the future.

We incurred a net loss of $0.9 million in 2002, and we may incur losses in the future. We expect our operating expenses to increase as we expand our operations. Our ability to maintain profitability depends on the growth rate of the PV market, the continued market acceptance of PV products, the competitiveness of our products and services as well as our ability to provide new products and services to meet the demands of our customers. Even though we have been profitable in recent periods, we may not be able to sustain or increase profitability in the future.

Failure to obtain sufficient quantities of silicon and silicon wafers could decrease our revenues and limit our ability to expand as planned.

Silicon wafers are the most important raw materials for making PV products. To maintain competitive manufacturing operations, we depend on our suppliers' timely delivery of quality silicon wafers in sufficient quantities and at acceptable prices. Our silicon wafer suppliers, in turn, depend on silicon manufacturers to supply silicon required for the production of silicon wafers. The significant growth of the PV industry has resulted in a significant increase in demand for silicon and silicon wafers, and we have, from time to time, experienced late delivery and supply shortages. In particular, some suppliers of silicon also supply to silicon wafer manufacturers for the semiconductor industry, which typically have greater buying power and market influence than manufacturers for the PV industry. As a result, increases in the demand for silicon from the semiconductor industry may in the future result in late deliveries or supply shortages with respect to the specialized silicon that our silicon wafer suppliers need as raw materials. This could result in our reduced manufacturing output, delayed or missed shipments, damaged customer relationships and decreased revenues. In the past, we have addressed shortages of silicon wafer supplies by entering into original equipment manufacturer, or OEM, manufacturing arrangements, under which we obtain silicon wafer supplies from certain of our customers and are obligated to sell a substantial portion of the PV modules manufactured with these wafers to such customers. However, we cannot assure you that such OEM manufacturing arrangements will be available to us in the future. We have also attempted to ease our supply shortages through prepaying for raw materials and establishing strategic relationships with certain suppliers, but we cannot assure you that we will be able to obtain supplies from them or any other suppliers in sufficient quantity and at acceptable prices. We acquire silicon wafers from our suppliers mostly through short-term supply arrangements. This subjects us to the risks that our suppliers may stop supplying silicon wafers to us for any reason, including the financial viability of such suppliers. If this occurs, our ability to manufacture our PV products may be limited, which would cause our revenues to decline.

RISK FACTORS

You should carefully consider the risks described below before making a decision to buy our class A common stock. If any of the following risks actually occur, our business, financial condition and results of operations could be harmed. In that case, the trading price of our class A common stock could decline and you might lose all or part of your investment in our class A common stock. You should also refer to the other information set forth in this prospectus, including "Special Note Regarding Forward-Looking Statements" and our consolidated financial statements and the related notes.

Risks Related to Our Business

We are currently experiencing an industry-wide shortage of polysilicon. The prices that we pay for polysilicon have increased recently and we expect these price increases to continue, which may constrain our revenue growth and decrease our gross margins and profitability.

Polysilicon is an essential raw material in our production of photovoltaic, or solar, cells. Polysilicon is created by refining quartz or sand. Polysilicon is melted and grown into crystalline ingots by companies specializing in ingot growth. We procure silicon ingots from these suppliers on a contractual basis and then slice these ingots into wafers. We also purchase wafers from third-party vendors. The ingots are sliced and the wafers are processed into solar cells in our Philippines manufacturing facility.

There is currently an industry-wide shortage of polysilicon, which has resulted in significant price increases. For example, according to SolarBuzz, an industry consulting firm, the average price of polysilicon increased from $25 per kilogram in 2004 to between $35 and $45 per kilogram for the first quarter of 2005. Based on our experience, we believe that the average price of polysilicon has continued to increase. Increases in polysilicon prices have in the past increased our manufacturing costs and may impact our manufacturing costs and net income in the future. As demand for solar cells has increased, many of our principal competitors have announced plans to add additional manufacturing capacity. As this manufacturing capacity becomes operational, it will increase the demand for polysilicon and further exacerbate the current shortage. Polysilicon is also used in the semiconductor industry generally and any increase in demand from that sector will compound the shortage. The production of polysilicon is capital intensive and adding additional capacity requires significant lead time. While we are aware that several new facilities for the manufacture of polysilicon are under construction, we do not believe that the supply imbalance will be remedied in the near term. We expect that polysilicon demand will continue to outstrip supply for the foreseeable future.

Although we have purchase orders and contracts for what we believe will be an adequate supply of silicon ingots through 2006, our estimates regarding our supply needs may not be correct and our purchase orders may be cancelled by our suppliers. The volume and pricing associated with these purchase orders and contracts may be changed by our suppliers based on market conditions. Our purchase orders are generally non-binding in nature. If our suppliers were to cancel our purchase orders or change the volume or pricing associated with these purchase orders, we may be unable to meet customer demand for our products, which could cause us to lose customers, market share and revenue. This would have a material negative impact on our business and operating results. If our manufacturing yields decrease significantly, our second manufacturing line becomes available earlier than anticipated or our suppliers cancel or fail to deliver, we may not have made adequate provision for our polysilicon needs for the balance of the year.

In addition, since some of these arrangements are with suppliers who do not themselves manufacture polysilicon but instead purchase their requirements from other vendors, it is possible that these suppliers will not be able to obtain sufficient polysilicon to satisfy their contractual obligations to us.

There are a limited number of polysilicon suppliers. Many of our competitors also purchase polysilicon from our suppliers. Since we have only been purchasing polysilicon in bulk for less than a year, these other competitors have longer and perhaps stronger relationships with our suppliers than we do. Many of them also have greater buying power than we do. Some of our competitors also have inter-locking board members with their polysilicon suppliers. Since we have committed to significantly increase our manufacturing output, an inadequate allocation of polysilicon would harm us more than it would harm our competitors.

The inability to obtain sufficient polysilicon at commercially reasonable prices or at all would adversely affect our ability to meet existing and future customer demand for our products and could cause us to make fewer shipments, lose customers and market share and generate lower than anticipated revenue, thereby seriously harming our business, financial condition and results of operations.

We currently depend on four customers for a high percentage of our total revenue and the loss of, or a significant reduction in orders from, any of these customers, if not immediately replaced, would significantly reduce our revenue and harm our operating results.

Conergy AG, or Conergy, accounted for approximately 7% of our total combined revenue in fiscal 2004 and 47% of our total revenue in the nine months ended September 30, 2005. Solon AG, or Solon, accounted for approximately 19% of our total combined revenue in fiscal 2004 and 16% of our total revenue in the nine months ended September 30, 2005. General Electric Company, or GE, and its subcontracting partner, Plexus Corp., or Plexus, accounted for approximately 9% of our total combined revenue in fiscal 2004, and accounted for approximately 13% of our total revenue in the nine months ended September 30, 2005. Integration Associates accounted for 31% of our total combined revenue in fiscal 2004 and 5% of our total revenue in the nine months ended September 30, 2005. Currently, our largest customers for our solar power products are Conergy and Solon, our largest customers for our imaging detector products are GE and Plexus and our largest customer for our infrared detector products is Integration Associates. The loss of sales to any of these customers would have a significant negative impact on our business. Our agreements with these customers may be cancelled if we fail to meet certain product specifications or materially breach the agreement or in the event of bankruptcy, and our customers may seek to renegotiate the terms of current agreements or renewals. Most of the solar panels we sell to the European market are sold through our agreement with Conergy and we may enter into similar agreements in the future.

We currently sell to a relatively small number of customers, and we expect our operating results will likely continue to depend on sales to a relatively small number of customers for the foreseeable future, as well as the ability of these customers to sell solar power products that incorporate our solar cells. Our customer relationships have been developed over a short period of time and are generally in their preliminary stages. We cannot be certain that these customers will generate significant revenue for us in the future or if these customer relationships will continue to develop. If our relationships with our other customers do not continue to develop, we may not be able to expand our customer base or maintain or increase our revenue. This is exacerbated by our current manufacturing constraints for solar cells which limit our ability to sell to other customers and our contractual arrangements which require us to sell part of our future output to Conergy and Solon. In addition, our business is affected by competition in the market for the end products that each of Solon, Conergy and Plexus sell, and any decline in their business could harm our business and cause our revenue to decline.

The reduction or elimination of government and economic incentives could cause our revenue to decline.

We believe that the near-term growth of the market for "on-grid" applications, where solar power is used to supplement a customer's electricity purchased from the utility network, depends in large part on the availability and size of government and economic incentives. Because a majority of our sales are in the on-grid market, the reduction or elimination of government and economic incentives may adversely affect the growth of this market or result in increased price competition, which could cause our revenue to decline.

Today, the cost of solar power exceeds the cost of power furnished by the electric utility grid in many locations. As a result, federal, state and local government bodies in many countries, most notably Germany, Japan and the United States, have provided incentives in the form of rebates, tax credits and other incentives to end users, distributors, system integrators and manufacturers of solar power products to promote the use of solar energy in on-grid applications and to reduce dependency on other forms of energy. These government economic incentives could be reduced or eliminated altogether. For example, Germany has been a strong supporter of solar power products and systems, and political changes in Germany could result in significant reductions or eliminations of incentives, including the reduction of feed-in tariffs over time. In addition, the federal incentive program in Japan is scheduled to expire at the end of 2005. Some solar program incentives expire, decline over time, are limited in total funding or require renewal of authority. For example, in California, the Emerging Renewables Program has finite funds that

MEMC ELECTRONIC MATERIALS, INC. (WFR: $19.28*)

St. Peters, MO
September 13, 2005

Market Perform
Price Target $15.00
Update

STOCK DATA	
52 Week Range	$19.66-$7.95
ADTV - 3 Month	2.4
Market Cap	$4,037.2
Shares Outstanding (Diluted)	224.7

EARNINGS DATA			
EPS (FD Operating)			
Dec.	2004A	2005E	2006E
1Q	$0.16	$0.23A	$0.25
2Q	0.19	0.26A	0.28
3Q	0.27	0.28	0.32
4Q	0.27	0.30	0.33
FY	$0.89	$1.07	$1.18
P/E	14.8x	18.1x	16.3x

FY	2004A	2005E	2006E
Revenue	1,028.0	1,117.5	1,213.1

FINANCIAL DATA	2Q05
Cash & Equivalents	101.0
Accounts Receivable	132.1
Inventories	134.9
Current Assets	395.2
Total Assets	1,079.5
Total Current Liabilities	199.9
Long-Term Debt	108.2
Total Debt	129.9
Total Stockholder Equity	563.6

Financial Values In Millions

WFR: Competitors Raising 300mm ASPs, though Impact of Polysilicon Shortage Still Illusive--Maintain Market Perform

Summary and Recommendation

We met with MEMC's competitors, Shin-Etsu and Komatsu, last week in Japan. In a nutshell, both companies indicated that 1) 300mm wafer demand has continued to improve while 200mm wafer demand has picked up over the past month; 2) 300mm lines are fully loaded (driven by continued increases in demand by memory manufacturers, foundries, and select IDMs like Intel and Texas Instrument), helping to raise ASPs; 3) both companies have aggressive plans to increase 300mm capacity next year; 4) both companies have had long-term polysilicon supply contracts (through local vendors or the parent company's subsidiary); and 5) similar to MEMC, Shin-Etsu is evaluating opportunities in the solar cell market. Given the incremental data points from competitors, it appears to us that MEMC could achieve upside to our current 2H05 estimates, which are nearly in line with consensus. Yet, given where the stock is currently trading, we do not believe the upside to our earnings estimates will be enough to cause our target to well exceed the current stock price. To that end, we prefer ATMI over WFR in the consumable segment and remain on the sidelines on MEMC until there is a better entry point.

Key Points

- **Competitors raising 300mm ASPs.** We met with Shin-Etsu (No. 1 wafer supplier) and Komatsu (No. 5 wafer supplier) last week in Japan. Due to 100% capacity utilization, both companies have been able to raise 300mm ASPs.
- **Increasing capacity.** Shin-Etsu is expected to increase 300mm wafer capacity by 25%-50%, while Komatsu will increase it by 70% by CY06.
- **However, polysilicon shortage is not expected to have an adverse impact.** Through long-term supply contracts, both competitors are expected to have a steady supply of raw material, with no significant increases in material costs.
- **Still prefer ATMI over WFR in consumable segment.** Although what we heard in Japan suggests WFR could achieve upside to our current 2H05 estimates, we still prefer ATMI over WFR, given where WFR is currently trading.

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Visiting MEMC's Competitors in Japan

We met with Shin-Etsu, the world's largest supplier of silicon wafers, and Komatsu, the fifth-largest supplier of silicon wafers, two of MEMC's competitors located in Japan. Below we have provided a bullet summary of important takeaways from each meeting. In a nutshell, both companies indicated that 1) 200mm wafer demand has seen an uptick over the past month; 2) 300mm lines (at Shin-Etsu and Komatsu) are fully loaded (driven by continued increase in demand by memory manufacturers, foundries, and select IDMs like Intel and Texas Instrument), helping to raise ASPs; 3) both companies have aggressive plans to increase 300mm capacity next year; 4) both companies have had long-term contracts for the supply of polysilicon (through local vendors or the parent company's subsidiary), and, thus, they are not expected to see a significant impact to their cost structures as a result of increasing material cost; and 5) similar to MEMC, Shin-Etsu is also evaluating opportunities in the solar cell market.

Given the incremental data points on increasing 300mm wafer prices, as well as increased 200mm demand, we now have increased confidence that MEMC could achieve upside to our current estimates for 2H05, which are nearly in line with the consensus. Nonetheless, given where the stock is currently trading, we do not believe the upside to our earnings estimates will be enough to cause our price target to well exceed the current stock price. To that end, we prefer ATMI over MEMC in the consumable segment and remain on the sidelines on MEMC until there is a better entry point.

Shin-Etsu

Shin-Etsu is the largest wafer manufacturer worldwide, with an estimated 30%-35% market share and located in Japan. The company's capacity mix is currently 60% 200mm and 40% 300mm. With internal facilities (200mm and 300mm) fully loaded, the company has recently been able to raise 300mm-related ASPs. Additionally, the company does not see a major change to its cost structure as a result of increased shortages of polysilicon material.

- Shin-Etsu currently has 400,000 wafers per month (wpm) of 300mm wafer capacity (or 40% of the total), but it is expected to increase to 500,000-600,000 wpm (or 45%-50% of total) by mid 2006.
- The company's 200mm wafer capacity is at 1.4 million wpm and fully loaded (100% utilization rate).
- Although demand for 300mm wafers has been strong since early this year, 200mm wafer demand has recently picked up.
- The company is alleviating 200mm capacity constraint by improving yields.
- Due to continuing strength in 300mm wafer demand and a lack of sufficient capacity, the company is raising prices for 300mm wafers.
- Regarding SOI wafers, Shin-Etsu is working with Soitec, located in France, to offer customers wafers.
- Current forecasts indicate continuing improvement in demand beyond Christmas, though seasonality will play a role in March-quarter orders.

- Regarding the growth of solar cells, Shin-Etsu is evaluating investment opportunities in this market, such as offering solar panels/cells.

- Through long-term supply agreements, Shin-Etsu is expected to have no difficulty in getting polysilicon material. Shin-Etsu was actually expecting a polysilicon shortage back in CY02 and, thus, secured a long-term supply agreement then.

Komatsu

Komatsu is the fifth-largest wafer manufacturer worldwide and is located in Japan, with an estimated 10%-15% market share. Komatsu's current revenue mix by wafer size is 200mm, 50%; below 200mm, 40%; 300mm, 10%.

- The company has recently finished increasing capacity at its Japanese facilities to 75,000 wpm, a 300mm equivalent, from the previous 45,000 wpm.

- The company is also building new facilities in Taiwan, with an estimated 300mm capacity of 50,000 wpm.

- Komatsu will make further investment, though it will only use cash from operations on the required capex.

- Demand for 300mm wafers has continued to increase, while it has remained stable for 200mm wafers. As a result, Komatsu's internal capacity has reached 100%.

- Although Komatsu does not have an internal production facility for polysilicon material, it has long-term supply agreements with one of the parent company's subsidiary, Applied Silicon, with the length of the contract well exceeding 12 months.

- Komatsu has also been able to increase its manufacturing yields, thus reducing the amount of polysilicon required to make a wafer. Such yield improvements have been achieved through the recycling of scrap wafers, as well as waste parts.

Risks

MEMC recently extended the useful lives of certain assets to better reflect their economic life. This reevaluation resulted in a 2% favorable impact on gross profit, which somewhat affects comparisons. We, thus, would look for ongoing improvement in gross margin through better asset utilization and turnover to determine management's effectiveness.

Although Texas Pacific Group's (TPG) ownership in MEMC has been reduced from 64% to its current level of about 40%, we believe that this is still an overhang on the stock that has nothing to do with fundamentals. We expect further reduction in TPG's ownership going forward.

Although the industry has consolidated, mitigating the risk of wafer-supply overcapacity, we believe that the risk of overcapacity remains as Japan-based competitors, with deep pockets, could flood the market with 300mm capacity aimed at increasing market share.

Given MEMC's facility loans and the indenture for its senior subordinated secured notes, the company is required to fulfill a number of restrictive covenants. In the event of violation, the loan commitments under the revolving credit facility may terminate and, thus, the loan and accrued interest outstanding would be lost.

Company Profile

Incorporated in 1984, MEMC Electronic Materials, Inc. is engaged in the design, manufacture, and sale of electronic-grade wafers for the semiconductor industry. The company provides wafers in sizes ranging from 100 millimeters (4 inches) to 300 millimeters (12 inches), including three general categories of wafer: prime polished, epitaxial, and test/monitor. Its principal customers are semiconductor device manufacturers, including major memory, microprocessor, and application-specific integrated circuit (ASIC) manufacturers and foundries. MEMC's wafers are used as a starting material for the manufacture of various types of semiconductor devices, including microprocessor, memory, logic, and power devices. The company operates manufacturing facilities in Europe, Malaysia, Japan, South Korea, the United States, and Taiwan.

(FY DEC) 12 Sep 05	MAR04A	JUN04A	SEP04A	DEC04A	FY04	MAR05A	JUN05A	SEP05E	DEC05E	FY05	MAR06E	JUN06E	SEP06E	DEC06E	FY06
REVENUE	228.8	255.5	275.3	268.4	1,028.0	257.9	275.4	286.4	297.9	1,117.5	283.0	297.1	314.9	318.1	1,213.1
% Change Y/Y	21.5%	33.2%	40.5%	30.9%	31.6%	12.7%	7.8%	4.0%	11.0%	8.7%	9.7%	7.9%	10.0%	6.8%	8.6%
% Change Q/Q	11.6%	11.7%	7.7%	-2.5%		-3.9%	6.8%	4.0%	4.0%		-5.0%	5.0%	6.0%	1.0%	
TOTAL COGS	155.4	168.4	164.5	170.2	658.5	164.6	175.0	181.1	186.5	707.1	182.8	188.3	192.0	192.8	755.9
GROSS PROFIT	73.3	87.2	110.7	98.2	369.4	93.3	100.4	105.3	111.3	410.4	100.2	108.8	122.9	125.3	457.2
% Total Revenue	32.1%	34.1%	40.2%	36.6%	35.9%	36.2%	36.5%	36.8%	37.4%	36.7%	35.4%	36.6%	39.0%	39.4%	37.7%
R&D	8.9	9.3	9.4	10.4	38.0	11.4	11.0	11.0	10.5	43.9	10.0	10.5	11.0	11.1	42.7
% Total Revenue	3.9%	3.6%	3.4%	3.9%	3.7%	4.4%	4.0%	3.8%	3.5%	3.9%	3.5%	3.5%	3.5%	3.5%	3.5%
SG&A	17.2	17.8	17.8	19.2	71.9	18.2	18.3	18.5	20.3	75.3	19.8	21.4	22.7	22.9	86.8
% Total Revenue	7.5%	7.0%	6.5%	7.1%	7.0%	7.0%	6.7%	6.5%	6.8%	6.7%	7.0%	7.2%	7.2%	7.2%	7.2%
OPERATING PROFIT	47.2	60.0	83.6	68.6	259.5	63.7	71.1	75.8	80.6	291.2	70.4	77.0	89.2	91.3	327.8
% Total Revenue	20.7%	23.5%	30.4%	25.6%	25.2%	24.7%	25.8%	26.5%	27.1%	26.1%	24.9%	25.9%	28.3%	28.7%	27.0%
% Change Y/Y	44.4%	78.2%	128.9%	72.9%	81.9%	34.9%	18.4%	-9.3%	17.4%	12.2%	10.4%	8.3%	17.7%	13.2%	12.6%
% Change Q/Q	19.0%	27.1%	39.2%	-17.9%		-7.2%	11.5%	6.7%	6.3%		-12.7%	9.3%	15.9%	2.3%	
OTHER	6.5	(9.1)	(0.4)	2.4	(0.6)	(1.3)	(1.5)	(1.0)	(1.0)	(4.8)	(1.0)	(0.8)	(0.5)	(0.5)	(2.8)
PRETAX PROFIT	53.7	51.0	83.2	71.1	258.9	62.4	69.6	74.8	79.6	286.4	69.4	76.2	88.7	90.8	325.1
% Total Revenue	23.5%	19.9%	30.2%	26.5%	25.2%	24.2%	25.3%	26.1%	26.7%	25.6%	24.5%	25.6%	28.2%	28.5%	26.8%
% Change Y/Y	83.2%	47.5%	70.9%	64.0%	66.1%	16.2%	36.5%	-10.0%	12.0%	10.6%	11.1%	9.5%	18.6%	14.0%	13.5%
% Change Q/Q	24.0%	-5.1%	63.1%	-14.6%		-12.1%	11.4%	7.5%	6.4%		-12.8%	9.8%	16.4%	2.3%	
TAXES	13.4	12.7	20.8	10.6	57.6	9.4	8.7	10.2	10.8	39.0	10.4	11.4	13.3	13.6	48.8
Tax Rate	25.0%	25.0%	25.0%	15.0%	22.2%	15.0%	12.4%	13.6%	13.6%	13.6%	15.0%	15.0%	15.0%	15.0%	15.0%
OTHER AFTER TAX	1.7	(17.5)	-	(11.0)	(26.8)	(25.0)	-	-	-	(25.0)	-	-	-	-	-
MINORITY INTERESTS	2.7	3.0	2.7	2.4	10.7	1.8	2.0	2.0	2.0	7.8	2.0	2.0	2.0	2.0	8.0
NET INCOME - CONT OPS	35.9	43.1	59.7	59.0	197.7	51.3	58.9	62.6	66.8	239.6	57.0	62.8	73.4	75.1	268.3
% Total Revenue	15.7%	16.9%	21.7%	22.0%	19.2%	19.9%	21.4%	21.9%	22.4%	21.4%	20.1%	21.1%	23.3%	23.6%	22.1%
% Change Y/Y	61.9%	57.9%	68.7%	71.4%	68.5%	42.9%	36.6%	4.9%	13.2%	21.2%	11.0%	6.6%	17.2%	12.5%	12.0%
% Change Q/Q	4.4%	20.0%	38.6%	-1.2%		-13.0%	14.8%	6.3%	6.6%		-14.7%	10.2%	16.9%	2.4%	
NET INCOME - TOTAL	35.9	60.6	59.7	70.0	226.2	76.3	58.9	62.6	66.8	264.6	57.0	62.8	73.4	75.1	268.3
% Total Revenue	15.7%	23.7%	21.7%	26.1%	22.0%	29.6%	21.4%	21.9%	22.4%	23.7%	20.1%	21.1%	23.3%	23.6%	22.1%
% Change Y/Y	61.9%	122.2%	69.7%	103.4%	94.0%	112.5%	-2.8%	4.9%	-4.6%	17.0%	-25.3%	6.6%	17.2%	12.5%	1.4%
% Change Q/Q	4.4%	68.8%	-1.5%	17.2%		9.1%	-22.8%	6.3%	6.6%		-14.7%	10.2%	16.9%	2.4%	
SHARES	222.1	221.0	220.4	222.1	221.4	223.9	224.7	225.1	225.5	224.8	225.9	226.3	226.7	227.1	226.5
EPS - CONT OPS	$ 0.16	$ 0.19	$ 0.27	$ 0.27	$ 0.89	$ 0.23	$ 0.26	$ 0.28	$ 0.30	$ 1.07	$ 0.25	$ 0.28	$ 0.32	$ 0.33	$ 1.18
% Change Y/Y	72.5%	55.6%	72.3%	72.1%	67.5%	41.8%	34.5%	2.7%	11.5%	19.4%	10.1%	5.8%	16.3%	11.8%	11.1%
% Change Q/Q	4.8%	20.6%	39.0%	-2.0%		-13.7%	14.4%	6.2%	6.4%		-14.8%	10.0%	16.7%	2.2%	
EPS - TOTAL	$ 0.16	$ 0.27	$ 0.27	$ 0.32	$ 1.02	$ 0.34	$ 0.26	$ 0.28	$ 0.30	$ 1.18	$ 0.25	$ 0.28	$ 0.32	$ 0.33	$ 1.18
% Change Y/Y	72.5%	116.9%	72.3%	104.2%	91.7%	110.8%	-4.4%	2.7%	-6.0%	15.2%	-26.0%	5.8%	16.3%	11.8%	0.6%
% Change Q/Q	4.8%	69.6%	-1.2%	16.3%		8.2%	-23.1%	6.2%	6.4%		-14.8%	10.0%	16.7%	2.2%	

WFR Cash Flow Model ($ Millions)	1Q04A	2Q04A	3Q04A	4Q04	1Q05	2Q05	3Q05E	4Q05E	1Q06E	2Q06E	3Q06E	4Q06E
Net Income from Operations	35.91	60.60	59.72	69.97	76.31	58.91	62.65	66.77	56.97	62.78	73.41	75.14
Depreciation & Amortization	9.92	10.24	11.44	12.53	13.34	14.30	15.00	16.00	16.00	16.00	15.75	15.90
(Incr) Decr in Accounts Receivable	(16.23)	(19.61)	(13.01)	11.15	10.19	(1.57)	(9.13)	(5.65)	7.34	(6.98)	(8.79)	(1.55)
(Incr) Decr in Inventories	(13.56)	10.49	(7.22)	(7.79)	(7.70)	0.41	(9.53)	(5.78)	7.51	(7.13)	(8.99)	(1.59)
(Incr) Decr in Other Current Assets	(9.40)	10.10	1.32	(9.61)	1.50	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Incr (Decr) in Current Liab. (Excl. debt)	27.31	11.01	(6.25)	31.86	(20.31)	(23.50)	0.00	0.00	0.00	0.00	0.00	0.00
=Cash from Operations	33.95	82.83	46.00	108.12	73.34	49.51	58.99	71.34	87.82	64.67	71.37	87.91
(Incr) Decr in Other Non-Current Assets	(57.23)	0.01	0.06	0.01	(0.03)	0.82	0.00	0.00	0.00	0.00	0.00	0.00
Capital Spending (Net of sales)	(29.00)	(44.00)	(25.50)	(51.73)	(54.40)	(51.20)	(34.03)	(28.00)	(45.27)	(45.00)	(46.00)	(46.00)
=Cash from Investing	(86.23)	(43.99)	(25.44)	(51.72)	(54.43)	(50.38)	(34.03)	(28.00)	(45.27)	(45.00)	(46.00)	(46.00)
Incr (Decr) in Non-curr Liab. (Excl. debt)	(23.55)	(7.57)	(1.17)	(8.47)	5.05	(2.34)	0.00	0.00	0.00	0.00	0.00	0.00
Additional Debt	83.42	(31.94)	(40.19)	(78.90)	(4.08)	(6.46)	0.00	0.00	0.00	0.00	0.00	0.00
Common Stock/Other Equity	(0.18)	5.78	0.60	18.06	1.31	(15.03)	(0.00)	0.00	0.00	0.00	0.00	0.00
=Cash from Financing	59.68	(33.73)	(40.75)	(69.31)	2.28	(23.83)	(0.00)	0.00	0.00	0.00	0.00	0.00
=Increase/(Decrease) in Cash	7.41	5.10	(20.20)	(12.91)	21.19	(24.70)	24.96	43.34	42.55	19.67	25.37	41.91
+Beginning Cash	130.70	140.62	129.49	103.31	92.31	116.32	101.00	125.96	169.30	211.85	231.52	256.89
+Adjustment	(0.40)	(13.79)	(5.94)	1.91	2.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
=End Cash	137.70	131.93	103.35	92.31	116.32	91.62	125.96	169.30	211.85	231.52	256.89	298.80
FREE CASH FLOW												
Quarterly	4.95	38.83	20.50	56.39	19.94	(1.69)	24.96	43.34	42.55	19.67	25.37	41.91
% Y/Y	-59%	868%	133%	120%	292%	-104%	22%	-23%	125%	-1266%	2%	-3%
% Q/Q	-81%	684%	-47%	175%	-65%	-108%	-1581%	74%	-2%	-54%	29%	65%
FY-End				$ 121				$ 86				$ 129
% Y/Y				138.5%				-29.1%				51.4%
FCF Margin	2%	15%	7%	21%	7%	-1%	9%	15%	15%	7%	8%	13%
YE FCF Margin				12%				8%				11%
ASSETS												
Cash & equivalents	140.62	129.49	103.31	92.31	116.32	101.00	125.96	169.30	211.85	231.52	256.89	298.80
Accounts receivable, net	119.25	138.86	151.87	140.73	130.53	132.11	141.24	146.89	139.55	146.52	155.31	156.87
Inventories, net	123.05	112.56	119.78	127.56	135.27	134.85	144.38	150.15	142.65	149.78	158.77	160.35
Other current assets	31.54	16.44	20.12	29.72	28.22	27.26	27.26	27.26	27.26	27.26	27.26	27.26
Total Current Assets	414.45	397.36	395.08	390.33	410.34	395.21	438.83	493.60	521.30	555.08	598.23	643.28
PPE	361.55	392.71	387.28	444.67	476.34	503.86	522.69	534.89	564.16	593.16	623.41	653.51
Other non-current assets	76.06	106.74	98.94	147.54	181.29	180.47	180.47	180.47	180.47	180.47	180.47	180.47
Total Assets	852.06	896.81	881.29	982.54	1,067.97	1,079.55	1,142.19	1,208.96	1,265.93	1,328.71	1,402.11	1,477.26
LIABILITIES & SHAREHOLDERS' EQUITY												
Short term debt	86.90	57.45	21.87	24.40	23.06	21.71	21.71	21.71	21.71	21.71	21.71	21.71
Other current liabilities	166.88	179.12	167.63	191.23	200.71	177.20	177.20	177.20	177.20	177.20	177.20	177.20
Total Current Liabilities	253.79	236.57	189.50	215.62	223.76	198.91	198.91	198.91	198.91	198.91	198.91	198.91
Long term debt	127.61	125.12	120.51	116.08	113.35	108.23	108.23	108.23	108.23	108.23	108.23	108.23
Other non-current liabilities	241.33	239.40	217.22	208.76	211.15	208.81	208.81	208.81	208.81	208.81	208.81	208.81
Total Liabilities	622.72	601.08	527.24	540.46	548.26	515.96	515.96	515.96	515.96	515.96	515.96	515.96
Total Shareholders' Equity	229.34	295.73	354.05	442.08	519.71	563.59	626.24	693.01	749.98	812.75	886.16	961.30
Total Liabilities & Shareholders' Equity	852.06	896.81	881.29	982.54	1,067.97	1,079.55	1,142.19	1,208.96	1,265.93	1,328.71	1,402.11	1,477.26

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MEMC ELECTRONIC MATERIALS, INC. (WFR) http://www.fbrcorp.com/d.asp?GVKEY=060992&IID=01

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Buy (Outperform)	49.5 %	19.2 %
Hold (Market Perform)	44.6 %	6.1 %
Sell (Underperform)	5.9 %	2.4 %

(1)As of midnight on the business day immediately prior to the date of this publication.
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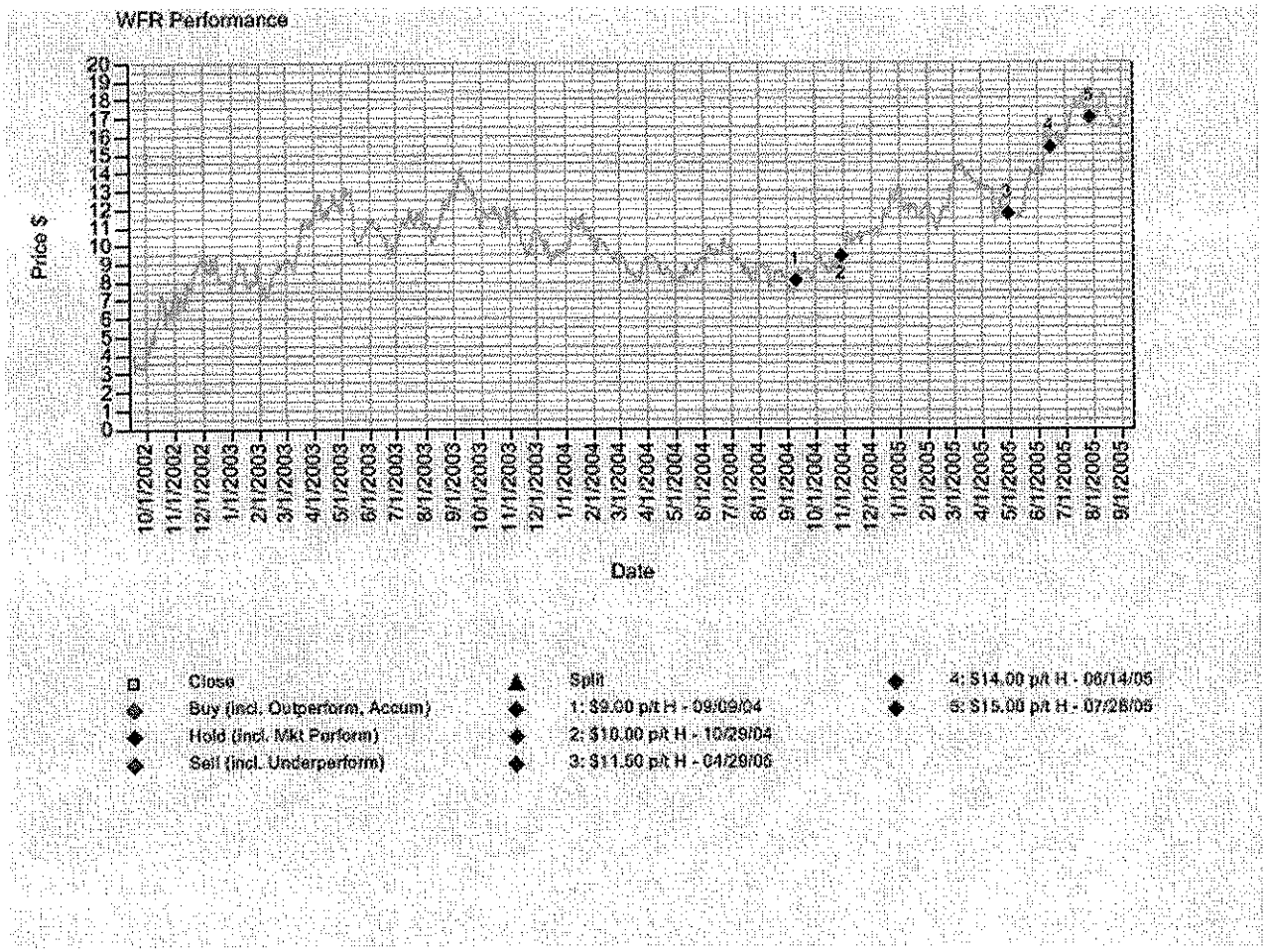
WFR Performance
Price $
Date
Close
Buy (incl. Outperform, Accum)
Hold (incl. Mkt Perform)
Sell (incl. Underperform)
Split
1: $9.00 p/t H - 09/09/04
2: $10.00 p/t H - 10/29/04
3: $11.50 p/t H - 04/29/05
4: $14.00 p/t H - 06/14/05
5: $15.00 p/t H - 07/26/05

MEMC ELECTRONIC MATERIALS, INC. (WFR: $19.07*)

St. Peters, MO
October 13, 2005

Underperform
Price Target $15.00
Opinion Downgrade

STOCK DATA	
52 Week Range	$23.75-$8.46
ADTV - 3 Month	3.0
Market Cap	$3,993.3
Shares Outstanding (Diluted)	224.7

EARNINGS DATA			
EPS (FD Operating)			
Dec.	2004A	2005E	2006E
1Q	$0.16	$0.23A	$0.25
2Q	0.19	0.26A	0.28
3Q	0.27	0.28	0.32
4Q	0.27	0.30	0.33
FY	$0.89	$1.07	$1.18
P/E	14.8x	17.9x	16.1x
FY	2004A	2005E	2006E
Revenue	1,028.0	1,117.5	1,213.1

FINANCIAL DATA	
	2Q05
Cash & Equivalents	101.0
Accounts Receivable	132.1
Inventories	134.9
Current Assets	395.2
Total Assets	1,079.5
Total Current Liabilities	199.9
Long-Term Debt	108.2
Total Debt	129.9
Total Stockholder Equity	563.6

Financial Values In Millions

WFR: Peeling Off the Layers, Separating the Facts from the Hype--Downgrading to Underperform

Summary and Recommendation

We are finally downgrading the shares of MEMC from Market Perform to Underperform, while keeping our price target unchanged at $15. Although we expect MEMC to exceed our 3Q estimates, we believe that upside to '06 EPS estimates will be limited (to, at best, less than 10%) because: 1) increased 300mm raw wafer capacity (a factor that was further highlighted in yesterday's news from SUMCO that it will raise $1.2B in mid November to fund capacity expansion), and 2) our view that the polysilicon pricing impact is negligible to MEMC's overall revenues. These, combined with the appropriate valuation multiple (a matter that, in our view, has been missed by the Street), do not give us a price target that would much exceed the mid teens. The risk to our argument is whether or not MEMC decides to actually purchase a solar panel manufacturing company/facility. But we believe that investors should remain focused on the organic revenues, peak margins and, thus, free cash flows (given the capital-intensive nature of this industry). We continue to encourage investors to swap from MEMC into ATMI, given ATMI's earning power.

Key Points

- **With margins expected to peak at high 20s, earnings upside in '06 is limited to revenue growth.** Given the capital-intensive nature of this industry and a 50% increase in 300mm wafer capacity at MEMC, we do not expect a meaningful expansion to our operating-margin assumptions.
- **Competitors raising capital, resulting in additional wafer capacity in '06, putting pressure on ASPs.** Given the news from SUMCO, we are more certain that there will be sufficient 300mm capacity in '06, thus limiting pricing power.
- **How to best value WFR; consumable vs. capital intensity.** Given that long-term revenue growth is expected to remain 10%-12% (the significant capex to bring up 300mm capacity--or otherwise lose market share--and limited margin expansion), we believe investors should not only consider the P/E multiple, but also the free cash flow outlays and whether or not the company can improve the ROIC.

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First Things First: a Preview of the Third Quarter

MEMC has not announced the date of the 3Q05 earnings release, but we expect the company to exceed our estimates on both the top and bottom lines. As we highlighted in our Asia trip report from early September, based on our checks with Japanese competitors as well as wafer distributors, we believe 300mm wafer prices increased by as much as 10% (QOQ) during the quarter, while 200mm wafer prices were flat (QOQ); we would expect MEMC to have experienced similar increases in wafer ASPs. Additionally, given the company's emphasis on the shortages of polysilicon material, we would also expect some polysilicon-related revenues to have finally started to contribute. Therefore, given the expected upside to revenues and a modest improvement in the overall margins, we expect upside to our earnings estimate.

Figure 1: FBR Estimates versus Company Guidance and Consensus

	3EPQ5E				Compares		4EQ5E		
	Reported	Est	Guidance	Consensus	3Q NQSA	3EPQ4A	Est	Guidance	Consensus
Rev ($M)	$286	$286	$284-$289	$289	$275	$275	$298	N/A	$304
% Y/Y	4%	4%			8%	41%	11%		
% Q/Q	4%	4%	3% - 5%		7%	8%	4%		
GM	37%	37%	improve over 2Q		36%	40%	37%		
OM	26%	26%	improve over 2Q		26%	30%	27%		
Tax Rate	14%	14%			12%	25%	14%		
Shares (M)	225	225			225	220	225		
OP EPS	$ 0.28	$ 0.28		$ 0.29	$ 0.26	$ 0.27	$ 0.30	N/A	$ 0.32

Source: FBR Research and company reports

However, based on our most recent checks with wafer distributors, we do not expect much of a 300mm wafer ASP increase in 4Q05. We remind investors that, in our opinion, a majority of contracts (short- and long-term) are based on volume and not ASPs. Although some may argue that customers are renewing contracts, thus helping MEMC with ASPs, we believe that minimum guaranteed order volume is the main issue in contract negotiations, not ASPs. Given our expectations of 4%-5% QOQ growth in the overall wafer starts in 4Q05, as well as a bit of polysilicon-related revenues, we expect MEMC to guide to, at least, 5% QOQ revenue growth for 4Q05, above our current estimate. Given higher margins in 3Q05, and higher revenues in 4Q05, we also expect the company's 4Q05 operating profit to exceed our current estimate.

Despite Expected Upside to 2H05 Estimates, We See Limited Upside to '06 Estimates

We have been arguing for some time that, unless '06 presents a super-cycle in the semiconductor industry, MEMC's earnings growth (above and beyond our current estimate) is limited. We continue to believe that upside to our next year's EPS estimate is limited because: 1) the lack of a 300mm wafer ASP increase, and 2) the lack of meaningful revenues from the sale of polysilicon material into the spot market.

1) Why the 300mm wafer ASPs increase will be very limited, at best. Figure 2 below illustrates the historical trends in ASP changes when wafer manufacturers migrate to larger wafers. Although the quality of 300mm wafers represents an opportunity by which select wafer manufacturers could gain some pricing power, overall pricing trends are downward at every migration.

In addition, we found out yesterday that SUMCO will proceed with its planned IPO early next month, with the proceeds expected to fund 300mm wafer-capacity increases of as much as 40% per year over the next two years. Wacker-Siltronic also told us, in mid September, that it remains on target with its planned equity offering, which is expected to help fund capex for 300mm wafer-capacity expansion. And, based on our research, we believe Shin-Etsu will increase 300mm wafer capacity by 30%-40% in '06, while Komatsu could increase it by as much as 50%. Such trends, along with our expectations of 45%-50% 300mm wafer-capacity increases at MEMC in '05, lead us to believe that there will not be as much pricing power next year. This, combined with our best-case assumption that 200mm wafer capacity remains unchanged but fully utilized, leads us to believe that the overall ASPs may be flat to up slightly--as a best case.

Figure 2: Historical Blended ASP of Polished and Epitaxial Wafers, at Start of Year, 1998-2004 (Price per Square Inch U.S. Dollars)

Wafer Diameter	1998	1999	2000	2001	2002	2003	2004	CAGR
3 Inches	$2.05	$1.99	$1.96	$1.98	$1.90	$1.84	$1.68	-3.2%
%Y/Y Change		*-3%*	*-2%*	*1%*	*-4%*	*-3%*	*-9%*	
100 mm	$2.02	$1.91	$1.90	$1.90	$1.81	$1.90	$1.85	-1.4%
%Y/Y Change		*-5%*	*0%*	*0%*	*-5%*	*5%*	*-3%*	
125 mm	$1.94	$1.83	$1.83	$1.79	$1.63	$1.53	$1.46	-4.6%
%Y/Y Change		*-6%*	*0%*	*-3%*	*-9%*	*-6%*	*-5%*	
150 mm	$2.00	$1.68	$1.64	$1.65	$1.46	$1.38	$1.28	-7.1%
%Y/Y Change		*-16%*	*-2%*	*1%*	*-12%*	*-5%*	*-7%*	
200 mm	$2.54	$1.95	$1.80	$1.78	$1.44	$1.30	$1.20	-11.7%
%Y/Y Change		*-23%*	*-8%*	*-1%*	*-19%*	*-10%*	*-7%*	
300 mm	N/A	N/A	N/A	N/A	$4.66	$3.03	$2.49	-27.0%
%Y/Y Change						*-35%*	*-18%*	

Source: Gartner Dataquest and FBR Research

2) Why we remain doubtful about the impact of a polysilicon shortage on MEMC's earnings power. As known by any average Joe on the Street, there is a shortage of polysilicon material used in the solar cell industry. It should be noted that the solar-grade poly is of a lower grade when compared to the semiconductor wafer poly grade. The shortage of solar poly grade, in our opinion, has led the spot solar-poly ASP to increase to $60-$65/kg, while the semiconductor-grade poly is currently sold at $90-$100/kg in the spot market. Given this scenario, the bulls have been arguing for incremental revenues as MEMC sells its excess poly material into the solar market.

Although we find the above scenario a clever way of leveraging the company's resources, we still find it hard to quantify the impact of poly sales into the solar market when MEMC's internal polysilicon manufacturing utilization rate was near 100% as of 4Q04. And, based on the past several quarterly conference calls, we do not expect MEMC's internal polysilicon capacity to increase by more than 3%-5% per year for the next two to three years. Therefore, given MEMC's plans to increase its own semiconductor capacity by 100% in '05 and 45%-50% in '06, this leads us to believe that MEMC may not have enough excess polysilicon material to sell into the spot market. As with semi-grade polysilicon, our research suggests that the top raw wafer manufacturers have either secured long-term poly supply, or have their own subsidiaries making polysilicon.

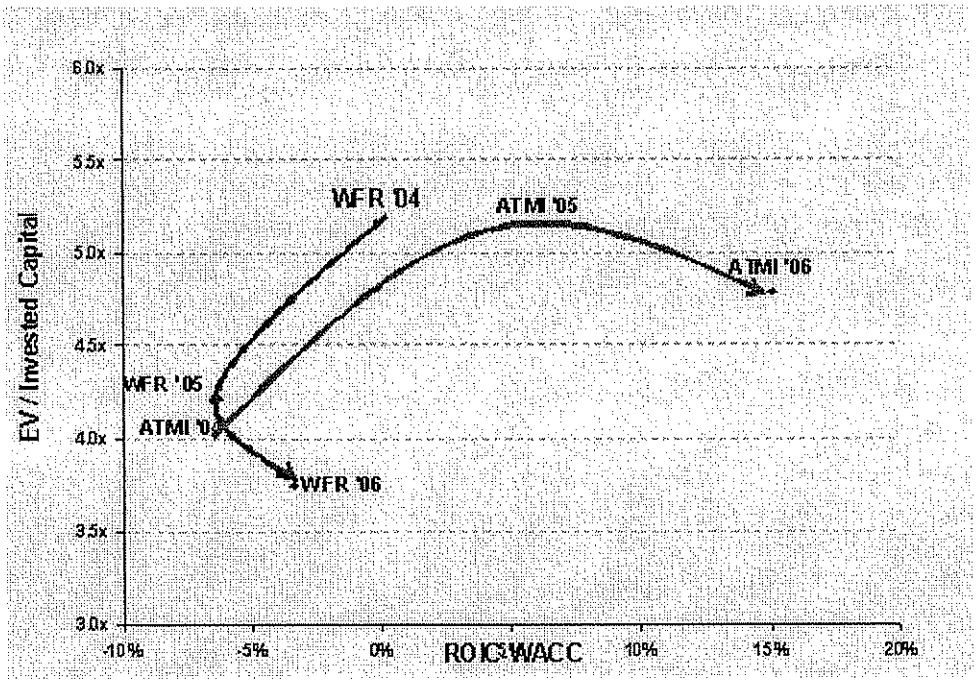
How to Value a Capital-Intensive Commodity Business

Two of the most challenging issues, in our opinion (regarding whether to buy, sell, or hold on to the shares of MEMC), have been valuation and determining what valuation methods/metrics to apply. Although the bulls highlight the company's low P/E multiple, we remind investors of a few critical factors: 1) MEMC's long-term business model is based on a commodity business. Even if such requirements as SOI or strained silicon help with some pricing power, in the long term (>1 year), this remains a commodity business, with the bulk of ASP power coming in the up-cycles; and, even though there are fewer vendors in the industry, the larger vendors with sizable market share are beginning to add capacity as a mean of consolidating or retaining market share. 2) Although this is a commodity business, it still remains a capital-intensive one, given the capacity requirement.

Therefore, we believe investors should focus on free cash flows and ROIC to better determine management's effectiveness. Below, we have provided an analysis of two consumable companies: MEMC, which still requires significant capex (approximately 15% of revenues in '05 and '06); and ATMI, with a capex requirement of less than 10% in '05 and '06. We note that ATMI has become a less capital-intensive company following the company's divestiture of its non-core businesses in '04.

Figure 3 below shows the current enterprise value as a multiple of the invested capital for each company against the ROIC (excluding the cost of capital), a metric illustrating the value that each company generates for its shareholder for each given year. Therefore, as the value created by the company increases for the given assets employed in creating the value, the market is expected to give a higher premium. As explained above, given MEMC's capital requirement and, thus, estimated free cash flow for the years '04-'05, the figure below shows that MEMC, according to our estimates, will not create much "value," though ATMI, through the divestiture of its capital-intensive businesses in '04, is expected to significantly increase the value created. In conclusion, we are using this graph to highlight the importance of the right "comparable peer group" when evaluating the shares of MEMC. And, to that end, we caution investors against using ATMI, or other less capital-intensive consumable companies like ATMI, in the valuation comp group.

Figure 3: EV/Invested Capital versus ROIC-WACC for WFR and ATMI (2004-2006E)



Source: FBR Research and company reports

To the extent that we do not expect a significant upside to our revenue assumptions for next year, and in the absence of operating-margin expansion above and beyond what is in our '06 model, we believe that a 10x-12x multiple is most appropriate. This, combined with less then 10% upside to our '06 EPS estimate (assuming a best-case scenario), leads us to believe that our $15 price target is the most appropriate. We therefore encourage investors to take profit here as, once true earning power is realized, we expect most of the hype to come out of the stock.

Risks

The microelectronics business is highly cyclical, with occasional periods of extreme imbalance between supply and demand.

We expect the overall semiconductor market to continue to improve into 2006. Current risks to this thesis are the following: 1) global GDP weakens unexpectedly; 2) overall semiconductor demand falls below our expectations; and 3) overall capex equipment installations (and thus supply) come in below our current

expectations.

Although Texas Pacific Group's (TPG) ownership in MEMC has been reduced, from 34% to its current level of about 25%, we believe that this is still an overhang on the stock that has nothing to do with fundamentals. We expect further reduction in TPG's ownership going forward.

Although the industry has consolidated, mitigating the risk of wafer-supply overcapacity, we believe that the risk of overcapacity remains, as Japan-based competitors, with deep pockets, could flood the market with 300mm capacity aimed at increasing market share, although such an increase in supply is not expected to fully materialize until 2H06.

Company Profile

Incorporated in 1984, MEMC Electronic Materials, Inc. is engaged in the design, manufacture, and sale of electronic-grade wafers for the semiconductor industry. The company provides wafers in sizes ranging from 100 millimeters (4 inches) to 300 millimeters (12 inches), including three general categories of wafer: prime polished, epitaxial, and test/monitor. Its principal customers are semiconductor device manufacturers, including major memory, microprocessor, and application-specific integrated circuit (ASIC) manufacturers and foundries. MEMC's wafers are used as a starting material for the manufacture of various types of semiconductor devices, including microprocessor, memory, logic, and power devices. The company operates manufacturing facilities in Europe, Malaysia, Japan, South Korea, the United States, and Taiwan.

[FY DEC] 12 Oct 05	MAR04A	JUN04A	SEP04A	DEC04A	FY04	MAR05A	JUN05A	SEP05E	DEC05E	FY05	MAR06E	JUN06E	SEP06E	DEC06E	FY06
REVENUE	228.8	255.5	275.3	269.4	1,028.0	257.9	275.4	286.4	297.9	1,117.5	283.0	297.1	314.9	318.1	1,213.1
% Change Y/Y	21.5%	33.2%	40.5%	30.9%	31.6%	12.7%	7.8%	4.0%	11.0%	8.7%	9.7%	7.9%	10.0%	6.8%	8.6%
% Change Q/Q	11.6%	11.7%	7.7%	-2.5%		-3.9%	6.8%	4.0%	4.0%		-5.0%	5.0%	6.0%	1.0%	
TOTAL COGS	155.4	168.4	164.5	170.2	658.5	164.6	175.0	181.1	186.5	707.1	182.8	188.3	192.0	192.8	755.9
GROSS PROFIT	73.3	87.2	110.7	98.2	369.4	93.3	100.4	105.3	111.3	410.4	100.2	108.8	122.9	125.3	457.2
% Total Revenue	32.1%	34.1%	40.2%	36.6%	35.9%	36.2%	36.5%	36.8%	37.4%	36.7%	35.4%	36.6%	39.0%	39.4%	37.7%
R&D	8.9	9.3	9.4	10.4	38.0	11.4	11.0	11.0	10.5	43.9	10.0	10.5	11.0	11.1	42.7
% Total Revenue	3.9%	3.6%	3.4%	3.9%	3.7%	4.4%	4.0%	3.8%	3.5%	3.9%	3.5%	3.5%	3.5%	3.5%	3.5%
SG&A	17.2	17.8	17.8	19.2	71.9	18.2	18.3	18.5	20.3	75.3	19.8	21.4	22.7	22.9	86.8
% Total Revenue	7.5%	7.0%	6.5%	7.1%	7.0%	7.0%	6.7%	6.5%	6.8%	6.7%	7.0%	7.2%	7.2%	7.2%	7.2%
OPERATING PROFIT	47.2	60.0	83.6	68.6	259.5	63.7	71.1	75.8	80.6	291.2	70.4	77.0	89.2	91.3	327.8
% Total Revenue	20.7%	23.5%	30.4%	25.5%	25.2%	24.7%	25.8%	26.5%	27.1%	26.1%	24.9%	25.9%	28.3%	28.7%	27.0%
% Change Y/Y	44.4%	78.2%	128.9%	72.9%	81.9%	34.9%	18.4%	-9.3%	17.4%	12.2%	10.4%	8.3%	17.7%	13.2%	12.6%
% Change Q/Q	19.0%	27.1%	39.2%	-17.9%		-7.2%	11.5%	6.7%	6.3%		-12.7%	9.3%	15.9%	2.3%	
OTHER	6.5	(9.1)	(0.4)	2.4	(0.6)	(1.3)	(1.5)	(1.0)	(1.0)	(4.8)	(1.0)	(0.8)	(0.5)	(0.5)	(2.8)
PRETAX PROFIT	53.7	51.0	83.2	71.1	258.9	62.4	69.6	74.8	79.6	286.4	69.4	76.2	88.7	90.8	325.1
% Total Revenue	23.5%	19.9%	30.2%	26.5%	25.2%	24.2%	25.3%	26.1%	26.7%	25.6%	24.5%	25.6%	28.2%	28.5%	26.8%
% Change Y/Y	83.2%	47.5%	70.9%	64.0%	66.1%	16.2%	36.5%	-10.0%	12.0%	10.6%	11.1%	9.5%	19.6%	14.0%	13.5%
% Change Q/Q	24.0%	-5.1%	63.1%	-14.6%		-12.1%	11.4%	7.5%	6.4%		-12.8%	9.8%	16.4%	2.3%	
TAXES	13.4	12.7	20.8	10.6	57.6	9.4	8.7	10.2	10.8	39.0	10.4	11.4	13.3	13.6	48.8
Tax Rate	25.0%	25.0%	25.0%	15.0%	22.2%	15.0%	12.4%	13.6%	13.6%	13.6%	15.0%	15.0%	15.0%	15.0%	15.0%
OTHER AFTER TAX	1.7	(17.5)	-	(11.0)	(26.8)	(25.0)	-	-	-	(25.0)	-	-	-	-	-
MINORITY INTERESTS	2.7	3.0	2.7	2.4	10.7	1.8	2.0	2.0	2.0	7.8	2.0	2.0	2.0	2.0	8.0
NET INCOME - CONT OPS	35.9	43.1	59.7	59.0	197.7	51.3	58.9	62.6	66.8	239.6	57.0	62.8	73.4	75.1	268.3
% Total Revenue	15.7%	16.9%	21.7%	22.0%	19.2%	19.9%	21.4%	21.9%	22.4%	21.4%	20.1%	21.1%	23.3%	23.6%	22.1%
% Change Y/Y	81.9%	57.9%	69.7%	71.4%	69.5%	42.9%	36.8%	4.9%	13.2%	21.2%	11.0%	6.6%	17.2%	12.5%	12.0%
% Change Q/Q	4.4%	20.0%	38.6%	-1.2%		-13.0%	14.8%	6.3%	6.8%		-14.7%	10.2%	16.9%	2.4%	
NET INCOME - TOTAL	35.9	60.6	59.7	70.0	226.2	76.3	58.9	62.6	66.8	264.6	57.0	62.8	73.4	75.1	268.3
% Total Revenue	15.7%	23.7%	21.7%	26.1%	22.0%	29.6%	21.4%	21.9%	22.4%	23.7%	20.1%	21.1%	23.3%	23.6%	22.1%
% Change Y/Y	81.9%	122.2%	69.7%	103.4%	94.0%	112.5%	-2.8%	4.9%	-4.6%	17.0%	-25.3%	6.6%	17.2%	12.5%	1.4%
% Change Q/Q	4.4%	68.8%	-1.5%	17.2%		9.1%	-22.8%	6.3%	6.6%		-14.7%	10.2%	16.9%	2.4%	
SHARES	222.1	221.0	220.4	222.1	221.4	223.9	224.7	225.1	225.5	224.9	225.9	226.3	226.7	227.1	226.5
EPS - CONT OPS	$ 0.16	$ 0.19	$ 0.27	$ 0.27	$ 0.89	$ 0.23	$ 0.26	$ 0.28	$ 0.30	$ 1.07	$ 0.25	$ 0.28	$ 0.32	$ 0.33	$ 1.18
% Change Y/Y	72.5%	55.6%	72.3%	72.1%	67.5%	41.8%	34.5%	2.7%	11.5%	19.4%	10.1%	5.8%	16.3%	11.8%	11.1%
% Change Q/Q	4.8%	20.6%	39.0%	-2.0%		-13.7%	14.4%	6.2%	6.4%		-14.8%	10.0%	16.7%	2.2%	
EPS - TOTAL	$ 0.16	$ 0.27	$ 0.27	$ 0.32	$ 1.02	$ 0.34	$ 0.26	$ 0.28	$ 0.30	$ 1.18	$ 0.25	$ 0.28	$ 0.32	$ 0.33	$ 1.18
% Change Y/Y	72.5%	118.9%	72.3%	104.2%	91.7%	110.8%	-4.4%	2.7%	-6.0%	15.2%	-26.0%	5.8%	16.3%	11.8%	0.6%
% Change Q/Q	4.8%	69.6%	-1.2%	16.3%		8.2%	-23.1%	6.2%	6.4%		-14.8%	10.0%	16.7%	2.2%	

WFR Cash Flow Model ($ Millions)	1Q04A	2Q04A	3Q04A	4Q04	1Q05	2Q05	3Q05E	4Q05E	1Q06E	2Q06E	3Q06E	4Q06E
Net Income from Operations	35.91	60.60	59.72	69.97	76.31	58.91	62.65	66.77	56.97	62.78	73.41	75.14
Depreciation & Amortization	9.92	10.24	11.44	12.53	13.34	14.30	15.00	16.00	16.00	16.00	15.75	15.90
(Incr) Decr in Accounts Receivable	(16.23)	(19.61)	(13.01)	11.15	10.19	(1.57)	(9.13)	(5.65)	7.34	(6.98)	(8.79)	(1.55)
(Incr) Decr in Inventories	(13.56)	10.49	(7.22)	(7.79)	(7.70)	0.41	(9.53)	(5.78)	7.51	(7.13)	(8.99)	(1.59)
(Incr) Decr in Other Current Assets	(9.40)	10.10	1.32	(9.61)	1.50	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Incr (Decr) in Current Liab. (Excl. debt)	27.31	11.01	(6.26)	31.86	(20.31)	(23.50)	0.00	0.00	0.00	0.00	0.00	0.00
=Cash from Operations	33.95	82.83	46.00	108.12	73.34	49.51	58.99	71.34	87.82	64.67	71.37	87.91
(Incr) Decr in Other Non-Current Assets	(57.23)	0.01	0.06	0.01	(0.03)	0.82	0.00	0.00	0.00	0.00	0.00	0.00
Capital Spending (Net of sales)	(29.00)	(44.00)	(25.50)	(51.73)	(54.40)	(51.20)	(34.03)	(28.00)	(45.27)	(45.00)	(46.00)	(46.00)
=Cash from Investing	(86.23)	(43.99)	(25.44)	(51.72)	(54.43)	(50.38)	(34.03)	(28.00)	(45.27)	(45.00)	(46.00)	(46.00)
Incr (Decr) in Non-curr Liab. (Excl. debt)	(23.55)	(7.57)	(1.17)	(8.47)	5.05	(2.34)	0.00	0.00	0.00	0.00	0.00	0.00
Additional Debt	83.42	(31.94)	(40.19)	(78.90)	(4.08)	(6.46)	0.00	0.00	0.00	0.00	0.00	0.00
Common Stock/Other Equity	(0.18)	5.79	0.60	18.06	1.31	(15.03)	(0.00)	0.00	0.00	0.00	0.00	0.00
=Cash from Financing	59.68	(33.73)	(40.75)	(69.31)	2.28	(23.83)	(0.00)	0.00	0.00	0.00	0.00	0.00
=Increase/(Decrease) in Cash	7.41	5.10	(20.20)	(12.91)	21.19	(24.70)	24.96	43.34	42.55	19.67	25.37	41.91
+Beginning Cash	130.70	140.62	129.49	103.31	92.31	116.32	101.00	125.96	169.30	211.85	231.52	256.89
+Adjustment	(0.40)	(13.79)	(5.94)	1.91	2.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
=End Cash	137.70	131.93	103.35	92.31	116.32	91.62	125.96	169.30	211.85	231.52	256.89	298.80
FREE CASH FLOW												
Quarterly	4.95	38.83	20.50	56.39	18.94	(1.89)	24.96	43.34	42.55	19.67	25.37	41.91
% Y/Y	-59%	668%	133%	120%	282%	-104%	22%	-23%	125%	-1266%	2%	-3%
% Q/Q	-81%	684%	-47%	175%	-66%	-109%	-1581%	74%	-2%	-54%	23%	65%
FY-End				$ 121				$ 86				$ 129
% Y/Y				138.5%				-29.1%				51.4%
FCF Margin	2%	15%	7%	21%	7%	-1%	9%	15%	15%	7%	8%	13%
YE FCF Margin				12%				8%				11%
ASSETS												
Cash & equivalents	140.62	129.49	103.31	92.31	116.32	101.00	125.96	169.30	211.85	231.52	256.89	298.80
Accounts receivable, net	119.25	138.86	151.87	140.73	130.53	132.11	141.24	146.89	139.55	146.52	155.31	156.87
Inventories, net	123.05	112.56	119.78	127.56	135.27	134.85	144.38	150.15	142.65	149.78	158.77	160.35
Other current assets	31.54	16.44	20.12	29.72	28.22	27.26	27.26	27.26	27.26	27.26	27.26	27.26
Total Current Assets	414.45	397.36	395.08	390.33	410.34	395.21	438.83	493.60	521.30	555.08	598.23	643.28
PPE	361.55	392.71	387.28	444.67	476.34	503.86	522.89	534.89	564.16	593.16	623.41	653.51
Other non-current assets	76.06	106.74	93.94	147.54	181.29	180.47	180.47	180.47	180.47	180.47	180.47	180.47
Total Assets	852.06	896.81	881.29	982.54	1,067.97	1,079.55	1,142.19	1,208.96	1,265.93	1,328.71	1,402.11	1,477.26
LIABILITIES & SHAREHOLDERS' EQUITY												
Short term debt	86.90	57.45	21.87	24.40	23.06	21.71	21.71	21.71	21.71	21.71	21.71	21.71
Other current liabilities	166.88	179.12	167.63	191.23	200.71	177.20	177.20	177.20	177.20	177.20	177.20	177.20
Total Current Liabilities	253.78	236.57	189.50	215.62	223.76	198.91	198.91	198.91	198.91	198.91	198.91	198.91
Long term debt	127.61	125.12	120.51	116.09	113.35	108.23	108.23	108.23	108.23	108.23	108.23	108.23
Other non-current liabilities	241.33	239.40	217.22	208.76	211.15	208.81	208.81	208.81	208.81	208.81	208.81	208.81
Total Liabilities	622.72	601.08	527.24	540.46	548.26	515.96	515.96	515.96	515.96	515.96	515.96	515.96
Total Shareholders' Equity	229.34	295.73	354.05	442.08	519.71	563.59	626.24	693.01	749.98	812.75	886.16	961.30
Total Liabilities & Shareholders' Equity	852.06	896.81	881.29	982.54	1,067.97	1,079.55	1,142.19	1,208.96	1,265.93	1,328.71	1,402.11	1,477.26
LIQUIDITY RATIOS												
Current Ratio	1.63	1.68	2.08	1.81	1.83	1.99	2.21	2.48	2.62	2.79	3.01	3.23
Quick Ratio	1.02	1.13	1.35	1.08	1.10	1.17	1.34	1.59	1.77	1.90	2.07	2.29
Net Working Capital	$ 161	$ 161	$ 206	$ 175	$ 187	$ 196	$ 240	$ 295	$ 322	$ 356	$ 399	$ 444
Long-term Debt/Equity	0.56	0.42	0.34	0.26	0.22	0.19	0.17	0.16	0.14	0.13	0.12	0.11
Total Debt/Equity	94%	62%	40%	32%	26%	23%	21%	19%	17%	16%	15%	14%
Operating Income/Assets Ex Cash	5%	6%	8%	7%	5%	6%	6%	6%	6%	6%	6%	6%
Operating Income/Assets Ex Cash (12 mo)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
BOOK & CASH VALUE												
Book Value Per Share	$1.03	$1.34	$1.61	$1.99	$2.32	$2.51	$2.78	$3.07	$3.32	$3.59	$3.91	$4.23
Tangible Book Value/Share	$1.03	$1.34	$1.61	$1.99	$2.32	$2.51	$2.78	$3.07	$3.32	$3.59	$3.91	$4.23
Cash Per Share	$0.63	$0.59	$0.47	$0.42	$0.52	$0.45	$0.56	$0.75	$0.94	$1.02	$1.13	$1.32
Net Cash Per Share	($0.33)	($0.24)	($0.18)	($0.22)	($0.09)	($0.13)	($0.02)	$0.17	$0.36	$0.45	$0.56	$0.74

IMPORTANT INFORMATION CONCERNING FRIEDMAN, BILLINGS, RAMSEY & CO., INC.

Company Specific Disclosures

Specific disclosures are applicable to tickers indicated.

MEMC ELECTRONIC MATERIALS, INC. (WFR) http://www.fbrcorp.com/d.asp?GVKEY=060992&IID=01

General Disclosures

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Rating	FBRC Research Distribution[1]	FBRC Banking Services in the past 12 months[1]
Buy (Outperform)	49.4 %	19.1 %
Hold (Market Perform)	44.3 %	7.3 %
Sell (Underperform)	6.3 %	2.2 %

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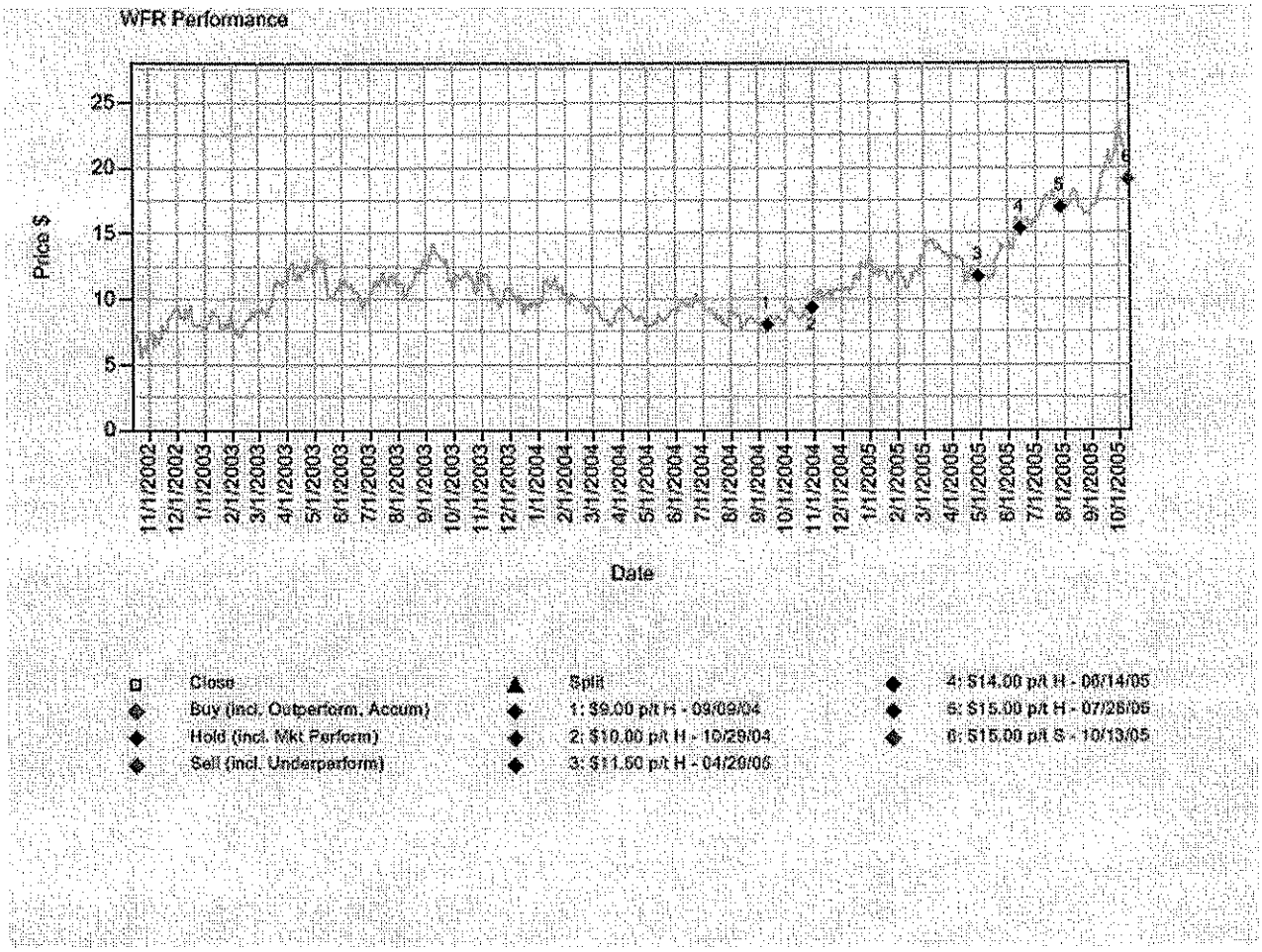
WFR Performance
Price $
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Close
Buy (incl. Outperform, Accum)
Hold (incl. Mkt Perform)
Sell (incl. Underperform)
Split
1: $9.00 p/t H - 09/09/04
2: $10.00 p/t H - 10/29/04
3: $11.50 p/t H - 04/29/05
4: $14.00 p/t H - 06/14/05
5: $15.00 p/t H - 07/26/05
6: $15.00 p/t S - 10/13/05

Princeton Tech Research

SOLEIL

Equity Research
Company Update
Estimates Change
Target Price Change

September 29, 2005

MEMC Electronic Materials
WFR, $21.52, Buy
Corrected: Wafer Pricing Beginning To Firm At Smaller Accounts

609-947-3365

Paul Leming, CFA
609-799-4809
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Sales and Trading
1-800-569-2407
www.soleilgroup.com

Ticker	WFR
Market Cap (M)	$4,519.2
Price	$21.52
52-Wk. Range	$22--$8
Rating	Buy
Price Target	$30.00
Shares Out (M)	210.0
Dividend	NA
Yield	NM
Trading Volume(M)	2.536
Market	NYSE

Sector Opinion:
We believe investors should be over-weighted in semiconductor stocks. From the summer of 2004 through February 2005, the semiconductor industry went through the most severe inventory correction of the last 20 years (this excludes the bursting of the tech bubble in 2001 and 2002, which was – we believe – something more than just an "inventory correction"). Peak-to-trough, unit volumes declined 13% as excess inventories throughout the channel were reduced. With this inventory correction now behind the industry, we believe unit volumes will accelerate to the upside over the next four to six quarters, driving earnings and cash flows substantially higher in this highly leveraged industry. With many companies in the semiconductor industry: 1) Sitting on debt-free balance sheets; with 2) Cash equal to 10% or more of their market capitalizations; and 3) Free cash flow accelerating to the upside, we believe the recent move by many semiconductor companies to increase the return of cash to shareholders through increased dividends and share repurchases is going to accelerate over the next 12 to 18 months. The combination of accelerating earnings driven by an upturn in industry volumes and accelerating return of cash to shareholders will – we believe – be the catalyst for the semiconductor stocks to significantly outperform the S&P 500 from current levels.

Action

We are increasing our estimates for MEMC Electronic Materials' earnings for the fourth quarter of 2005 from 32 to 35 cents per share. This increase in estimates is being driven by signs that silicon wafer prices are beginning to firm at smaller customers - and is coming a quarter sooner than we had previously forecast. We continue to believe consensus estimates for 2006 – at roughly $1.40 per share excluding our estimate of $1.56 a share – are low and will move up over the next several quarters as the silicon wafer industry moves into the strongest pricing environment it has seen in almost a decade. We are also increasing our price target on MEMC's shares from $24 to $30 as we believe MEMC's improved financial performance warrants the company being valued in line with the "average" semiconductor company.

Fiscal Year Dec		Fiscal Year			Calendar Year			Curr. Qtr.	Next Qtr.	Yr. Ago Qtr.
	$	F05E	F06E	F07E	C05E	C06E	C07E	3Q05E	4Q05E	3Q04A
Revenue	Current	1.136B	1.385B	1.528B	1.136B	1.385B	1.528B	293.4	309.0	—
	Previous	1.132B	1.385B	1.528B	1.132B	1.385B	1.528B	292.0	307.0	275.3
EPS	Current	1.15	1.56	1.78	1.15	1.56	1.78	0.31	0.35	—
	Previous	1.12	1.56	1.78	1.12	1.56	1.78	0.31	0.32	0.27
P/S	Current	4.0	3.3	3.0	4.0	3.3	3.0	—	—	—
P/E	Current	18.7	13.8	12.1	18.7	13.8	12.1	—	—	—

Revenues in millions, except when noted.

Silicon Wafer Prices Beginning To Firm - Our checks indicate that pricing for silicon wafers is beginning to firm ***at smaller accounts***. This firming is coming sooner than we have previously factored into our estimates (the first quarter of 2006 is when we had previously factored in the first upward movement in wafer pricing). We continue to believe that 1) High capacity utilization rates in the silicon wafer industry and 2) ***Extremely*** limited supplies of polysilicon are creating the strongest pricing environment the silicon wafer industry has seen in a decade.

Volume Increases Should Bring A Resumption Of Productivity Gains - MEMC has - by our calculations - seen little, if any, improvement in its cost per square inch of silicon over the last year, as volumes in the silicon wafer industry have stagnated. We believe the strong recovery in volumes that began in the second quarter, and is expected to continue through the middle of 2006 (at least), is going to begin to result in MEMC's manufacturing costs per square inch once again trending lower beginning in the fourth quarter of this year.

Increasing Price Target On MEMC - We are increasing our price target on MEMC Electronic Materials from $24 to $30 a share. Our new price target assumes is based on MEMC selling at the mid-point of our new target EV-to-EBITDA multiple range of 10X to 15X on our 2006 estimates. The new multiple range of 10X to 15X 2006 results is in line with the average large-cap semiconductor company - a group that MEMC's growth and profitability is in line with.

Increasing Q4 Estimate
We are increasing our estimates for MEMC's earnings in the fourth quarter of 2005. Specifically, we are increasing our revenue estimate from $307mm to $309mm and our EPS estimate from $0.32 a share to $0.35 a share. Two factors are driving the increase in our estimates:

Wafer Pricing Starting To Firm – One of the questions we are asked most frequently about MEMC Electronic Materials is: "If the outlook is so bright, why aren't prices moving up NOW?" We believe that question is going to be rendered moot over the next 60 days as it becomes increasingly clear that silicon wafer prices ***are*** moving up. It is important that investors recognize several facts about the silicon wafer business over the last several quarters that have kept pricing under pressure – and three of these four factors are going to reverse – dramatically – over the next 90 days.

- ***Silicon wafer volumes have not grown over the last year*** – The inventory correction that rolled through the semiconductor industry in the second half of 2004 and first two months of 2005 had a significant impact on silicon wafer volumes as well. As shown in the table below, square inches of silicon shipped to the semiconductor industry in the second quarter of this year were still below the peak levels reached during Q3 2004.

Table 1
Shipments of Silicon Wafers
(millions of square inches)

Q3 '04	Q4 '04	Q1 '05	Q2 '05	Q3 '05E	Q4 '05E
1,629	1,486	1,465	1,606	1,730	1,771

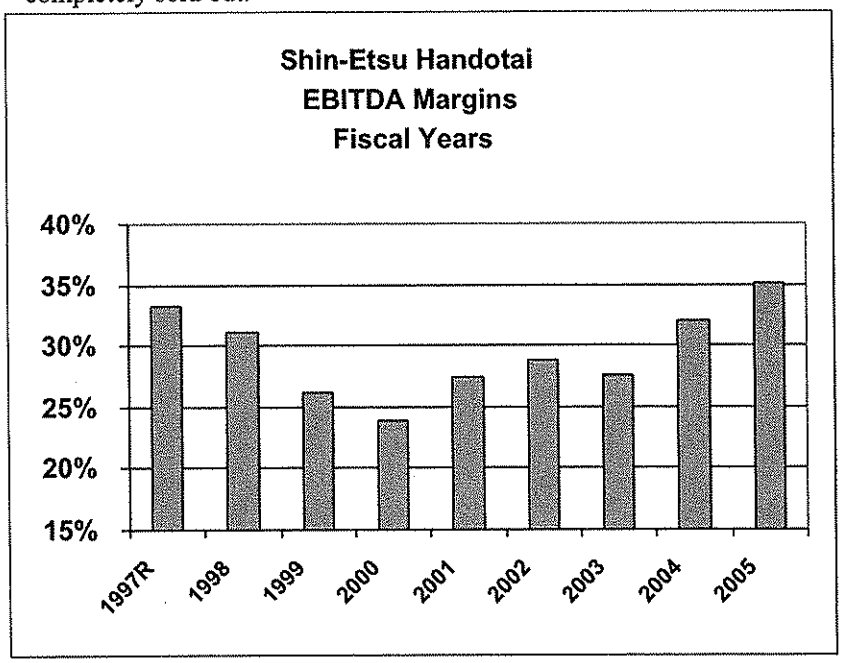
Source: SEMI, and Princeton Tech Research estimates

- ***Capacity utilization declined over the last year.*** With declining volumes and increasing capacity (for 300mm silicon wafers), capacity utilization has declined over the last year in the silicon wafer industry. The decline in capacity utilization was particularly sharp for smaller wafer sizes (as the ramp of 300mm semiconductor fabs continued through the downturn).

- ***Polysilicon costs – to the major silicon wafer producers – have been flat over the last three quarters*** – While there has been a great deal of commentary over the last several months about sharp increases in polysilicon prices, the reality is that for the major silicon wafer producers – Shin-Etsu, SUMCO, and Siltronic – polysilicon costs do not move appreciably ***during*** the year. Their polysilicon costs are ***largely*** set on an annual basis at the beginning of each year, and remain relatively constant over the course of the year.

- ***Profitability at the market leader – Shin-Etsu – has been high...and is moving higher without the benefit of any price increases.*** The chart below shows that Shin-Etsu's

profitability has been improving steadily over the last several years, and should in the current fiscal year, be at record levels. This strong level of profitability makes it somewhat difficult for the market leader to justify increasing prices in an environment where capacity is not completely sold out.



Roll all of those factors together – volumes below year ago levels, declining capacity utilization, flat polysilicon costs, and high (and improving) profitability at the market leader – and it is not hard to understand why silicon wafer pricing has not been moving up over the last year. However, ***we believe three of those four variables are going to change (dramatically) over the next 90 days***:

- We expect the silicon wafer industry to report record shipments of silicon for the third quarter of 2005. We believe the silicon wafer industry will ship 7% to 8% more square inches of silicon in the third quarter of 2005 than the 1.629 billion square inches shipped in the peak quarter of 2004. the third quarter of 2004. And, we look for further growth in square inches in the fourth quarter.
- Driven by this growth, ***we believe capacity utilization for 200mm wafers will move solidly above 95% before year-end***; and
- Polysilicon pricing will move up roughly 20% to the major Japanese wafer producers on January 1st.

All of these developments are beginning to be felt in the silicon wafer market now, and are beginning to have an impact on wafer pricing for smaller customers.

We have been forecasting flat ASPs for MEMC in the fourth quarter. ***We are now bumping that forecast up to a 2% increase in wafer ASPs for the fourth quarter as our checks indicate that market leader Shin-Etsu is beginning to have success moving pricing higher at smaller customers.*** We believe these first signs of improved pricing will broaden through the fourth quarter and continue to believe wafer pricing will move higher through the first half of 2006 as more and more constraints on silicon wafer availability (both manufacturing capacity for 200mm wafers and polysilicon availability) become apparent in the marketplace.

Productivity Gains To Resume – The second factor that we believe will aid fourth quarter earnings is a resumption of the productivity gains that were consistently seen at the company over the last several years, but have been absent over the last year as consistent volume growth has been absent. With a return of steady volume growth over the last two quarters, and continued volume gains through (at least) the middle of 2006, we believe MEMC Electronic Materials is going to once again see a steady decline in its cost per square inch of silicon. We previously have been factoring flat costs per square inch into our earnings model.

Valuation

The second most frequent question we are asked by investors regarding MEMC (after "Why aren't wafer prices going up now") is how to value the company. What's the right P/E multiple for MEMC? And our response is that ***P/E multiples are a particularly poor way to value MEMC***. MEMC's reported earnings are inflated by a low tax rate and unrealistically low levels of depreciation (a point the company disagrees with – and we disagree with them). MEMC cries out to be valued on an EV-to-EBITDA basis. ***By using EBITDA to value the company, investors take the company's tax rate and depreciation levels off the table as issues***. Which leaves the question – what is the appropriate EV-to-EBITDA multiple for MEMC?

In the table below, we compare MEMC's revenue growth and EBITDA profitability to a dozen large-cap semiconductor companies.

Table 2
Semiconductor Industry
Revenue Growth, EBITDA Margins And Valuation

	Revenue Growth Last 3 Years*		2005E EBITDA Margin		2005E EV-to-EBITDA Multiple
MRVL	201%	LLTC	60%	BRCM	27.5
BRCM	165%	MXIM	51%	MRVL	25.7
LLTC	81%	MCHP	48%	XLNX	18.4
ALTR	62%	INTC	43%	LLTC	16.1
TXN	58%	NSM	34%	ALTR	15.5
WFR	52%	ALTR	33%	MXIM	15.4
XLNX	49%	WFR	33%	ADI	14.6
MXIM	46%	TXN	31%	MCHP	12.7
INTC	36%	MRVL	31%	WFR	12.6
STM	36%	ADI	31%	TXN	12.4
MCHP	34%	XLNX	28%	NSM	12.4
ADI	31%	STM	26%	INTC	8.2
NSM	11%	BRCM	22%	STM	6.7

***Measured from the Sept. 2002 quarter to the September 2005 quarter.**

Source: Company Reports and Princeton Tech Research estimates.

MEMC's revenue growth over the last three years has been modestly above that of the median

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of the industry, and it's EBITDA profitability is currently right at the median of the industry. Yet, it's EV-to-EBITDA multiple is below the median of the industry.

Given the company's strong growth over the last three years, and the likelihood that it's profitability will continue to improve over the next several years, we are raising our EV-to-EBITDA multiple range on MEMC Electronics from the 8X to 12X range we have been using to the 10X to 15X multiple range we use for the average semiconductor company in our coverage universe.

An assumed multiple range of 10X to 15X on our 2006 estimates for MEMC's financial performance produces a target price range of $24 to $36 for the company's shares in 2006. We are raising our price target on MEMC Electronic Materials from $24 a share to the midpoint - $30 a share – of this valuation range.

Risks

We believe there is one over-riding risk facing investors in MEMC Electronic Materials: A sharp deceleration in the rate of global economic growth over the next several quarters. Such a slowdown in economic growth would undoubtedly reduce the demand for semiconductors, and – in turn – the demand for silicon wafers. Any reduction in the demand for silicon wafers will eliminate the tightness in supply for silicon wafers and polysilicon. Without tightness in those markets, pricing for silicon wafers - the linchpin of our investment story - is likely to come in below our expectations.

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Analyst Certification

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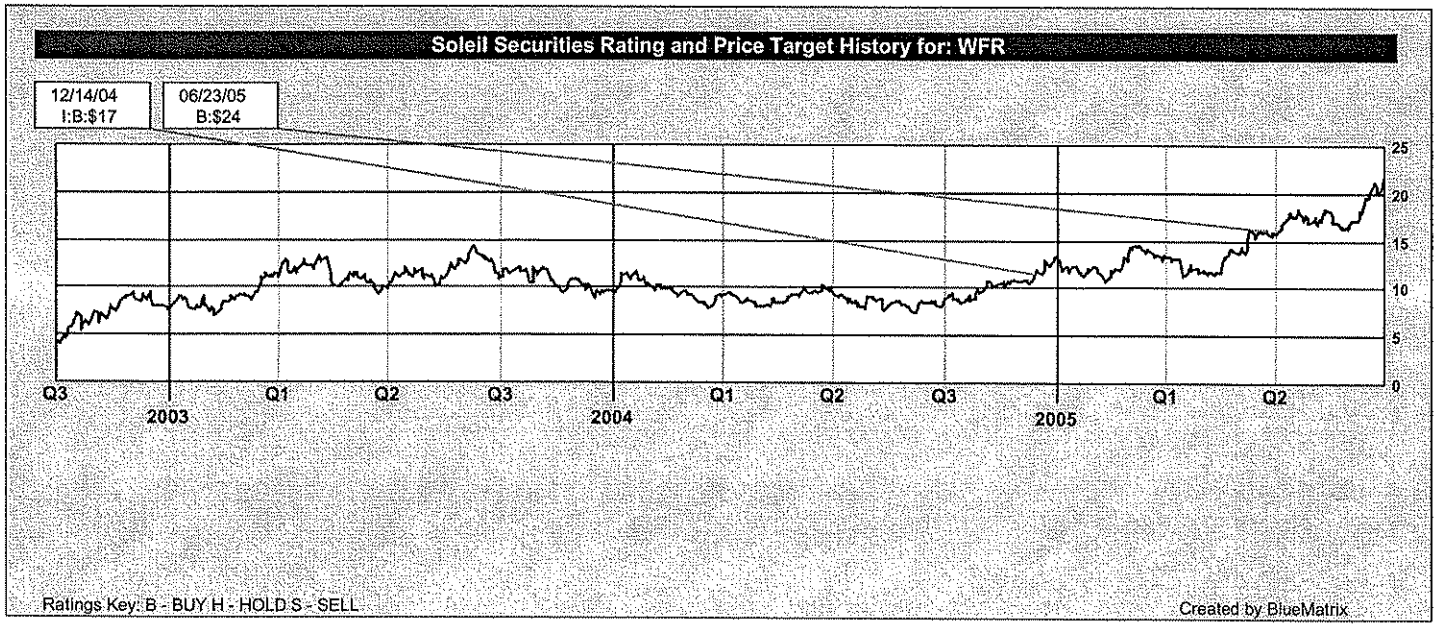
			IB Serv./Past 12 Mos.		Technology			IB Serv./Past 12 Mos.	
Rating	Count	Percent	Count	Percent	Rating	Count	Percent	Count	Percent
BUY [BUY]	222	55.64	0	0.00	BUY [BUY]	33	54.10	0	0.00
HOLD [HOLD]	145	36.34	0	0.00	HOLD [HOLD]	22	36.07	0	0.00
SELL [SELL]	32	8.02	0	0.00	SELL [SELL]	3	4.92	0	0.00



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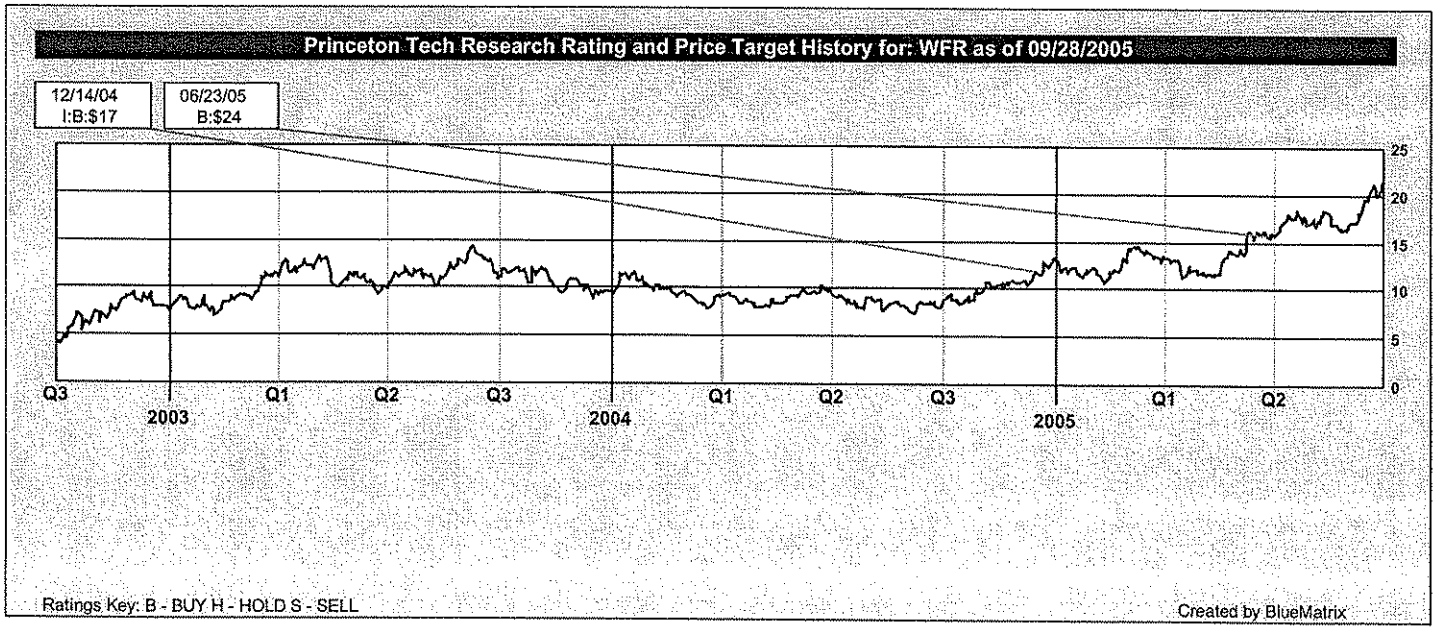

Appendix 1
MEMC Electronic Materials

Quarterly Income Statement
(Dollars in Millions, except per share data)

	2004					2005E					2006E					2007E				
	Q1	Q2	Q3	Q4	Year	Q1A	Q2A	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year
Net Sales	228.76	255.54	275.26	268.38	1,027.96	257.85	275.39	293.44	309.00	1,135.68	325.00	345.00	355.00	360.00	1,385.00	365.00	375.00	390.00	398.00	1,528.00
Yr-to-Yr % Change	*21.5%*	*33.2%*	*40.5%*	*30.9%*		*12.7%*	*7.8%*	*6.6%*	*15.1%*		*26.0%*	*25.3%*	*21.0%*	*16.5%*		*12.3%*	*8.7%*	*9.9%*	*10.6%*	
Qtr-to-Qtr % Change	*11.6%*	*11.7%*	*7.7%*	*-2.5%*		*-3.9%*	*6.8%*	*6.6%*	*5.3%*		*5.2%*	*6.2%*	*2.9%*	*1.4%*		*1.4%*	*2.7%*	*4.0%*	*2.1%*	
Cost of Goods Sold (Before Depreciation)	145.50	158.14	153.10	157.68	614.41	151.24	160.58	164.70	166.07	642.61	174.74	184.96	186.25	183.92	729.87	188.74	195.46	198.50	197.22	779.92
	$ 0.70	$ 0.71	$ 0.65	$ 0.70		$ 0.70	$ 0.70	$ 0.68	$ 0.67											
Gross Profit (Before Depreciation)	**83.26**	**97.40**	**122.19**	**110.70**	**413.55**	**106.62**	**114.80**	**128.74**	**142.93**	**493.08**	**150.26**	**160.04**	**168.75**	**176.08**	**655.13**	**176.26**	**179.54**	**191.50**	**200.78**	**748.08**
Margin	*36.4%*	*38.1%*	*44.4%*	*41.2%*		*41.3%*	*41.7%*	*43.9%*	*46.3%*		*46.2%*	*46.4%*	*47.5%*	*48.9%*		*48.3%*	*47.9%*	*49.1%*	*50.4%*	
Incremental Margin	*50.2%*	*52.5%*	*72.4%*	*60.8%*		*80.3%*	*87.6%*	*36.1%*	*79.3%*		*65.0%*	*65.0%*	*65.0%*	*65.0%*		*65.0%*	*65.0%*	*65.0%*	*65.0%*	
Expenses																				
Selling, General & Admin Expenses	17.19	17.84	17.77	19.15	71.95	18.15	18.34	19.00	20.09	75.58	21.13	22.43	23.08	23.40	90.03	23.73	24.36	25.35	25.87	99.32
Research & Development Expense	8.91	9.27	9.41	10.38	37.98	11.40	11.01	11.00	12.36	45.77	13.00	13.80	14.20	14.40	55.40	14.60	15.00	15.60	15.92	61.12
Total	26.10	27.11	27.18	29.53	109.92	29.55	29.35	30.00	32.45	121.35	34.13	36.23	37.28	37.80	145.43	38.33	39.36	40.95	41.79	160.44
EBITDA	**57.16**	**70.29**	**95.01**	**81.16**	**303.63**	**77.07**	**85.44**	**98.74**	**110.48**	**371.73**	**116.14**	**123.82**	**131.48**	**138.28**	**509.71**	**137.94**	**140.17**	**150.55**	**158.99**	**587.64**
Margin	*25.0%*	*27.5%*	*34.5%*	*30.2%*		*29.9%*	*31.0%*	*33.6%*	*35.8%*		*35.7%*	*35.9%*	*37.0%*	*38.4%*		*37.8%*	*37.4%*	*38.6%*	*39.9%*	
Depreciation & Amortization	9.92	10.24	11.44	12.53	44.14	13.34	14.36	15.05	15.73	58.49	16.41	17.50	18.59	19.68	72.20	20.78	21.98	21.98	21.98	86.71
Operating Income	**47.24**	**60.05**	**83.57**	**68.64**	**259.49**	**63.73**	**71.08**	**83.68**	**94.75**	**313.24**	**99.72**	**106.31**	**112.88**	**118.59**	**437.51**	**117.16**	**118.19**	**128.57**	**137.01**	**500.93**
Margin	*20.7%*	*23.5%*	*30.4%*	*25.6%*		*24.7%*	*25.8%*	*28.5%*	*30.7%*		*30.7%*	*30.8%*	*31.8%*	*32.9%*		*32.1%*	*31.5%*	*33.0%*	*34.4%*	
Other Income/(Expense)	6.49	(9.07)	(0.40)	2.52	(0.46)	(1.28)	(1.50)	(1.15)	(0.70)	(4.6)	(0.50)	(0.50)	0.50	0.50	0.00	1.00	1.00	1.00	1.00	4.00
Unusual/Non-Recurring Items	0.0	0.0	0.0	(60.4)	(60.4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pretax Income	**53.73**	**50.98**	**83.17**	**10.75**	**198.62**	**62.44**	**69.58**	**82.53**	**94.05**	**308.61**	**99.22**	**105.81**	**113.38**	**119.09**	**437.51**	**118.16**	**119.19**	**129.57**	**138.01**	**504.93**
Tax Rate	*25.0%*	*8.8%*	*25.0%*	*credit*		*13.6%*	*12.4%*	*13.6%*	*13.6%*		*15.0%*	*15.0%*	*15.0%*	*15.0%*		*15.0%*	*15.0%*	*15.0%*	*15.0%*	
Income after taxes	**40.30**	**46.50**	**62.37**	**71.69**	**220.87**	**53.92**	**60.93**	**71.31**	**81.26**	**267.42**	**84.34**	**89.94**	**96.38**	**101.23**	**371.89**	**100.44**	**101.31**	**110.14**	**117.31**	**429.19**
Equity income	(1.72)				(1.72)															
Minority Interest	(2.65)	(2.96)	(2.65)	(2.45)	(10.73)	(1.76)	(2.02)	(2.14)	(2.44)	(8.34)	(2.53)	(2.70)	(2.89)	(3.04)	(11.16)	(3.01)	(3.04)	(3.30)	(3.52)	(12.88)
Net Income	**35.91**	**43.55**	**59.72**	**69.25**	**208.42**	**52.16**	**58.91**	**69.17**	**78.82**	**259.08**	**81.81**	**87.24**	**93.48**	**98.19**	**360.73**	**97.42**	**98.27**	**106.83**	**113.79**	**416.31**
Preferred Dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net to Common Shareholders	**35.91**	**43.55**	**59.72**	**69.25**	**208.42**	**52.16**	**58.91**	**69.17**	**78.82**	**259.08**	**81.81**	**87.24**	**93.48**	**98.19**	**360.73**	**97.42**	**98.27**	**106.83**	**113.79**	**416.31**
Net Income Avail for Common before Adj																				
Basic Shares Outstanding	207.2	207.7	207.8	208.1	207.71	208.8	209.2	209.8	210.3	209.5	210.8	211.3	211.8	212.3	211.6	212.8	213.3	213.8	214.3	213.6
Common Share Equivalents	14.9	13.2	12.5	14.0	13.68	15.1	15.5	16.0	16.0	15.6	17.0	17.0	17.0	17.0	17.0	18.0	18.0	18.0	18.0	18.0
Diluted Shares Outstanding	222.1	221.0	220.4	222.1	221.39	223.9	224.7	225.8	226.3	225.2	227.8	228.3	228.8	229.3	228.6	230.8	231.3	231.8	232.3	231.6
Basic E.P.S.	**$0.17**	**$0.21**	**$0.29**	**$0.33**	**$1.00**	**$0.25**	**$0.28**	**$0.33**	**$0.37**	**$1.24**	**$0.39**	**$0.41**	**$0.44**	**$0.46**	**$1.70**	**$0.46**	**$0.46**	**$0.50**	**$0.53**	**$1.95**
Diluted E.P.S.	**$0.16**	**$0.20**	**$0.27**	**$0.31**	**$0.94**	**$0.23**	**$0.26**	**$0.31**	**$0.35**	**$1.15**	**$0.36**	**$0.38**	**$0.41**	**$0.43**	**$1.56**	**$0.42**	**$0.42**	**$0.46**	**$0.47**	**$1.78**
	82.3%	*57.3%*	*72.3%*	*-43.6%*		*44.1%*	*33.0%*	*14.4%*	*11.7%*		*54.2%*	*45.7%*	*31.8%*	*22.9%*		*17.5%*	*11.2%*	*12.8%*	*9.8%*	
Expenses as a % of Sales																				
SG&A	7.5%	7.0%	6.5%	7.1%		7.0%	6.7%	6.5%	6.5%		6.5%	6.5%	6.5%	6.5%		6.5%	6.5%	6.5%	6.5%	
R&D	3.9	3.6	3.4	3.9		4.4	4.0	3.7	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Depreciation	4.3	4.0	4.2	4.7		5.2	5.2	5.1	5.1		5.1	5.1	5.2	5.5		5.7	5.9	5.6	5.5	
Total	15.7	14.6	14.0	15.7		16.6	15.9	15.4	15.6		15.6	15.6	15.7	16.0		16.2	16.4	16.1	16.0	
Year-to-Year % Change																				
SG&A	22.0%	33.2%	30.5%	18.9%		5.6%	2.8%	6.9%	4.9%		16.4%	22.2%	21.4%	16.5%		12.3%	8.7%	9.9%	10.6%	
R&D	20.6	8.7	12.0	20.6		27.9	18.8	16.9	19.1		14.1	25.4	29.1	16.5		12.3	8.7	9.9	10.6	
Depreciation	13.3	22.9	65.1	61.1		34.5	40.2	31.6	25.6		23.0	21.9	23.5	25.1		26.6	25.6	18.2	11.7	
Total	19.1	23.5	37.0	29.5		19.1	17.0	16.6	14.5		17.8	22.9	24.0	19.3		16.9	14.2	12.6	10.9	

Source: Company Reports & Princeton Tech Research.

MEMC Electronic Materials

Paul Leming
Soleil Securities
October 2, 2005

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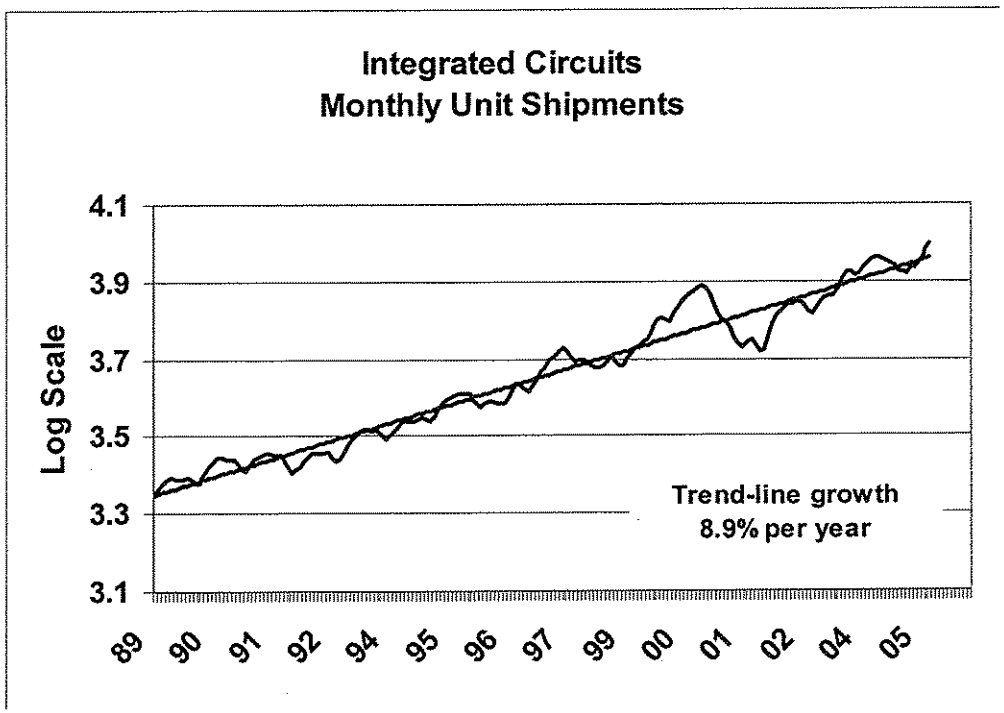
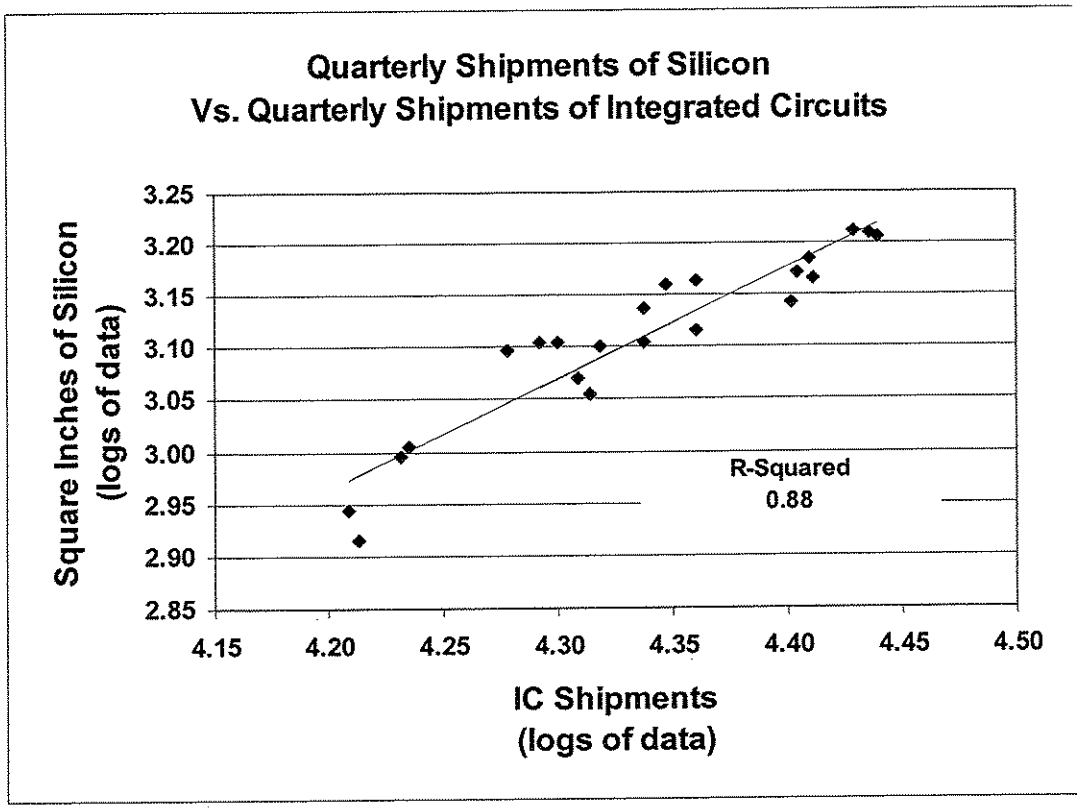
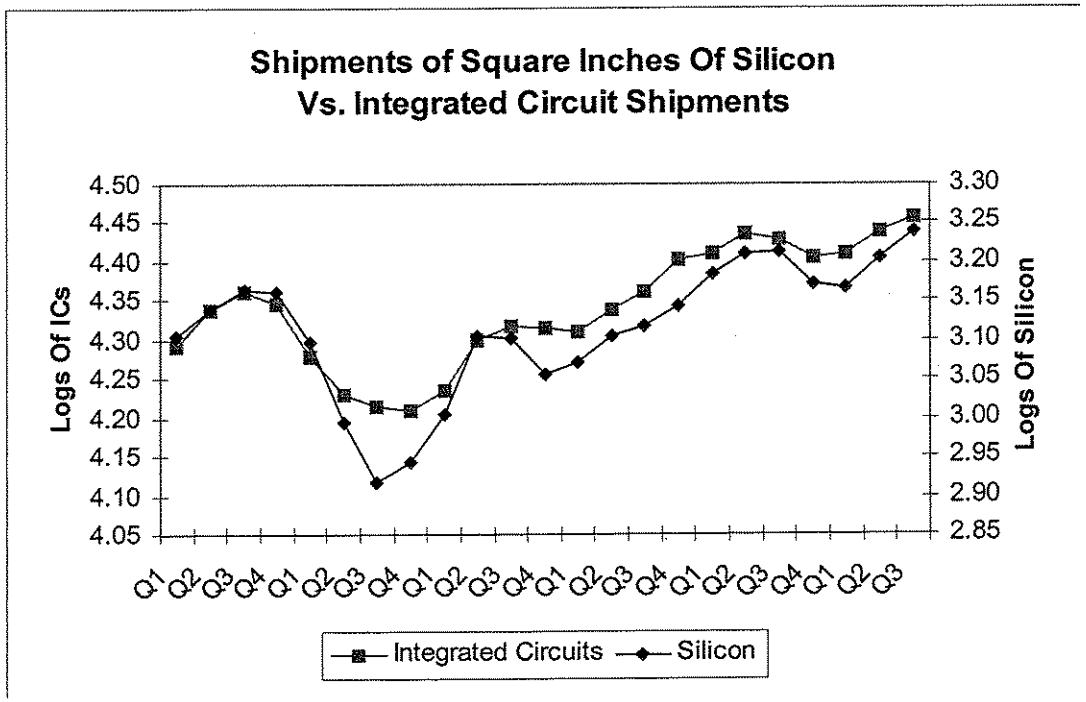
Integrated Circuit unit shipments have grown 9% per year over the last 15+ years.



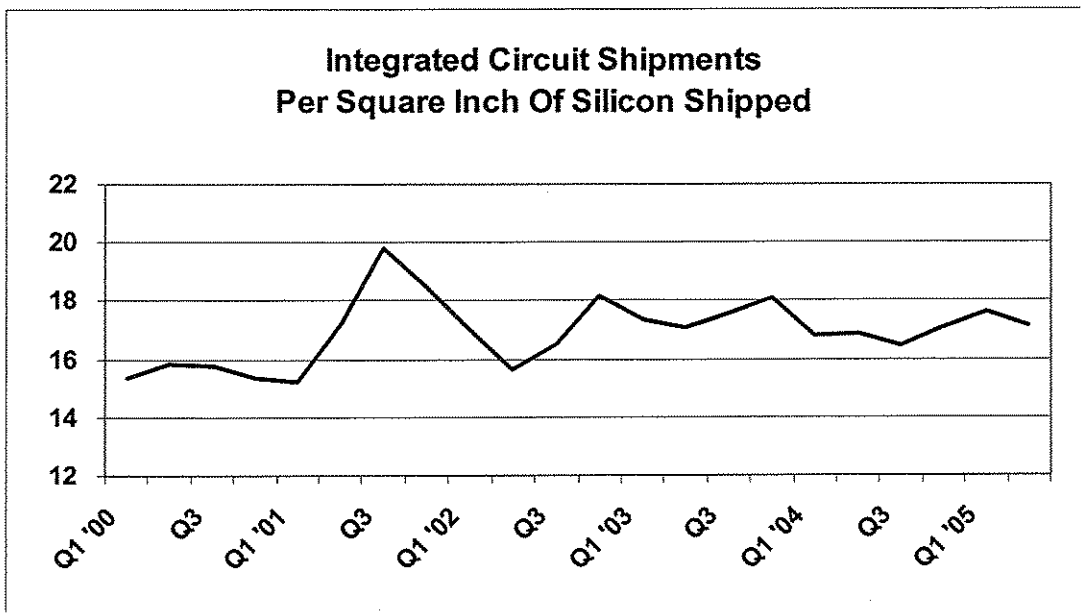
Shipments of silicon (square inches) have been highly correlated to IC shipments



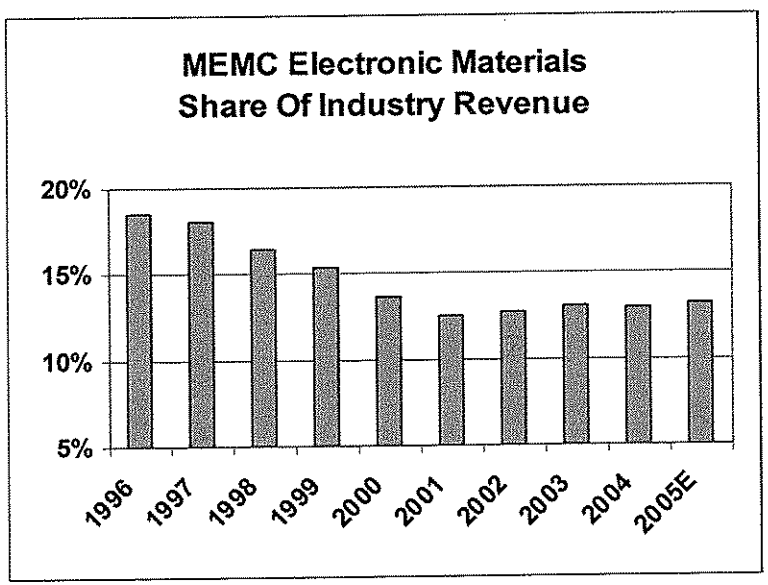
Shipments of silicon track IC shipments closely – but are more volatile



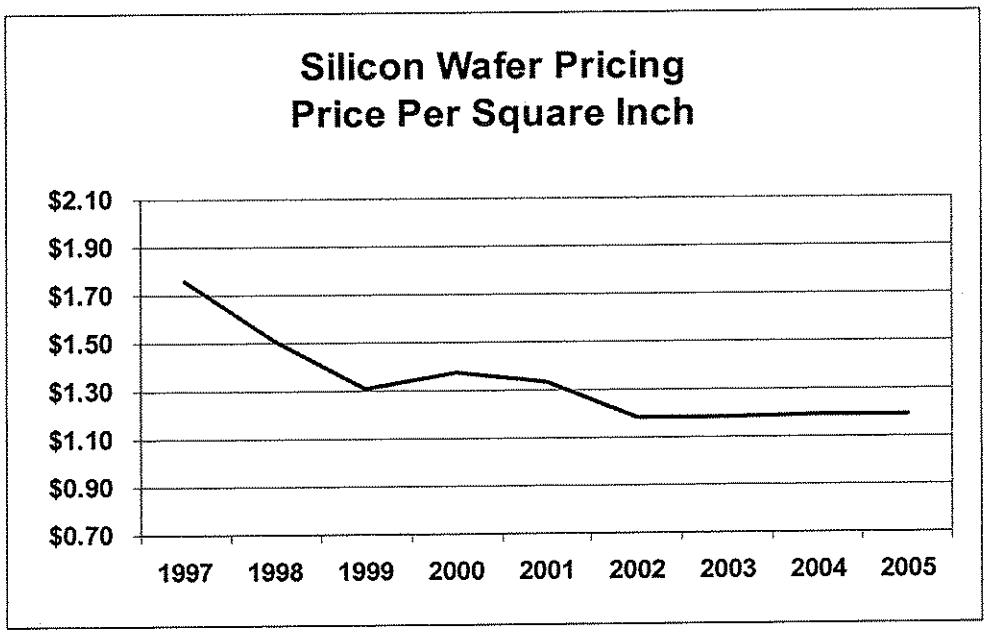
Number of integrated circuits per square inch of silicon has remained relatively constant over the last 4 years.



MEMC lost significant market share in the second half of the 1990s. New management has stabilized this share. We expect the company to begin gaining share in 2006, and 2007.



Silicon wafer pricing has stabilized over the last several years after sharp declines – due to industry overcapacity – in the late 1990s.



Silicon wafer pricing should be driven higher over the next two to three years by:

- **High capacity utilization (above 95%) in the silicon wafer industry.**
  - Capacity utilization – particularly for 200mm wafers is likely to be bumping up against industry capacity by year-end.
  - Because of the shift to 300mm wafers, new capacity for 200mm wafers is not being installed.
- **Tight supplies of Polysilicon**
  - Growth of solar panel market has created a shortage of polysilicon.
  - Capacity expansions in polysilicon have been committed to the solar panel industry under long-term contracts
- **Shift to 300mm wafers**
  - 300mm wafers sell for 2X (per square inch of silicon) the price of 200mm wafers
  - In the last industry transition (from 150mm wafers to 200mm wafers in the 1990s), the new wafer size commanded a premium for over a decade

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Polysilicon Supply/Demand

MEMC is vertically integrated into polysilicon – its competitors buy polysilicon at market prices (and not all competitors have guaranteed supplies of polysilicon for 2006)

Polysilicon Producers
(Millions of metric tonnes per year)

Hemlock Owned by Dow Corning; Shin-Etsu; and Mitsubishi	7,700
Wacker Polysilicon (Part of Wacker-Chemie Group; Owned by Wacker Family and Aventis)	5,000
Tokuyama Independent Chemical Company	5,200
Advanced Silicon Materials (Sold by Komatsu to Renewable Energy)	3,000
MEMC	2,700
Mitsubishi	2,800
Solar Grade Silicon (Owned by Renewable Energy)	2,200
Sumitomo	700
	29,300

Silicon Wafer Produers
(Share of Wafer Inudstry Revenues)

Shin-Etsu Owns 25% of Hemlock Polysilicon from Hemlock and Tokuyama	32%
SUMCO JV of Sumitomo and Mitsubishi Mitsubishi has own Polysilicon Mitsubishi owns 12.5% of Hemlock	24%
MEMC	14%
Siltronic (Wacker) 70% of polysilicon supplied by Wacker at market prices	12%
Komatsu Electronic Metals Parent Komatsu Ltd. Recently sold 75% stake in ASiMi to Renewable Energy Corp.	9%
Toshiba Ceramic	5%
LG Siltron	

Quarterly revenues of the major silicon wafer producers (SUMCO and LG Siltron are estimated).

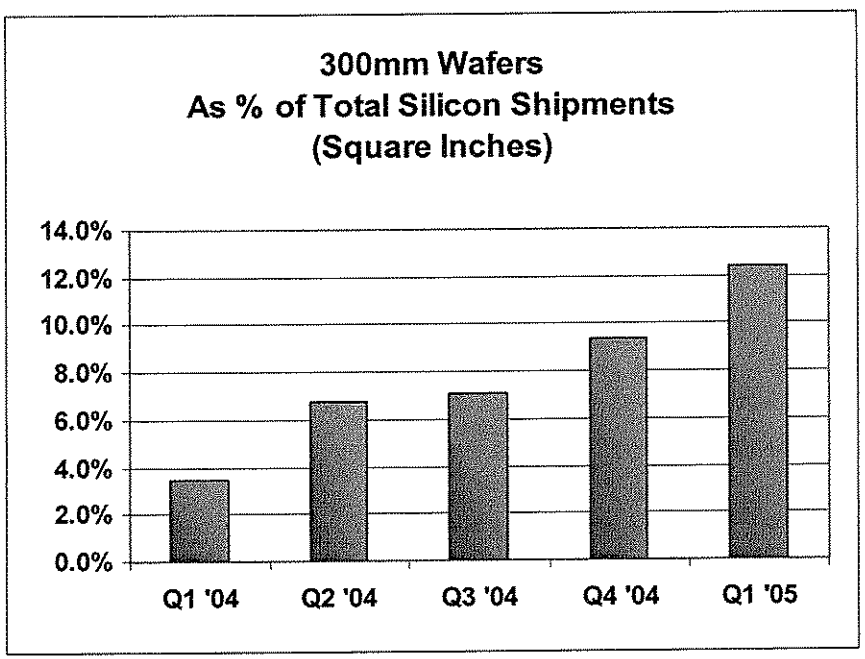
Silicon Wafer Producers

Quarterly Revenue & Market Share
Dollars in Millions

	2004					2005				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year
Shin-Etsu	529.6	560.0	585.2	600.0	2,274.8	644.1				
Share of Market	*31.6%*	*31.8%*	*31.9%*	*33.3%*	*32.2%*	*35.7%*				
SUMCO	400.0	420.0	440.0	430.0	1,690.0	430.0				
Share of Market	*23.8%*	*23.9%*	*24.0%*	*23.9%*		*23.8%*				
MEMC	228.8	255.5	275.3	268.4	1,028.0	257.9				
Share of Market	*13.6%*	*14.5%*	*15.0%*	*14.9%*		*14.3%*				
Siltronic	195.5	212.2	205.0	201.3	814.0	173.0				
Share of Market	*11.7%*	*12.1%*	*11.2%*	*11.2%*		*9.6%*				
Komatsu	166.6	173.8	179.2	162.4	682.0	165.5				
Share of Market	*9.9%*	*9.9%*	*9.8%*	*9.0%*		*9.2%*				
Toshiba	105.6	85.0	95.0	85.0	370.6	80.8				
Share of Market	*6.3%*	*4.8%*	*5.2%*	*4.7%*		*4.5%*				
LG Siltron	52.0	54.0	55.0	54.0	215.0	53.0				
Share of Market	*3.1%*	*3.1%*	*3.0%*	*3.0%*		*2.9%*				
Total	1,678.0	1,760.6	1,834.7	1,801.1	7,074.3	1,804.3				-

Source: Company Reports and Soleil Securities estimates

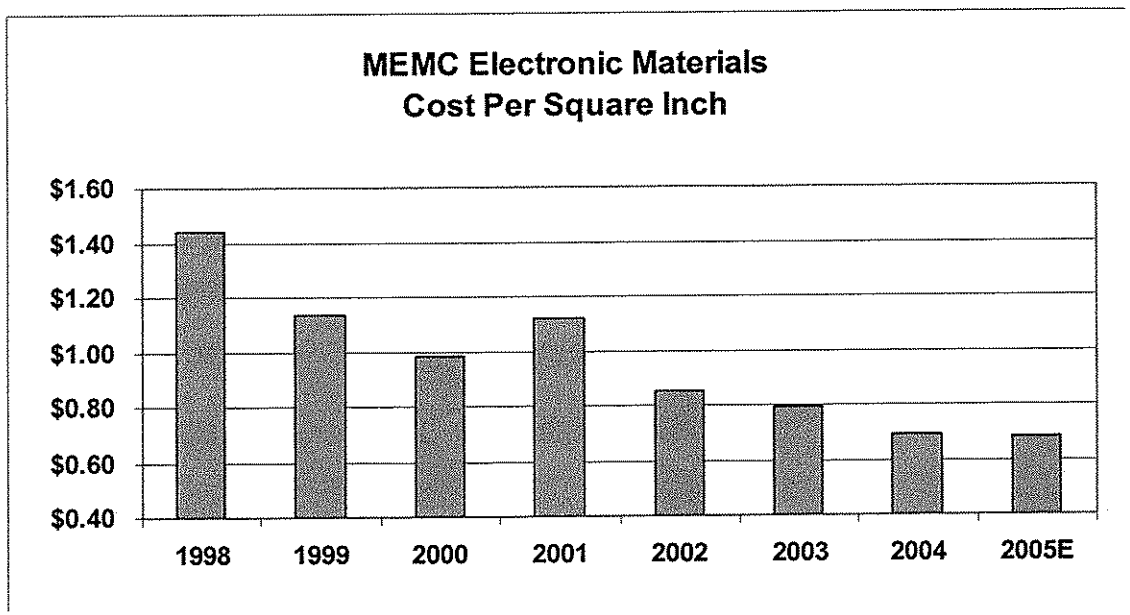
300mm wafers are taking an increasing share of silicon square inches. This should increase through 2008, until 300mm wafers represent 45% to 50% of shipments



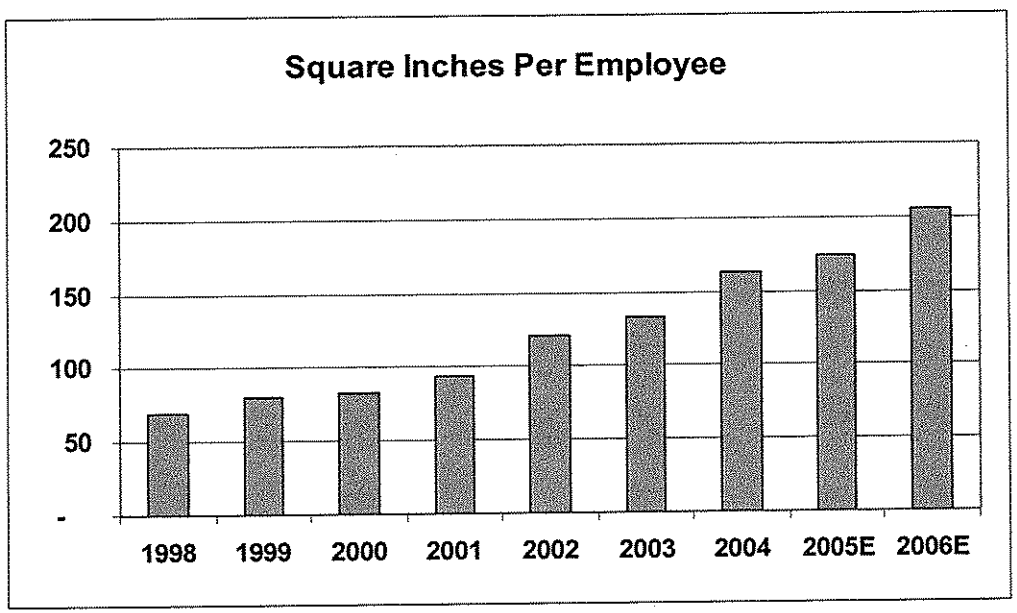
MEMC Revenue Outlook For 2006

- Shipments of integrated circuits are forecast to increase by 10% (essentially trend-line growth).
- MEMC should gain market share (polysilicon shortage should exacerbate this trend).
- We look for industry pricing to increase in 2006 by 5% to 10%
  - High capacity utilization in the silicon wafer business itself
  - Further capacity constraints from polysilicon shortage
  - Shift of product mix to higher-priced 300mm wafers
- We believe MEMC Electronic Materials can increase revenues by 20% to 25% in 2006.
- Consensus estimates are for MEMC's revenues to increase by 14% in 2006.

Costs per square inch have declined over time, as…



Square inches per employee have grown steadily



Margins should expand sharply in 2006

- Higher prices should flow directly to bottom-line.
- Productivity gains (more square inches per employee) should continue.

- With stronger than consensus revenue growth;
- And, strong expansion of margins;
- We believe MEMC Electronic Materials can show $2.00 of annualized earnings power (i.e. 50 cents/quarter) by late 2006.
- Consensus EPS estimates (excluding our own) are for MEMC to earn less than $1.40 s share in 2006