

CURRENT ECONOMIC MONITOR

Emerging Companies Drive Growth in Semiconductor Industry

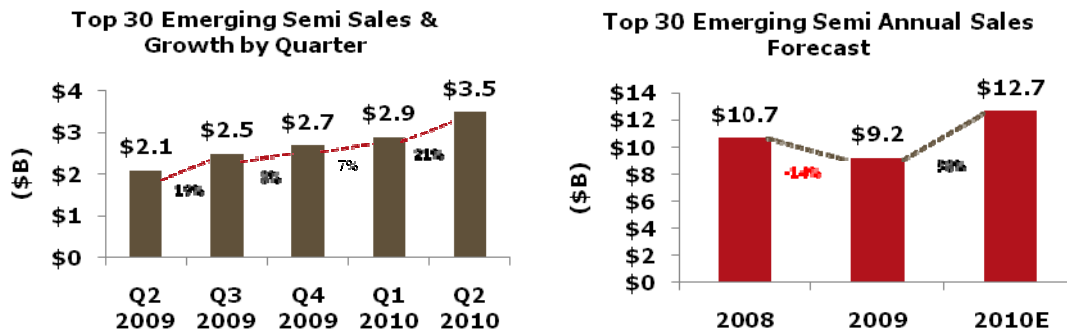
Jodi Shelton, President, GSA

Today, the term “emerging” is on the mind of every executive connected with the semiconductor industry. Chip companies, venture capitalists, suppliers and original equipment manufacturers (OEMs) are investing in emerging applications, countries, companies, etc. as they continue to experience growth and drive demand. As a result, emerging semiconductor companies (i.e., those fabless and IDM public companies that generate less than \$500 million in annual sales) are taking a bigger piece of the pie, accounting for 9.6% of total 2009 revenue compared to 8.9% in 2008.

EMERGING SEMICONDUCTOR COMPANIES

Sales Growth

The top 30 emerging semiconductor companies (i.e., fabless companies and integrated device manufacturers (IDMs)) by Q2'10 sales continue to experience growth quarter over quarter (QoQ), with sales totaling \$3.5 billion, an increase of 21% QoQ and 67% year-over-year (YoY) (Figure 1). This is the largest quarterly increase reported over four quarters and greater than the 6.4% quarterly growth reported by the top-30 large sales leaders (e.g., Samsung Electronics, Intel, Toshiba). Top-30 emerging company sales is expected to increase 38% in 2010, which is an improvement from the negative growth shown in 2009 and higher than the expected average growth of 28% for the overall semiconductor industry (Figure 1).



Source: GSA, Company Reports, Investment Reports

Figure 1. Sales for the top 30 increased 21% QoQ in Q2'10; Sales expected to increase 38% in 2010

While quarterly sales rankings remain relatively static QoQ for the large sales leaders, quarterly sales rankings for emerging companies are dynamic with most companies moving up/down by more than three spots (Figure 2). The only emerging company that kept the same ranking QoQ was Semtech. Trident Microsystems posted the largest increase, jumping 12 spots, with Etron Technology and Seoul Semiconductor both coming in second and jumping six spots. Trident Microsystems' strong results were largely the result of its acquisition of NXP's TV and set-top box product lines in February 2010. Sylvia Summers, Trident's chief executive officer, said in a recent press release, "For the second consecutive quarter, Trident exceeded expectations for revenues and gross margins, driving a

substantially lower operating loss in the first full quarter since the acquisition of NXP's Set-Top Box and TV product lines." PMC-Sierra and Zoran dropped the most in the rankings—by five spots.

	Company	Stock Exchange	Ticker	Q2 2010 Sales (US\$000)	1H 2010 Sales (US\$000)
1	Power-One, Inc.	NASDAQ	PWER	\$214,549	\$366,926
2	ProMOS Technologies Inc.	Taiwan OTC	5387	\$205,570	\$340,034
3	Seoul Semiconductor	KOSDAQ	046890	\$177,149	\$287,329
4	Trident Microsystems, Inc.	NASDAQ	TRID	\$171,648	\$262,052
5	Epistar Corporation	TSE	2448	\$168,493	\$295,275
6	PMC-Sierra, Inc.	NASDAQ	PMCS	\$160,669	\$313,495
7	Littelfuse, Inc.	NASDAQ	LFUS	\$157,508	\$301,910
8	Diodes Inc.	NASDAQ	DIOD	\$149,153	\$286,000
9	Microsemi Corporation	NASDAQ	MSCC	\$136,017	\$254,235
10	Silicon Laboratories	NASDAQ	SLAB	\$134,577	\$261,296
11	New Japan Radio Co., Ltd. - Semiconductor Division	TSE	6911	\$113,958	\$216,634
12	Semtech Corporation	NASDAQ	SMTC	\$113,227	\$215,107
13	Oclaro, Inc.	NASDAQ	OCLR	\$112,709	\$213,861
14	Infinera Corp.	NASDAQ	INFN	\$111,398	\$207,158
15	EMULEX	NYSE	ELX	\$103,129	\$205,333
16	Richtek Technology Corporation	TSE	6286	\$100,352	\$185,889
17	Nihon Inter Electronics Corporation	TSE	6974	\$98,872	\$180,257
18	Standard Microsystems Corporation (SMSC)	NASDAQ	SMSC	\$97,159	\$180,148
19	NetLogic Microsystems, Inc.	NASDAQ	NETL	\$95,014	\$181,265
20	Zoran Corporation	NASDAQ	ZRAN	\$93,370	\$183,821
21	Etron Technology, Inc.	Taiwan OTC	5351	\$87,240	\$159,413
22	Alpha & Omega Semiconductor, Inc. (AOS)	NASDAQ	AOSL	\$85,469	\$163,141
23	IXYS Corporation	NASDAQ	IXYS	\$84,875	\$161,436
24	Cirrus Logic, Inc.	NASDAQ	CRUS	\$81,915	\$144,554
25	Power Integrations	NASDAQ	POWI	\$79,858	\$151,365
26	Mitsumi Electric Co., Ltd - Semiconductor Division	TSE	6767	\$79,659	\$156,689
27	Opnext, Inc.	NASDAQ	OPXT	\$78,866	\$155,649
28	Raydium Semiconductor	Taiwan ESM	3592	\$78,522	\$154,495
29	Elite Semiconductor Memory Technology, Inc.	TSE	3006	\$77,345	\$139,696
30	LiteOn Semiconductor Corp.	TSE	5305	\$77,145	\$150,000

Source: GSA, Company Reports

Figure 2. Top 30 Emerging Semiconductor Companies by Q2'10 Sales

Looking at the top 30 emerging semiconductor companies by Q2'10 sales, all companies posted a positive QoQ sales growth in Q2'10, compared to all but two posting a positive YoY growth.

In Q2'10, Trident Microsystems reported the largest QoQ and YoY sales growth of the top 30 at 89.9% and an outstanding 1051.1%, respectively (Figure 3). Seoul Semiconductor came in second, with a quarterly growth of 60.8%. The Nikkei Group reported that Seoul Semiconductor took 3rd place in light-emitting diode (LED) market share in July. Lee Sang-min, vice president of sales at Seoul Semiconductor said, "The sales of the company were uniformly increased in all areas including LED TV,

cellular phones and automobiles...We hope many people would show their interest to us so that a mid-sized company can achieve its goal of overcoming difficulties.”

	Company	Stock Exchange	Ticker	Q2 2010 Sales (US\$000)	QoQ Growth (%)	YoY Growth (%)
1	Trident Microsystems, Inc.	NASDAQ	TRID	\$171,648	89.9%	1051.1%
2	Seoul Semiconductor	KOSDAQ	046890	\$177,149	60.8%	96.4%
3	ProMOS Technologies Inc.	Taiwan OTC	5387	\$205,570	52.9%	217.1%
4	Power-One, Inc.	NASDAQ	PWER	\$214,549	40.8%	135.3%
5	Epistar Corporation	TSE	2448	\$168,493	32.9%	78.7%

Source: GSA, Company Reports

Figure 3. Highest Quarterly Sales Growth among Top 30 Emerging Semiconductor Companies

Of the top-30 emerging companies that are covered by an analyst and an estimate could be found, all but two (Opnext and Zoran) are expecting positive sales growth in 2010 over 2009. As shown in Figure 4, NetLogic Microsystems currently leads the pack with an expected 119.2% annual growth. The Benchmark Company forecasts a solid 2010 for NetLogic Microsystems as it is “positioned to benefit from growing Internet protocol-based network traffic. An increasing amount of network traffic is moving from legacy circuit-switched networks to IP-based packet-switched networks. Growth in Internet protocol traffic and the increasing complexity of IP-based networks is a tremendous boon for Netlogic’s traditional knowledge-based processor, Ethernet and multi-core processor product sales.”

	Company	2009 Sales (US\$000)	2010 Sales Forecast (US\$000)	Estimate Covering Firm	YoY Growth (%)
1	NetLogic Microsystems, Inc.	\$174,689	\$382,861	The Benchmark Company	119.2%
2	Power-One, Inc.	\$431,572	\$916,900	Dougherty & Company	112.5%
3	Seoul Semiconductor	\$389,653	\$761,750	Hyundai Securities	95.5%
4	Cirrus Logic, Inc.	\$191,870	\$327,100	Capstone Investments	70.5%
5	Epistar Corporation	\$394,120	\$649,124	SinoPac Securities	64.7%

Source: GSA, Company Reports, Investment Reports; Note: CY2010 estimates could not be found for some of the top 30, which may affect results.

Figure 4. High Sales Growth Expectations for 2010

IPO & FUNDING UPDATES

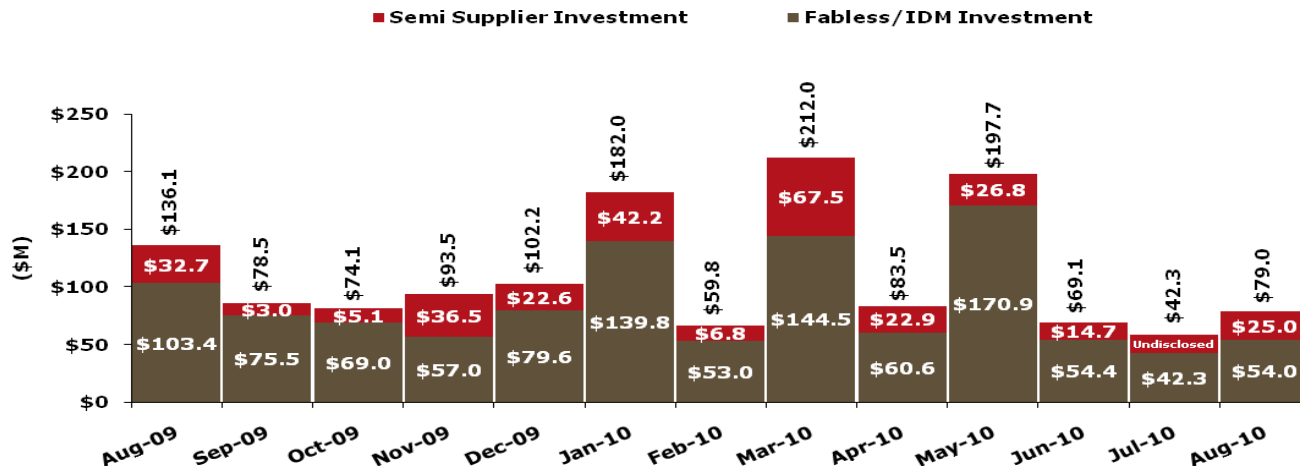
Funding Activity

In August 2010, three semiconductor companies (i.e., fabless companies and semiconductor suppliers) raised \$79.0 million, a dollar amount increase of 86.8% from July 2010 and a decrease of 42.0% from August 2009. The number of deals closed decreased by four month-over-month (MoM) and 12 year-over-year (YoY). While there were no investments in integrated device manufacturers (IDMs) in August 2010, two fabless companies raised \$54.0 million, a dollar amount increase in fabless/IDM investment of 27.7% MoM and a decrease of 47.8% YoY. The number of fabless/IDM deals closed decreased by three MoM and eight YoY. One semiconductor supplier raised \$25.0 million, a dollar amount decrease of 23.5% YoY. The number of semiconductor supplier deals closed decreased by one MoM and four YoY. The great YoY decreases seen in August 2010 may be due to the slowdown of global economic growth in 2H 2010. The Organization for Economic Cooperation and

Development (OECD) recently cut its growth forecast, expecting the seven industrialized countries (i.e., U.S., Britain, Canada, France, Germany, Italy and Japan) to now grow by around 1.5% the rest of the year.

Smooth-Stone raised the greatest amount of funding in August 2010, with an impressive \$48.0 million Series A round. While ARM processors are typically found in ultra-mobile devices, this significant round of funding may indicate its shift to the server market. The company is developing ARM-based chips that can provide an energy consumption solution for the computing industry.

With many venture capitalists (VCs) initially shying away from the capital-intensive semiconductor industry in today's economy, law firms are making an effort to connect their start-up clients with VCs. Smooth-Stone garnered investors for its latest round through its law firm DLA Piper LLP. DLA introduced Smooth-Stone to investors Battery Ventures, Flybridge Capital Partners and Highland Capital Partners, who all invested in the company. "DLA helped rifle-shot our business plan to the investors that were most likely to be interested," said Barry Evans, CEO of Smooth-Stone. Jeffrey Bussgang, general partner at Flybridge Capital, acknowledged that a reference from a reputable law firm increased the firm's interest in the company. In addition to the VC firms, Smooth-Stone received funding from the Advanced Technology Investment Company (ATIC), ARM and Texas Instruments.



Source: GSA; Financial terms were not disclosed for a number of funding deals.

Figure 5. Semiconductor Investment by Month and Company Type

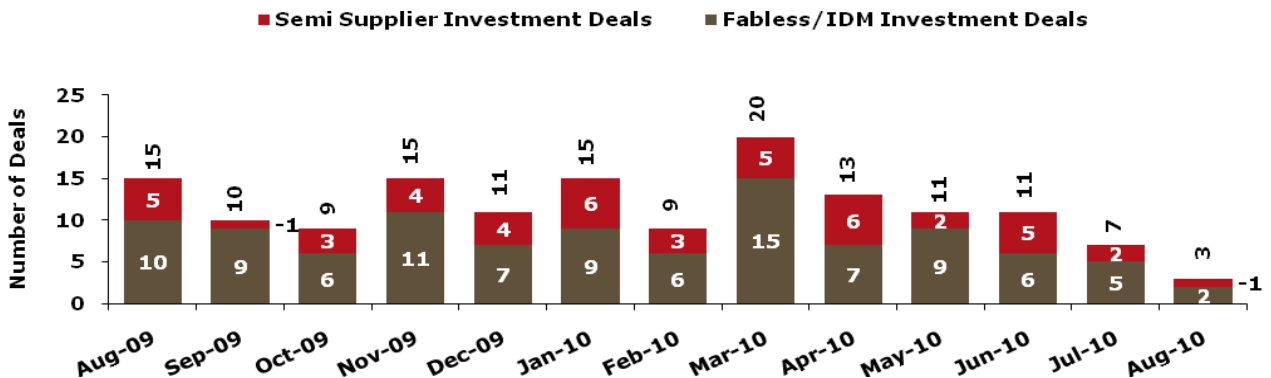


Figure 6. Semiconductor Investment Deals by Month and Company Type

IPO Activity

On August 6, light-emitting diode (LED) chipmaker SemiLEDs filed a \$172.5 million initial public offering (IPO). The company plans to go public as the LED market takes off. According to MarketsandMarkets (M&M), the global LED chip market is estimated to be valued at \$8.5 billion by 2014, growing at a compound annual growth rate (CAGR) of 22% for the period 2009 to 2014.

For the first time on record, NASDAQ IPOs fell behind Standard & Poor’s 500 as new NASDAQ companies are not growing fast enough to deserve a higher market value. According to International Investment Research Plc, NXP Semiconductors, the largest NASDAQ IPO this year, will see its revenue grow an estimated 3.9% in 2011. The company’s stock price slid 20.9% at the end of August from its offer price.

Two semiconductor companies have priced on the NASDAQ Stock market this year, while six await pricing on the exchange. Jack Ablin, chief investment officer of Harris Private Bank, states, “You have to have a certain degree of optimism and hopefulness to invest in a NASDAQ IPO, just because of the promise of the future and the growth that lies ahead...With the level of uncertainty on the economic horizon, it’s certainly going to impact prospects for investors to embrace NASDAQ IPOs.”

Company	Stock Exchange	Ticker	IPO Date	Offer Price	Stock Price (8/31/2010)	Market Cap (8/31/2010) (\$000)
NXP Semiconductors	NASDAQ	NXPI	8/5/2010	\$14.00	\$11.08	\$2,761,712
Alpha & Omega Semiconductor	NASDAQ	AOSL	4/28/2010	\$18.00	\$11.13	\$245,828
MaxLinear	NYSE	MXL	3/23/2010	\$14.00	\$11.40	\$356,124
Sensata Technologies	NYSE	ST	3/10/2010	\$18.00	\$16.87	\$2,886,119
Rexchip Electronics	Taiwan ESB	4932	1/18/2010	N/A	N/A	N/A

Source: GSA

Figure 7. Post-IPO Performance of 2010 Pricings

IPOs to Watch For

The industry is watching a list of chip companies for potential IPO filing announcements within the next year to 18 months. The list includes:

- Ambarella Inc.
- Apache Design Solutions Inc.
- Aptina Imaging Corp.
- Elonics Ltd.
- eSilicon Corp.
- Freescale Semiconductor
- Icera Inc.



Integrated Memory Logic
Peregrine Semiconductor Corp.
Picochip Designs Ltd.
ViXS Systems Inc.

Source: *GSA, EE Times*