

# Micro-Mechanics

**Bloomberg:** MMH SP

**Sector:** Technology

**Price** S\$0.49

**Rating:**  
 Initiating Coverage **Outperform**

Y/E 30-Jun	2002A	2003A	2004F	2005F
Net Profit (\$m)	1.0	2.9	3.5	4.3
EPS (cts)	1.3	3.5	3.1	3.9
EPS Growth (%)	-	+170	-10	+24
Consensus EPS	-	-	-	-
PER (x) @ S\$0.490	38.2	14.1	15.7	12.7
NTA (\$)	0.22	0.22	0.24	0.27

Performance (%)	1mth	3mth	12mth		
Absolute	-5	+9	-	Market Capitalisation :	S\$54m
Relative against STI	-5	-1	-	Issued shares :	111m
				30-day avg daily vol ('000) :	247

## Low risk play on semiconductor growth

- **A semiconductor consumables supplier**
- **Semiconductor play with less of the sector volatility**
- **Growth driven by geographic and product expansion**
- **Looking at strong earnings growth next FY**
- **Robust balance sheet**
- **Valuation undemanding at 16x FY04 and 13x FY05 earnings**
- **Fair value - 62c**

### A semiconductor play with less of the downside.

Micro-Mechanics (MM) is a supplier of precision tools, assemblies and consumable parts for the back-end semiconductor industry, focusing primarily on the die attach and wire bond processes (See 'Background' section of this report for more details). Being in the semiconductor supplies business, MM has been able to enjoy and tap into the long-term growth and prospects of the semiconductor industry, which had typically offered 15-17% CAGR in the past and is projected to grow between 8-12% CAGR in coming years. However, it is unlike most other semiconductor and related companies, which tend to exhibit the negative traits of this industry such as earnings and pricing volatility due to the cyclical nature of the business, and huge capital expenditure (capex) requirements. The unique nature of MM's business limits exposure to these downside. This is because

the semiconductor consumables business typically enjoys recurring demand, low obsolescence and high-barriers to entry, due to the proprietary technology involved in the material, design manufacturing processes.

To test the above theory, we examined MM's past performance based on the various negative traits mentioned above:

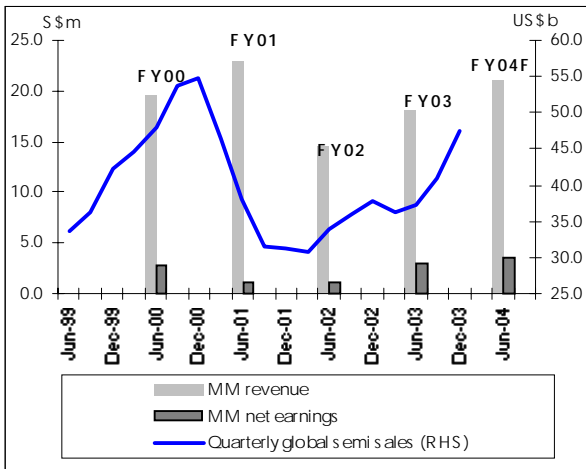
- **Earnings volatility:** Looking at Chart 1, we see that although the group was generally affected by the semiconductor downturn that started in October 2000, it managed to remain profitable whilst most other semiconductor and related companies incurred various degrees of losses. (Note that the group went public in 2003, hence the EPS decline in FY04 despite growth in net profit.)
- **Pricing volatility:** We note that gross margins have been relatively unscathed at between 56%-61%, while the industry suffered price declines due to low capacity utilisation during the downturn (See Chart 2).
- **Capital expenditure:** Aside from the relatively high capex spent in FY00, mainly for the expansion of their manufacturing facility in Penang, Malaysia, capex as a percentage of sales has been modest at between 6%-15% of sales (See Chart 3).

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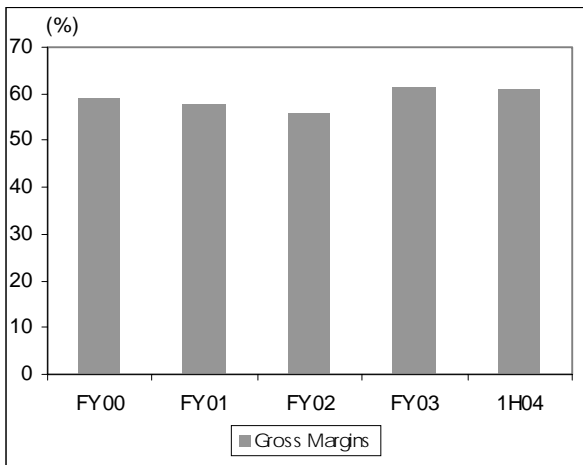
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**Chart 1: MM's revenue and earnings vs global semiconductor sales**



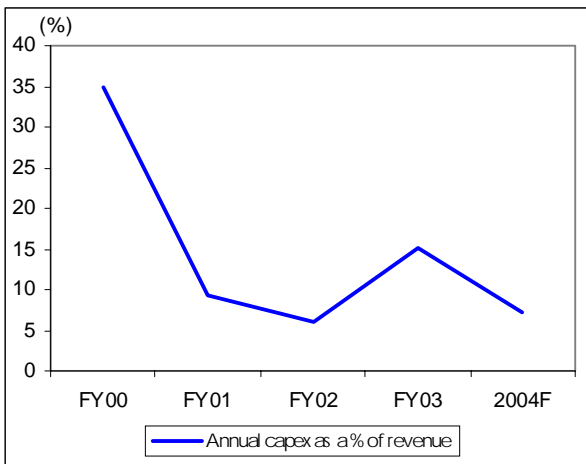
Source: WSTS, SIA, Company data, OIR estimates

**Chart 2: MM's gross margins relatively stable**



Source: Company data, OIR estimates

**Chart 3: MM's capex as a % of sales**



Source: Company data, OIR estimates

**China, the next thrust.** MM has established its presence in China over the last few years and made commendable progress, with revenue contribution from China now accounting for roughly 7% of group revenue. However, with the continued migration of semiconductor companies into China, and its growing domestic market, MM sees further upside in this geographic market. As such, the group in Dec 03 began building a new manufacturing plant in Suzhou, China, which is expected to be operational by Jul 04. Up until now, orders from China have been supported by the Malaysian plant, and these cross-border transactions are often subjected to various complications such as RMB currency restrictions, where customers in China are allowed only to deal in US\$ and not in RMB. And then there are also the long delivery lead-times from Malaysia - typically as long as a month due to delays at customs, often at the China-end of the transaction. With the new manufacturing facility in place, these complications will be avoided and we expect MM to further increase market share thereafter.

Besides capacity expansion, MM has also strengthened its sales force in China, especially in Shanghai, Beijing and Guangzhou. With all these initiatives in place, we expect China to show significant contribution by FY05. On other geographic markets, focus has also recently been on the Philippines and Switzerland, with more sales force being added.

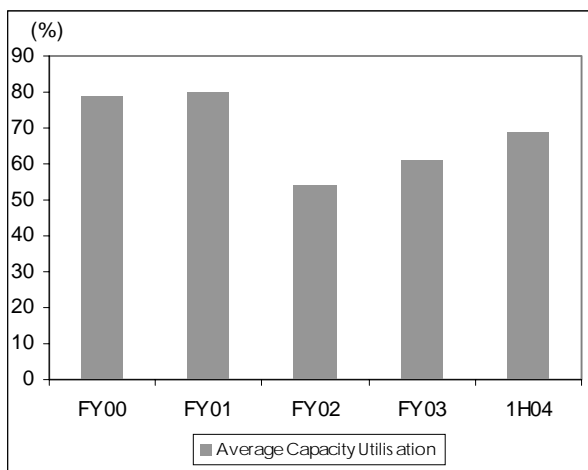
**Growth through product range expansion.** Besides tapping on the semiconductor recovery and new geographic markets, MM intends to grow through the expansion of its product range to encompass other process areas such as the mold/encapsulation process. As such, the group in January 2003 acquired equipment and expertise in Malaysia for the production of pot and plungers, which are consumables used in the semiconductor encapsulation process. Extensive customer evaluations have since been conducted for these new mold components with orders starting to flow through. Monthly shipments for the pot and plunger sets are currently at 50-100 units.

We believe that this is a viable growth strategy for MM given its good standing as a supplier of consumables in the die attach and wire bond processes, which in turn allows the group to more

effectively cross-sell these new product offerings to its large existing customer base. Moreover, as the semiconductor consumables/supplies market is vastly fragmented due to the numerous processes involved, we expect customers to be open to MM's new mold/encapsulation product offerings, if it means having to deal with fewer suppliers for consumables.

**Optimism underpinned by strong semiconductor outlook.** As for the outlook for FY04, management is optimistic following its 1H04 results ended December 03; which saw sales up 11.2% year on year. The group also cited the Semiconductor Industry Association's (SIA) global semiconductor chip sales forecast of 19.4% growth for 2004. Average capacity utilisation for the 1H04 was 69%, reaching a high of 77% in December 03. That translated to sales that were 20% higher than the average monthly sales recorded in 1H04. The order backlog currently stands at 3-4 weeks. Full year FY04 capex is budgeted at S\$1.6m (S\$0.6m has already been spent in 1H04), and mainly for the new manufacturing facility in Suzhou, China and the enhancement of technical capabilities.

**Chart 4: Average Capacity Utilisation**



Source: Company data, OIR estimates

**Financials and risks.** The group has a strong balance sheet with zero gearing and net cash position of S\$7.6m, representing 30% of its book value. Current ratio is healthy at 5.2, while annualised inventory turns is at close to 10x. On risks, we see the main ones being the sustainability of this semiconductor recovery and inventory obsolescence due to the fast changing nature of this industry. However, we have seen MM successfully weather the downturn over the last two

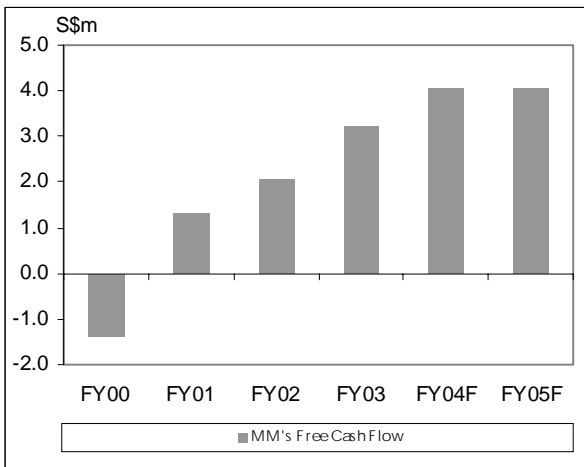
years rather well and are confident on the group's ability to manage these risks.

**Valuations are undemanding.** On valuations, we find MM's ability to generate strong free cash flow, its low capex requirement and high product margins attractive investment merits. Further, we also expect the group to enjoy significant operating leverage as business volumes continue to grow from the overall recovery in the semiconductor industry, its initiatives in China and the expansion of product offerings. This should result in margin improvement going forward or at least ensure that its high margins be sustained. In arriving at our FY04 and FY05 forecasts for MM however, we have conservatively assumed flat margins for the group.

Based on FY05 earnings, we are looking at a fair value PE multiple of 16x. And from there, we derive a fair value of S\$0.62 for the stock. If we use its FY04 earnings, fair value PE may not look all that cheap at 20x vis-à-vis the Singapore market's average of around 15-16x. But note that this is a June year-end company and besides, if we look at FY04 multiples for semiconductor companies, PE ratios in the 20s are not uncommon. So even on FY04 earnings, MM cannot be really said to be expensive. Moreover, do note that most of the growth drivers we had mentioned will only kick in sometime in FY05.

Our fair value also represents 2.3x net tangible asset (NTA) for end-FY05. That is very reasonable for a stock with an ROE of around 14-15% and a long-term growth rate that correlates closely with the semiconductor growth rate. On a more qualitative angle, we like the stock for its credible management team, strong technical know-how and robust business model. We therefore initiate our coverage on the stock with an **OUTPERFORM** rating.

**Chart 5: Strong free cash flow generation**

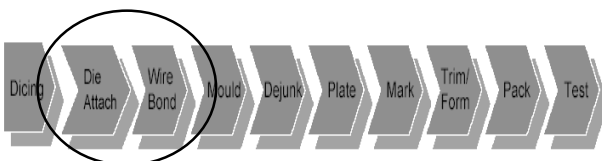


Source: Company data, OIR estimates

**BACKGROUND**

**An integrated supplier to the semiconductor assembly and test (A&T) industry.** Micro-Mechanics (MM) is an integrated designer and manufacturer of precision tools, assemblies and consumable parts for the semiconductor assembly and test industry, focusing particularly on the die attach and wire bond processes (See Chart 6). The group has manufacturing facilities in Singapore, Malaysia, Thailand and the Philippines.

**Chart 6: Overview of the Assembly and Test Process**



Source: Company reports

The group's core products are grouped into three main segments namely:

- **Die-attach tools** - Consumables used in the process of physically attaching the die to a substrate. These products include rubber tips and holders/hi-temp plastic pick-up-tools, die ejector needles, dispensing nozzles and stamping tools.

- **Wire bond tools** - Consumables used in the process of electrically connecting the die to a substrate. Core products manufactured in this segment include wire bond clamps, heavy wire clamp and anvils.

- **Custom tools** - Customised consumables including tools used in the dicing of silicon wafers into individual dies and the encapsulation of the die in a protective body.

**Table 1: Revenue contribution by product segment**

(%)	FY00	FY01	FY02	FY03	1H04
Die Attach Tools	64	62	59	63	64
Wire Bond Tools	27	24	29	27	26
Custom Tools	9	14	12	10	10

Source: Company data

MM has over 200 customers, many of whom are major A&T companies such as Intel, Motorola, Amkor, AMD, STATS and UTAC, just to name a few. Major customers are Motorola, the Amkor Group, Wesco Dorval and Actec.

**Table 2: Revenue contribution by major customers**

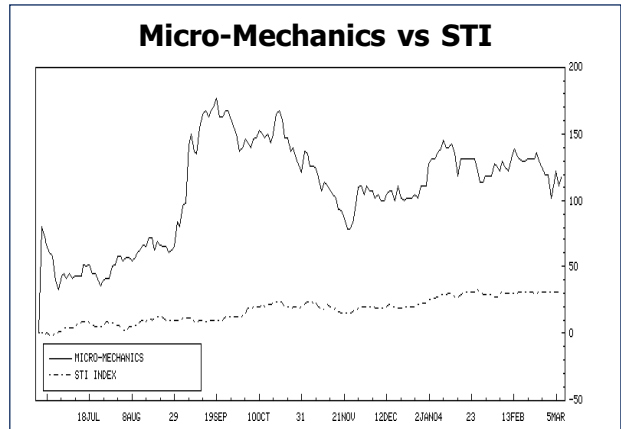
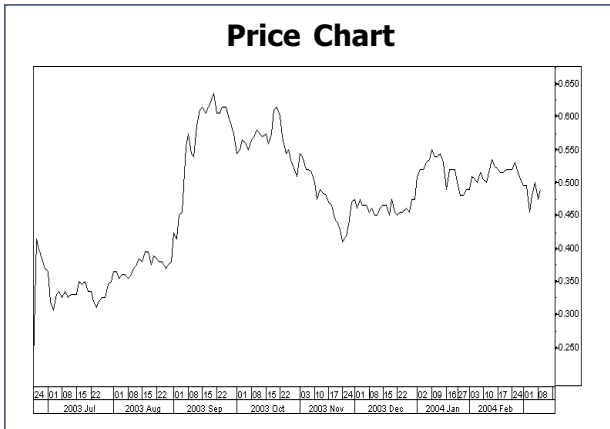
(%)	FY00	FY01	FY02	1H03
Actec	7.2	6	5.9	7.5
Amkor Group	5.3	5.5	7	6.3
Wesco Dorval	5.4	3.2	0.2	0.5
Motorola Inc	2.3	2.7	2.5	8.2

Source: Company data

**Table 3: MM's Key Financial Data**

<b>Income Statement</b>	<b>FY02</b>	<b>FY03</b>	<b>2004F</b>	<b>2005F</b>
<b>Revenue</b>	<b>14.5</b>	<b>18.2</b>	<b>21.1</b>	<b>23.8</b>
<b>EBITDA</b>	<b>3.5</b>	<b>5.8</b>	<b>6.7</b>	<b>7.6</b>
Dep & Amort	2.3	2.2	2.3	2.2
Net Interest	(0.1)	(0.0)	0.0	0.1
Associates	0.0	0.0	0.0	0.0
Exceptionals	0.0	0.0	0.0	0.0
<b>Pretax Profit</b>	<b>1.1</b>	<b>3.5</b>	<b>4.4</b>	<b>5.4</b>
Tax	0.0	0.6	1.0	1.1
Minority Interests	0.0	0.0	0.0	0.0
<b>Net profit</b>	<b>1.0</b>	<b>2.9</b>	<b>3.5</b>	<b>4.3</b>
<b>Balance Sheet</b>	<b>FY02</b>	<b>FY03</b>	<b>2004F</b>	<b>2005F</b>
<b>Cash</b>	<b>0.9</b>	<b>6.4</b>	<b>10.0</b>	<b>12.8</b>
Other Current Assets	5.6	4.6	5.9	6.7
Fixed Assets	15.4	15.8	15.1	14.8
Other Assets	0.0	0.4	0.4	0.4
<b>Total Assets</b>	<b>21.9</b>	<b>27.3</b>	<b>31.4</b>	<b>34.7</b>
Current Liabilities	2.8	2.8	3.9	4.5
Other Liabilities	1.2	0.5	0.5	0.5
Debt	0.6	0.0	0.0	0.0
Shareholders Equity	17.9	24.0	27.1	29.7
<b>Total Equity and liabilities</b>	<b>21.9</b>	<b>27.3</b>	<b>31.4</b>	<b>34.7</b>
<b>Cash Flow Statement</b>	<b>FY02</b>	<b>FY03</b>	<b>2004F</b>	<b>2005F</b>
<b>Operating Cash Flow</b>	<b>2.5</b>	<b>4.6</b>	<b>4.4</b>	<b>4.7</b>
Capex	(0.9)	(2.7)	(1.6)	(1.9)
<b>Investing cash flow</b>	<b>(0.8)</b>	<b>(3.1)</b>	<b>(1.6)</b>	<b>(1.9)</b>
Change in equity	0.0	4.8	0.7	0.0
Net change in debt	(0.7)	(0.6)	0.0	0.0
<b>Financing cash flow</b>	<b>(0.7)</b>	<b>4.1</b>	<b>0.7</b>	<b>0.0</b>
<b>Net Cash Flow</b>	<b>1.0</b>	<b>5.6</b>	<b>3.6</b>	<b>2.8</b>
<b>Key Ratios</b>	<b>FY02</b>	<b>FY03</b>	<b>2004F</b>	<b>2005F</b>
PER (X)	38.2	14.1	15.7	12.7
Price/Book (X)	2.2	2.2	2.0	1.8
Dividend Yield (%)	0.0	2.0	3.1	3.1
ROA (%)	4.6	11.8	11.8	13.0
ROE (%)	6.0	13.8	13.5	15.1
Net gearing (%)	-1.2	-26.9	-36.9	-43.2

Source: Company data, OIR estimates



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