

INSTITUTIONAL RESEARCH

INDUSTRY: SEMICONDUCTOR CAPITAL EQUIPMENT

The Urge to Merge – Part III



October 2002



NEWCAP PARTNERS INC.
PRIVATE INVESTMENT BANKERS

Background

This is the third installment in an ongoing series of research reports by NewCap Partners on the semiconductor capital equipment industry. In the two prior reports, we analyzed the ever-changing universe of publicly traded companies in the industry highlighting the disparity in valuations that existed between large-cap companies (which we define as companies with a market capitalization of \$250 million or more) and small-cap companies (which have a market capitalization of less than \$250 million). Based upon our analysis, we outlined our expectations about merger and acquisition activity within the industry. Our first report, The Urge to Merge, published in 1999 stated that there was significant evidence to support the thesis that because the large-cap companies had higher relative valuations there would be a wave of mergers and acquisitions as larger companies arbitrated the valuation differentials by acquiring smaller companies with lower relative valuations. Following that report, our expectations were validated, as merger/acquisition activity was brisk.

In November 2000, we published The Urge to Merge- Part II and again looked at the relative valuations of the public semiconductor capital equipment companies which we call the Class of 2000. At that time the large-cap companies again had higher relative valuations than the small-cap companies, although the differentials, and thus the arbitrage opportunities, were less. Merger and acquisition activity did continue in the industry, but at a much slower pace than what was observed following our first report. We identified 23 merger and acquisition transactions that involved companies in the Class of 2000, a noticeable decline from the 50 transactions that occurred following our first report. A large majority of these transactions involved large-cap companies acquiring private companies, which have even lower relative valuations than their public cousins. For a list of these transactions, please request it via email at info@newcap.com.

Class of 2002

With this report we are defining the Class of 2002 to include the public semiconductor equipment, materials and related services companies. A complete list of the Class of 2002 is included in Appendix A. There are 72 companies that make up the Class of 2002, down slightly from the 76 companies included in the Class of 2000.

We determined relative valuations of the companies by measuring their market capitalization with respect to revenue, book value, EBIT, and net income, and then averaged them for both groups. For the purpose of consistency, a cut-off date of August 14, 2002 was used. Calculations were based on trailing twelve-month data except book value for which we used the latest balance sheet. Our valuation analysis for the Class of 2002 was hampered by the fact that most companies did not have positive EBIT or Net Income during the trailing 12 months, and thus, we focused primarily on valuations relative to revenue and book value rather than earnings for our analysis.

Our relative valuation analysis is summarized in the following tables. A more detailed analysis of the data can be found in Appendices B and C.

Public Semiconductor Capital Equipment Companies
Valuation Ratios
(As of August 14, 2002)

	Ratios of Market Value Divided By			
	Revenue	Book Value	EBIT	Net Income
Small-Cap	1.60	1.51	41.58	54.41
Large-Cap	3.18	1.85	53.32	139.87

Valuation Ratios Comparison
(Year 1999 – 2002)

	Market Value / Revenue			Market Value / Book Value			Market Value / EBIT			Market Value / Net Income		
	Small-Cap	Large-Cap	Diff.	Small-Cap	Large-Cap	Diff.	Small-Cap	Large-Cap	Diff.	Small-Cap	Large-Cap	Diff.
The Class of 1999 (As of 5/9/99)	1.43	3.36	135%	1.55	3.8	145%	10.05	62.79	525%	14.83	81.88	452%
The Class of 2000 (As of 11/3/00)	1.66	3.55	114%	2.23	4.05	82%	16.72	19.65	18%	18.76	22.94	22%
The Class of 2002 (As of 8/14/02)	1.60	3.18	98%	1.51	1.85	22%	41.58	53.32	28%	54.41	139.87	157%

- There continues to be a gap between the relative valuations of large-cap and small-cap companies in the semiconductor capital equipment industry, although the differentials are smaller on a percentage basis today than they have been in the past. This conclusion is clearly demonstrated comparing market value to revenues and to book value. As previously stated, we are placing less emphasis on the profitability measures with this report because so few of the companies in the Class of 2002 (only 10 of 72 or 14% of the total) were profitable on a trailing 12 month basis.
- The mix of large-cap and small-cap companies has changed significantly since our last report. With the overall decline in the stock market, it is not surprising that many companies previously categorized as large-cap are now considered to be small-cap. In the Class of 2000, there were 27 small-cap and 49 large-cap companies. In the Class of 2002, there are 39 small-cap and 33 large-cap companies. Small-caps now represent 54% of our universe of companies while they previously made up 36%.
- The cumulative market capitalization of the Class of 2000 was approximately \$176 billion when we published our prior report. The cumulative value of the Class of 2002 is approximately \$57 billion a decline of over 67%.
- With so many companies struggling at the moment, merger and acquisition activity is down in general, and the semiconductor capital equipment industry is no exception. Companies are focusing on the fundamentals of running their business to generate growth and earnings, which should be a priority for all companies. However, because the relative valuation differentials between the large and small companies still exist, we believe there will be more strategic acquisitions even in this uncertain environment.

Conclusions

While the semiconductor capital equipment industry has been in decline, we believe this is a good time for companies to look at strategic acquisitions. Industry valuations are down, and there are still valuation differentials between the small-cap and large-cap companies. Thus we would expect to see:

- Larger companies continuing to acquire the smaller public companies as well as private companies.
- Small-cap companies merging with other public companies or acquiring private companies in an effort to become larger.
- Because of the growing internationalization of the industry, we also expect to see a growing number of trans-border merger and acquisition transactions, primarily between US companies and companies in Asia, particularly Taiwan and China.

Thomas W. Turney

Eric De Garceau

---ANNOUNCEMENTS---

NewCap Partners Forms Strategic Alliance With Arscientia

NewCap Partners is pleased to announce that it has entered into a strategic alliance with Arscientia LLC to focus on companies in the semiconductor and semiconductor capital equipment industries. Arscientia provides strategic consulting services to companies in the semiconductor and semiconductor capital equipment industries. With the alliance, NewCap Partners and Arscientia can offer clients strategic planning as well as merger and acquisition services. Visit www.newcap.com for additional information. For a presentation entitled "The Strategy of Strategy" describing Arscientia's strategic consulting methodologies, please send a request via email to strategy@arscientia.info.

NewCap Partners and JS Cresvale International Ltd. Form Strategic M&A Relationship

NewCap Partners is pleased to announce that it has entered into a strategic relationship with JS Cresvale International, an investment banking firm headquartered in Hong Kong, and its affiliated office in Shanghai. This strategic relationship is designed to strengthen the merger and acquisition capabilities of both firms in trans-border transactions, particularly between US companies and companies in China, Hong Kong, and Taiwan. Visit the websites at www.newcap.com and www.jsresvale.com.hk for more information on the companies and their services.

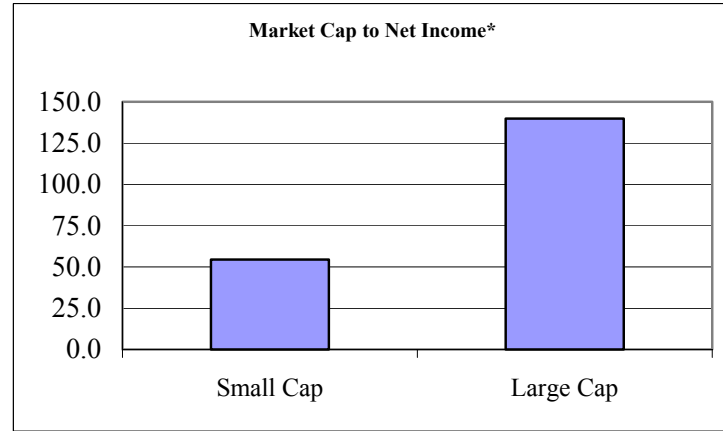
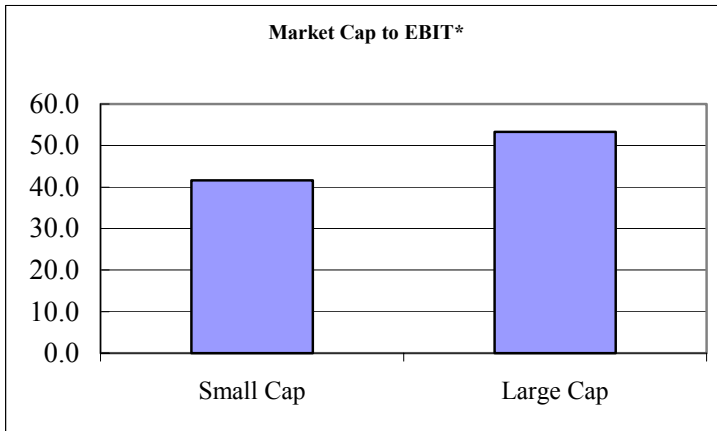
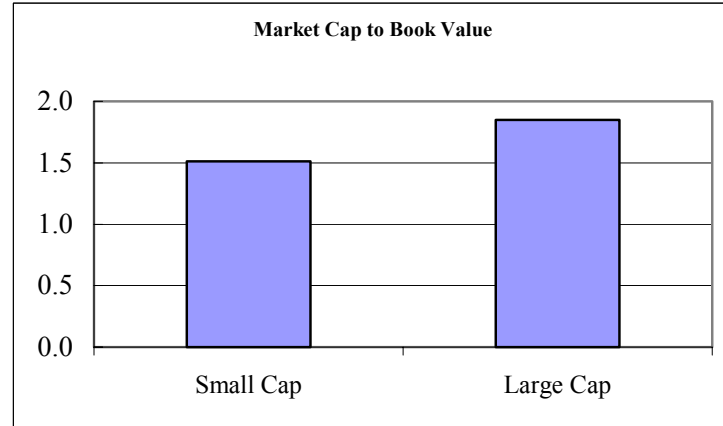
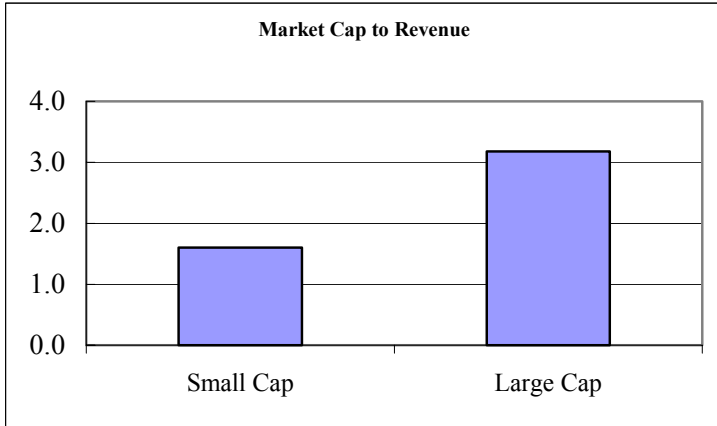
APPENDIX A

The Class of 2002 Semiconductor Capital Equipment Companies

Name	Symbol	Name	Symbol
Acorn Holding Corp.	AVCC	Ibis Technology Corporation	IBIS
ADE Corporation	ADEX	Infinite Graphics Incorporated	INFG
Advanced Energy Industries, Inc.	AEIS	inSilicon Corporation	INSN
Aehr Test Systems	AEHR	inTEST Corporation	INTT
Aetrium Incorporated	ATRM	Isonics Corporation	ISON
Amkor Technology, Inc.	AMKR	JMAR Technologies, Inc.	JMAR
AMTECH SYSTEMS, INC.	ASYS	KLA-Tencor Corporation	KLAC
Applied Materials	AMAT	Kopin Corporation	KOPN
ASAT Holdings Limited	ASTT	Kulicke and Soffa Industries, Inc.	KLIC
ASE Test Limited	ASTSF	Lam Research Corporation	LRCX
Asyst Technologies, Inc.	ASYT	LTX Corporation	LTXX
ATMI, Inc.	ATMI	Mattson Technology, Inc.	MTSN
August Technology Corporation	AUGT	MEMC Electronic Materials, Inc.	WFR
Axcelis Technologies, Inc.	ACLS	Metron Technology N.V.	MTCH
AXT, Inc.	AXTI	Micro Component Technology, Inc.	MCTI
Brooks-PRI Automation, Inc.	BRKS	MKS Instruments, Inc.	MKSI
Cabot Microelectronics Corporation	CCMP	Mykrolis Corporation	MYK
ChipPAC, Inc.	CHPC	Nanometrics Incorporated	NANO
Coherent, Inc.	COHR	Novellus Systems, Inc.	NVLS
Cohu, Inc.	COHU	Photronics, Inc.	PLAB
CoorsTek, Inc.	CRTK	Radiant Technology Corporation	RTNC
Credence Systems Corporation	CMOS	Reliability Incorporated	REAL
Cree, Inc.	CREE	Robotic Vision Systems, Inc.	ROBV
CVD Equipment Corporation	CVV	Rudolph Technologies, Inc.	RTEC
CyberOptics Corporation	CYBE	Semitool, Inc.	SMTL
Cymer, Inc.	CYMI	SpeedFam-IPEC Inc.	SFAM
Data I/O Corporation	DAIO	Surge Components, Inc.	SPRS
DuPont Photomasks, Inc.	DPMI	Tanisys Technology, Inc.	TNIS
Electro Scientific Industries, Inc.	ESIO	Tegal Corporation	TGAL
Electroglass, Inc.	EGLS	Teradyne, Inc.	TER
EMCORE Corporation	EMKR	Therma-Wave, Inc.	TWAV
Entegris, Inc.	ENTG	Trikon Technologies, Inc.	TRKN
FEI Company	FEIC	Ultratech Stepper, Inc.	UTEK
FSI International, Inc.	FSII	Varian Semiconductor Equipment Asso.	VSEA
Genus, Inc.	GGNS	Veeco Instruments	VECO
Helix Technology Corporation	HELX	Wilshire Technologies, Inc.	WILK

APPENDIX B

Semiconductor Capital Equipment Company Relative Valuations



*Sample limited to profitable companies.

APPENDIX C
Semiconductor Capital Equipment Company Valuation Ratios
8/14/2002

All Companies

	<i>Market Value to Revenue</i>	<i>Market Value to Book Value</i>	<i>Market Value to EBIT</i>	<i>Market Value to Net Income</i>
Mean	2.33	1.67	47.98	114.23
Median	1.62	1.25	23.79	48.80
Low	0.03	0.09	1.37	25.60
High	17.23	10.89	178.63	601.42
Count	72	69	11	10

Small-cap Companies

	<i>Market Value to Revenue</i>	<i>Market Value to Book Value</i>	<i>Market Value to EBIT</i>	<i>Market Value to Net Income</i>
Mean	1.60	1.51	41.58	54.41
Median	1.04	1.02	23.79	53.46
Low	0.03	0.09	1.37	28.07
High	10.75	10.89	127.22	81.71
Count	39	36	5	3

Large-cap Companies

	<i>Market Value to Revenue</i>	<i>Market Value to Book Value</i>	<i>Market Value to EBIT</i>	<i>Market Value to Net Income</i>
Mean	3.18	1.85	53.32	139.87
Median	2.61	1.64	23.16	44.15
Low	0.28	0.42	10.47	25.60
High	17.23	5.00	178.63	601.42
Count	33	33	6	7



NEWCAP PARTNERS INC.
PRIVATE INVESTMENT BANKERS

NewCap Partners, founded in 1987, is a private investment banking firm located in Los Angeles, California, (USA) with offices in Orange County and Silicon Valley. NewCap Partners is a “broker-dealer” registered with the U.S. Securities and Exchange Commission (SEC) and the National Association of Securities Dealers (NASD).

NewCap Partners provides specialized strategic merger, acquisition and divestiture services to buyers and sellers. NewCap Partners privately places debt and equity securities for its clients to finance expansion, acquisitions, buyouts, recapitalizations and reorganizations. NewCap Partners also specializes in business transactions in the Greater China Region. NewCap Partners is staffed by a team of senior, experienced and professional investment bankers.

For additional information on NewCap Partners visit our website at www.newcap.com or contact any of the individuals listed below.

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