



STOCKS

U.S. stocks slipped on Friday, but ended the week up. The **Dow** gained 1.8% and the **Nasdaq** gained a strong 2.7%. The **SOX** index rose another 1.9% last week and is now 100 points above *FTR*'s 'break-out' level.

MARKET INDEXES

INDEX	Ticker	Close 09/19	Change Week
DJ-30 Ind.	DJ30	9644.82	1.8%
Nasdaq	COMP	1905.70	2.7%

ATE STOCKS

COMPANY	Ticker	Close 09/19	Change Week
Aehr Test	AEHR	\$4.15	6.1%
Aetrium	ATRM	\$2.48	-1.6%
Advantest	ATE	\$17.20	0.2%
Agilent Tech	A	\$25.04	0.3%
Cohu	COHU	\$21.00	-2.3%
Credence	CMOS	\$13.65	12.3%
Electroglas	EGLS	\$2.73	7.5%
ESI	ESIO	\$22.65	8.1%
FormFactor	FORM	\$22.25	-1.5%
inTest	INTT	\$6.24	2.5%
K & S	KLIC	\$12.30	3.4%
LTX	LTX	\$14.12	-2.3%
MCT	MCTI.OE	\$0.85	2.4%
Mosaid (\$C)	MSD	\$9.22	1.9%
Photon Dyn.	PHTN	\$32.20	3.1%
Teradyne	TER	\$22.00	7.5%
Average Change Last Week			3.0%

EDA STOCKS

COMPANY	Ticker	Close 09/19	Change Week
Cadence	CDN	\$13.97	-0.1%
LogicVision	LGVN	\$3.23	-1.5%
Mentor	MENT	\$19.77	3.0%
Synopsys	SNPS	\$68.57	6.3%
Average Change Last Week			1.9%

INDUSTRY

SEMI said that bookings reported by North American chip equipment makers in August were \$720.6 million (three-month average basis) – just slightly above the final July figure of \$706.9 million (which was revised downwards from the preliminary figure of \$763.4 million reported last month.) Total bookings have remained flat for the past four months, although TAP equipment bookings have remained at its highest levels since 2001. Total equipment billings were \$789.9 million, a slight improvement from the previous month. Its preliminary August book-to-bill for all equipment was 0.91.

Front-end equipment bookings were \$522.4 million – 40% below last year's figure of \$874.8 million – while billings were \$614.6 million – 24% below the \$811.0 million of a year ago. The August front-end equipment book-to-bill was 0.85.

Back-end Test, Assembly and Packaging (TAP) equipment bookings were \$198.2 million in August – flat with the previous month, but 40% above the \$142.0 million reported for the same month last year. Billings were also flat in August at \$175.3 million – but down 5% from \$183.8 million in August 2002. The August book-to-bill for TAP equipment was 1.13, the seventh consecutive month above unity.

August TAP Book-to-Bill
\$Million

	Jul'03	Aug'03	Aug'02
Book	\$197.6	\$198.2	\$142.0
Bill	\$179.7	\$175.3	\$183.8
B/B	1.10	1.13	0.77



VLSI Research now sees worldwide equipment revenues at \$30.2B, a mere 1.8% increase from 2002. Preliminary results from the company's quarterly suppliers' market share survey indicate that second quarter equipment revenues fell 12% YoY after a lackluster increase of 1.4% in the first quarter 2003. It said that "while the Test and Assembly markets are definitely seeing an upturn with both IDMs and subcontractors buying equipment, the front-end is being dragged down by added capacity via upgrades and used equipment."

Gartner Dataquest's latest report sees the global market for chip ATE edging up just 1.8% to US\$2.22 billion in 2003. But, he expects that market will surge 55% and 61% in 2004 and 2005 respectively, reaching US\$5.54 billion by 2007.

The SEAJ said global chip equipment sales fell 7% YoY in July, to \$2 billion. However it noted that global orders for Japan-made equipment jumped 27% in July, and that "sales tend to lag orders by about six months."

The U.S. IMS/PCB Industry book-to-bill ratio for July 2003 was 1.04. Billings in July 2003 decreased 3.7% from July 2002 and orders booked increased 9.2% from July 2002.

COMPANIES

Morris Chang, chairman of TSMC – during a keynote address at the *Taiwan+China Semiconductor Outlook* conference in San Jose, CA last week – said that the semiconductor industry is in the midst of a recovery, with 11% growth expected in the business for 2003 and 17% for 2004. However, he expects another semiconductor downturn in 2005. He said China is building fab capacity at an alarming rate, which result in another cyclical round of semiconductor overcapacity by the 2005 time frame.

Brian Halla, National Semi's chairman/president/CEO, said that "the battered [chip] industry has recovered from its long slump and noted that customers are placing orders at a "healthy" pace" But added, "it is too early to say if chipmakers are in a sustained recovery."

Bruce Freyman, executive VP of operations at **Amkor Technology**, said he expects the global production value of IC packaging and testing services will reach US\$34 billion in 2005, compared with US\$22 billion in 2002. And, he believes that the market for outsourced IC packaging and testing is likely to balloon to US\$10.5 billion in 2005 from US\$5.7 billion in 2002.

The Fabless Semiconductor Association (FSA), will host its first annual *Semiconductor IP (SIP) Workshop* in conjunction with the association's *2003 Suppliers Expo*. The workshop will be held on October 10, 2003, at the McEnery Convention Center in San Jose, CA..

KLA-Tencor said that its fiscal 2003 earnings of \$137.19 million or \$0.70/share would have be reduced to \$46.31 million or \$0.24/share if it had been required to expense stock options!

Credence Systems said Manteca, CA-based **Silicon Turnkey Solutions (STS)**, has purchased 'multiple' Octet SoC test systems for its Fremont CA test service facility.

Teradyne said **VIA Technologies** has selected its *Tiger Source Synchronous Pin Electronics (SSPE)* and *SerDes Port Qualifier (SPQ)* options.

Agilent Technologies announced a collaboration with Hong Kong Science and Technology Parks to establish the Probe and Test Development Center in the Hong Kong Science Park at Pak Shek Kok, Shatin, Hong Kong. The center will provide a wide array of IC testing resources using the Agilent 93000 SoC test platform.

InTEST subsidiary, **Temptronic**, introduced its *TPO3500 Thermo-Chuck System* for thermal testing of ICs on 200mm and 300mm silicon wafers. It claims the new system is so durable that it has "been able to extend its warranty period to a full two years."

XPEQT AG said **Melexis Ipre** in Belgium has ordered 10 Testers XTA Mixed Signal for sensor applications..

Kulicke & Soffa formally opened its new 13,500 square meter (145,000 square foot) facility in the Suzhou-Singapore Industrial Park, near Shanghai. The facility will produce a variety of bonding tools, dicing blades and test interconnect products.

MOSAID Technologies has closed its fabless semiconductor division and ended its CAM (content address memory) development. As a result it cut 34 jobs – about one-third of its remaining employees – and recorded a restructuring expense of C\$4.9 million (US\$3.6 million).

Synopsys reported that **Toshiba** has taped out a high-performance digital image processor chip using Synopsys' DFT Compiler *SoCBIST*'s deterministic logic BIST capability. By partnering with Synopsys on this six million gate device Toshiba reduced overall test cost with a 10X reduction in tester time and more than 100X reduction in test data volume, it said.

Rood Technology reported a profit of EUR 31,000 for the first six months of this year compared to a: loss of EUR 2,206,000 for the same period in 2002. Sales for the period were EUR 4.2 million, down 6.8% from EUR 4.5 million in the first half year of 2002 due to the company having closed its operations in Scotland late last year.

SigmaTel, an Austin, TX fabless company which specializes in mixed-signal audio chips, made a very successful IPO on Friday. It sold 10 million shares at \$15.00 and the stock closed its first session at \$19.80.

Intel, at its *Developer Forum (IDF)* in San Jose, CA last week, demonstrated its first silicon wafer based on 65-nm process technology and disclosed two new and future microprocessors, code-named *Tulsa* and *Tanglewood*. It also announced new technology which would enable multiple, independent software environments in a single PC. Code-named *Vanderpool*, the technology is aimed at improving system reliability and recovery from computer crashes.

Intel's introduction of the 802.11a version of its wireless chip, part of its Centrino mobile package, will be delayed past its expected arrival at the end of the third quarter. It had hoped to deliver the combination 802.11a/802.11b chip by the end of this month, but customers will have to wait until October, at least.

ASIA

China

SMIC has raised \$630 million in funding through the issuance of Series C preference shares.

SMIC said that its Fab 4 is scheduled to begin pilot production in the first half of 2004 while the combined monthly capacity of Fabs 1 and 2 will ramp to 85,000 wafers by the end of 2004, up from 35,000 units in June 2003. It plans to begin pilot production using 0.14-micron DRAM trench technology at its 8-inch fabs before the end of 2003 and 0.11-micron production using DRAM trench technology at its Fab 4 in the first half of 2004. SMIC is licensing the technology from **Infineon Technologies**.

TSMC plans to invest \$222 million more in a Shanghai plant and boost production capacity five times, *Shanghai Daily* reported, citing TSMC representative **Sheldon Wu**. TSMC now plans to invest \$1.12 billion in the eight-inch silicon wafer plant in Shanghai's Songjiang Science and Technology Park.

Infineon opened its new Chinese headquarters in Shanghai, housing administration, as well as a large software center. Its China headquarters has already more than 100 employees and it will become one of the biggest software centers of Infineon.

JAPANESE ATE STOCKS

INDEX	Ticker	Close 09/19	Change Week
NIKKEI 225	N225	10,938	2.1%
Advantest	6857	7,850	-1.5%
JEM	6855	1,910	-13.2%
MJC	6871	1,440	0.0%
TEL	8035	8,180	-1.7%
TSK	7729	3,620	-4.0%
Yokogawa	6841	1,154	-5.9%
Average Change Last Week.			-4.4%

Japan

UMC Japan, the subsidiary of chip foundry **UMC** and the Japan's only pure-play foundry, will invest US \$45 million in UMC's 300mm affiliate in Singapore, **UMCi**. That will secure capacity for up to 2000 wafers/month for its Japanese customers, it said.

Singapore

Chartered Semi has qualified **ST Assembly Test Services (STATS)** to provide turnkey bump sort and flip-chip assembly solutions optimized for Chartered's advanced technology manufacturing processes.

Chartered Semiconductor denied market talk that its parent, state-owned **Singapore Technologies**, was paring its stake in the world's third largest custom chip maker. "The company wished to state that we are unaware of any such sale and based on our inquiries to Singapore Technologies, we believe it is not accurate," the company said

Taiwan

The Taiwan Government will invest NT\$1.3 billion (about US\$38 million) for the development of III-V semiconductor equipment and lift the local-content rate from the present 5-6% to 70% over the next three years. Equipment companies are to present prototypes by the end of May 2004.

Amkor Technology has signed an agreement with **FICTA Technology** to take over an entire floor at FICTA's Plant 2 near Hsinchu. FICTA's digital and mixed signal testers at that location will be consigned to Amkor, who will manage the test floor operation. Approximately 35 of FICTA's test engineers will join Amkor. Amkor will also consolidate its existing Taiwan test operation into this location and over time will add new test assets

Silicon Integrated Systems will spin off its semiconductor fab into a fully owned subsidiary. The move is likely to end speculation it would sell the plant to major shareholder UMC.. Spinning off its manufacturing operations will help SiS focus on chip design and technology development, said **John Hsuan**, chairman of SiS, in a statement.

PEOPLE

Roger Bitter has joined **Teseda** as VP of sales. He had been president/CEO of TSSI until its acquisition by Credence Systems. He was most recently worldwide VP of sales and marketing at **Xpedion**, and had previously been the GM of **TSSI** after that company was acquired by **Credence Systems**.

Dr. William (Bill) Lattin has joined Teseda's board of directors. He began his career in 1969 with Motorola and moved to Intel as its VP/GM for its Systems Group. He retired as executive VP of Synopsys in 1999.

Michel Villemain has left his position as VP/GM of Probe Systems at **NPTest** to join "another chip equipment company" (reportedly **KLA**). Dr. Villemain had been with Schlumberger/NPTest since 1987. He has been replaced by **Tim Anayama**, previously head of marketing for Probe Systems.

Rich Beyer, president/CEO of **Intersil** has joined the board of **Credence Systems**.

Chris Galvin, chairman/CEO of **Motorola** – the company his grandfather founded – will retire after a difference in opinion with the board on the company's strategy. However, Galvin said that he will remain in his present position until a successor is named.