

# Semiconductor WEEK:

January 21, 2022

*An overview of results and conclusions from recent reports at VLSI*

## Chip Market Research Services

**Customers are clamoring for more capacity**

- Order activity for semiconductor equipment continued to heat up, jumping past 114 degrees
- IC Inventory Levels

## Semiconductor Analytics

**Last Week in the Semiconductor Market:**

Semiconductor sales continued to explode out of the normal Christmas roll-over with double-digit W/W and Y/Y growth, as IC Supply/Demand tightened up. The IC weather warmed 2°F last week. VLSI's IC Supply/Demand indices tightened last week, with OSATs moving back to Shortage, while More Moore Foundry tightened up to Balanced and More than Moore to Loose. DRAM and Auto ICs held in Shortage, with NAND, IDM, and Analog & Power at Tight levels. Semiconductor Sales growth continued to head down to historic trend rates. Zooming in on NAND this week the 13-wk MA growth dipped towards 25%, the lowest since September. The 2022 NAND forecast is for sales to almost hit \$70B and grow at 17%. Last week, Logic was passed by DRAM for the title of the fastest W/W growth with Analog & Power a close third. NAND was slow. Auto ICs actually declined and growth was low on a Y/Y basis – an indication of the shortage ending for the bulk of the market.

## Chip History Center

**People:** Yan Borodovsky discusses what was happening in 2007 with DFM and Computational Lithography at Intel. Craig Barrett discusses how Intel turned manufacturing into the powerhouse it is today

## The Chip Insider

**Strategy and Tactics:** TSMC's \$44B CapEx Plan: Highway to a Glut?

**Semiconductor Manufacturing:** Test & Related Equipment Outlook

## **Semiconductor Stocks**

- *VLSI's Semiconductor Stock and S&P plummeted this week*
- *Semiconductor Stock Index plummeted*
  - *SMIC was this week's biggest winner*
- *Semiconductor Equipment Stock plunged*
  - *ASM Pacific Technology came out on top*
- *EDA Stock Index plummeted*
- *Electronics Materials Stock Index fell*
- *Hottest Stocks: SMIC, ASM Pacific Technology, MediaTek, DNP, Panasonic, and Tokyo Ohka.*

# The Chip Insider<sup>®</sup>'s Graphics File



## January 2021

### Customers are clamoring for more capacity

- Order activity for semiconductor equipment continued to heat up, jumping past 114 degrees
- SOC Computing and Memory added another point, hitting fresh new highs for the year
- Equipment suppliers are adding capacity in order to meet demand, which continues to exceed supply
- VLSI's Chip Price Performance continued to rise



*This issue contains the latest forecast.*

Forecast as of January 2022:	2021	2022
<b>Semi Equipment (\$B):</b>	<b>\$ 124.7</b>	<b>\$ 149.9</b>
Sequential Change	35.0%	20.2%
<b>Capacity Utilization:</b>	97.3%	96.5%
<b>ICs (\$B):</b>	<b>\$ 487.6</b>	<b>\$ 540.6</b>
Sequential Change	26.2%	10.9%
<b>IC Units (BU):</b>	394.2	434.0
Sequential Change	23.7%	10.1%
<b>Electronics (\$B) :</b>	<b>\$ 2,536</b>	<b>\$ 2,710</b>
Sequential Change	17.1%	6.8%

[Contact us to access more details](#)

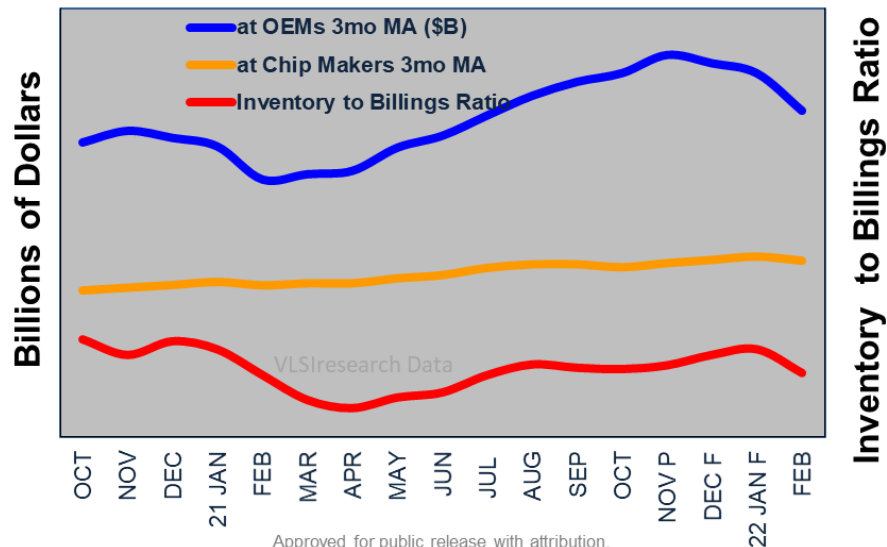
# The Chip Insider<sup>®</sup> Graphics

## IC Inventory Levels:

- Total Inventories are trending higher

**IC Inventory Levels:** chart gives rolling averages for semiconductor integrated circuit inventories held at OEMs, in Die Banks, and the total Inventory-to-Billing Ratio

## Semiconductor Inventory



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weVISION Interview:

## Memory Market Forecast 2022...

with Jim Handy of Objective  
Analysis



## What the conversation is about:

- In this video conversation, Dan talks with Jim about how 2021 unfolded, how it was different, and what he expects will happen in the markets for DRAM and NAND in 2022. Jim has been one of our most popular guests and is one of the most respected memory analysts in the world.

[Click here to watch online](#) or on the weVISION button in VLSI's mobile app

# Semiconductor Analytics

## Last Week in the Semiconductor Market:

Semiconductor sales continued to explode out of the normal Christmas roll-over with double-digit W/W and Y/Y growth, as IC Supply/Demand tightened up. The IC weather warmed 2°F last week. VLSI's IC Supply/Demand indices tightened last week, with OSATs moving back to Shortage, while More Moore Foundry tightened up to Balanced and More than Moore to Loose. DRAM and Auto ICs held in Shortage, with NAND, IDM, and Analog & Power at Tight levels.

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Last week, Logic was passed by DRAM for the title of the fastest W/W growth with Analog & Power a close third. NAND was slow. Auto ICs actually declined and growth was low on a Y/Y basis – an indication of the shortage ending for the bulk of the market.



1: Measures Order Activity 2: Measures Pricing Power

# Electronics Retail Pricing Trends:

for PC notebooks Tablets Smartphones Cell phones Digital Cameras Appliances TVs

Electronics' Retail Prices are rising.

**Electronics Pricing Barometer**  
indexed 13 week moving average

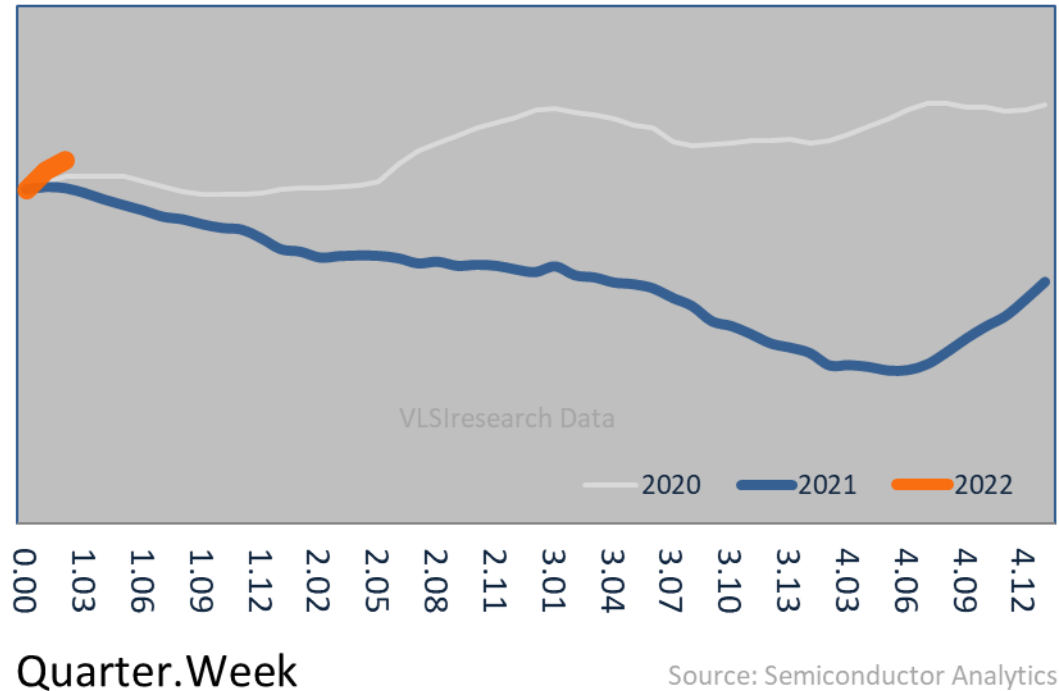
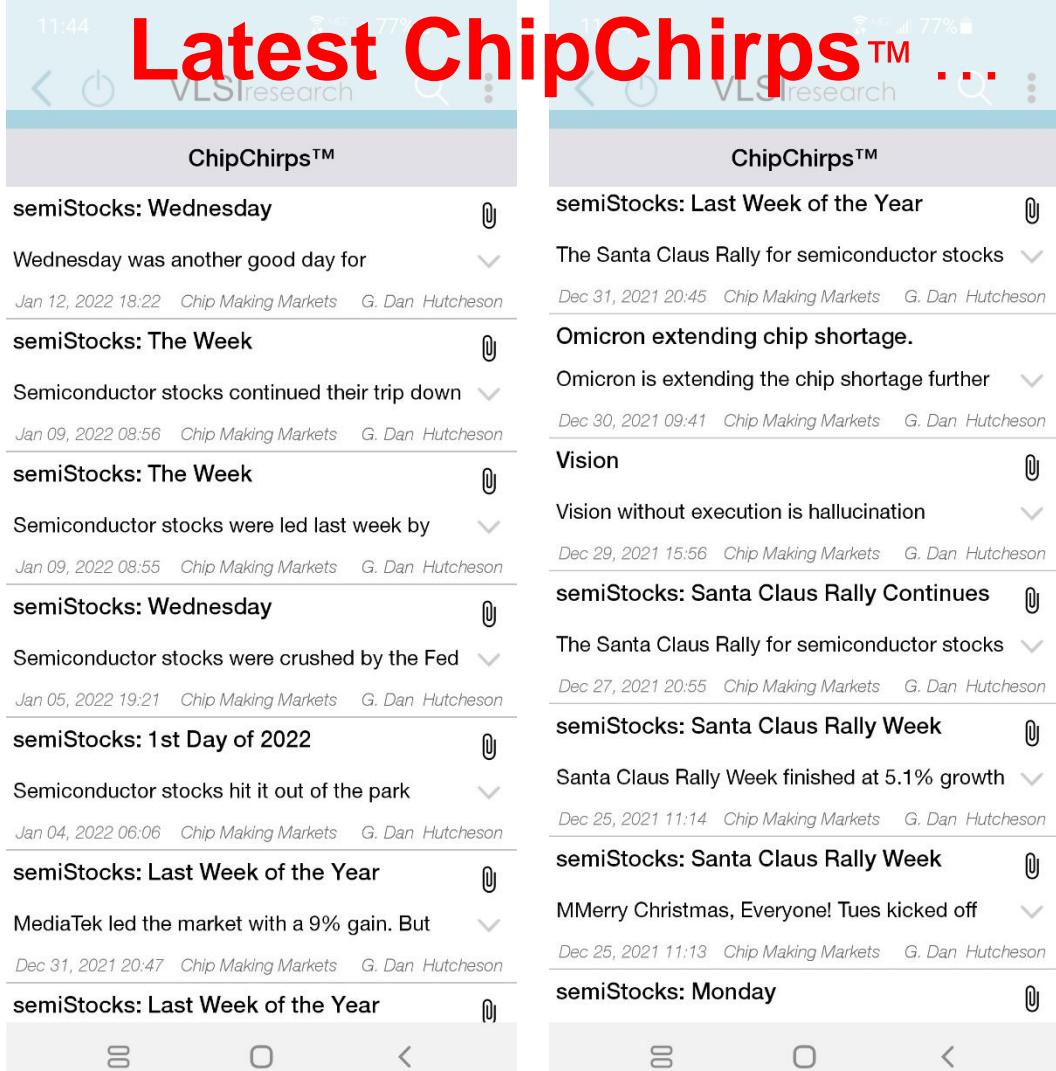


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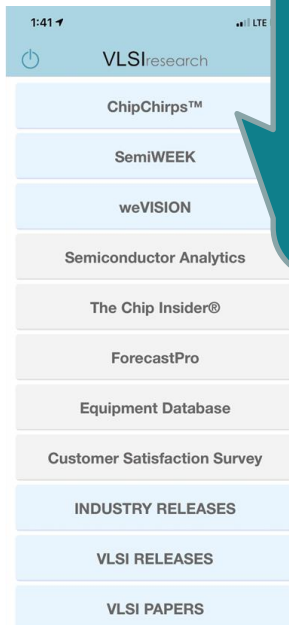
# Latest ChipChirps™



on VLSI's app

ChipChirps™

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## Strategy & Tactics



**Strategy and Tactics:** TSMC's \$44B CapEx Plan: Highway to a Glut?

### Summaries:

TSMC's \$44B CapEx Plan: Highway to a Glut? With all the CapEx and new fab plans, I keep getting asked the question if we are headed to a glut as all of these companies keep upping the ante. Those asking the questions have only heard of gluts from the history of our industry ... My stock answer has been to go through why things are different this time. This is always dangerous unless things are really different ... And they are! Gluts in the past were the result of ... Of these, only one is true today. As for TSMC's \$44B, which in reality is \$40-44B, on the surface it looks more like catch-up to underspending in the late 2010s as More Moore production waited for EUV and the transition from nanometer to angstrom scale devices. TSMC's share of CapEx in 2021 was STILL BELOW ITS 2015 SHARE! Meanwhile, More Moore capacity spending was well above 2015 levels in 2021. And don't forget TSMC also has to spend on More than Moore capacity additions, which have been in general decline since 2015.

VLSIinsiders: 2022 Semiconductor Forecast Memory Technology Forecast On the Silicon Road Again – NOW available as downloadable podcasts on the VLSI Smartphone app. Also, check out ChipChirps™ where you'll find VLSI's Semiconductor Analytics report, semiStocks-weekday and more. – Click on the Chip Insider® button in VLSI's App for Android and iOS to download or Click here for the website.

*“History never repeats itself but it often rhymes.”  
—as Mark Twain is reputed to have said*



# The Chip Insider<sup>®</sup>

## *Semiconductor Manufacturing*



### **Test & Related Equipment Outlook**

- Strong demand through supply chains
- Changes since last forecast
- Test in 2021 and outlook 2022
- Test relative to Electronics and ICs
- Trends in Test
- VLSI's view

WildPhotons: Be careful when using sports analogies...



# Cyclical Growth for Test

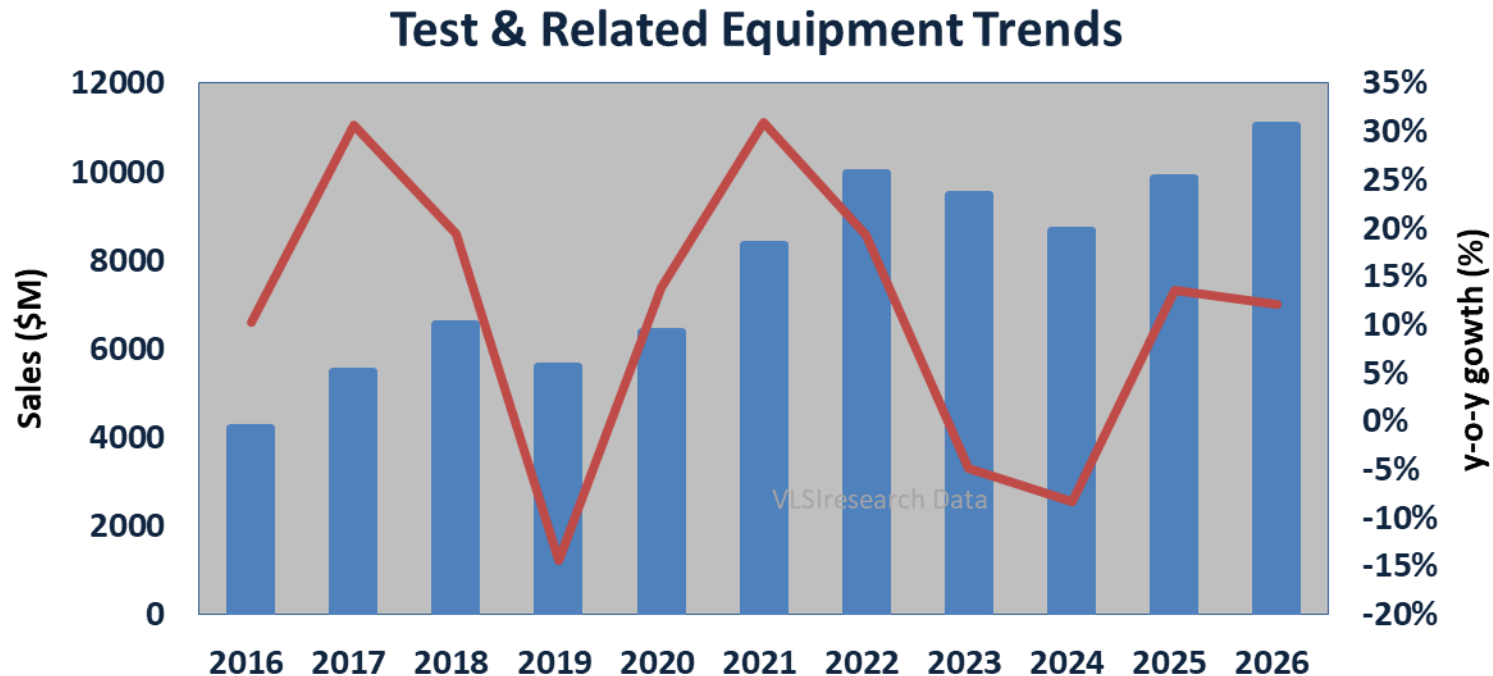


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**People:** Yan Borodovsky discusses what was happening

in 2007 with DFM and Computational Lithography at Intel in this historic interview series. Intel had made quite a splash with its announcement that it had developed a new form of computational lithography. At the time, Dr. Borodovsky was a Senior Intel Fellow and Director of Advanced Lithography there. In the first video, he describes the technology. In the second, he demonstrates how it works. In the third, details how innovation really happens at companies like Intel.



[DFM and Computational Lithography](#)

[Yan Borodovsky demonstrates it](#)

[Breaking the Limits, Solving the Unsolvable](#)

**People:** Craig Barrett discusses how Intel turned

manufacturing into the powerhouse it is today, in the first of this series with Dr. Barrett from 2006. He describes the origins of manufacturing lore such as Copy Exactly, Intel U, and refsnart in this interview. Then he also discusses the future of American competitiveness and the importance of math and science. At the time, he was Chairman of Intel.



[How Intel Rebuilt Manufacturing in the mid-80's](#)

[American Competitiveness](#)

[Math, Science, and Your Future](#)

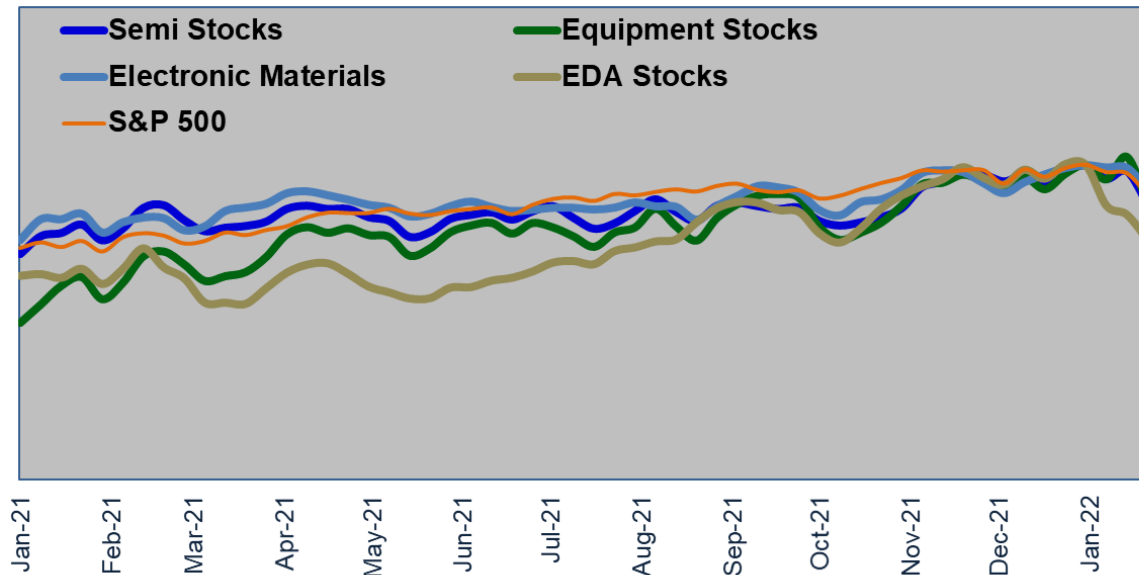
# semiStockWEEK:

VLSI's Semiconductor Stock Indices and S&P plummeted this week making it the worst week since the pandemic hit in March 2020.



## Semiconductor Industry Stock Performance Indices

(Stock Prices Indexed to 100 in last week of 2021)



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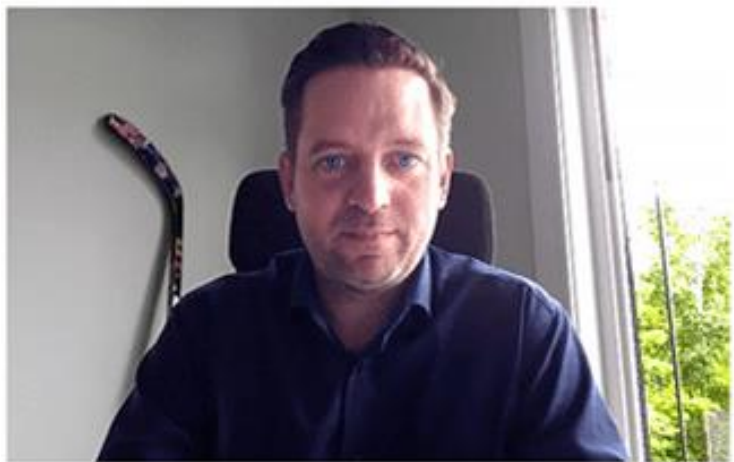
### VLSI's Stock Indices:

Semiconductors -8.5%  
Equipment -11.4%  
Electronic Materials -5.6%  
EDA -7.3%

weVISION Interview:

# Announcing a new and exciting combination: VLSIresearch joins forces with TechInsights!

Effective August 16, 2021



## What the conversation is about:

The business of technology is inseparable from the technology of the business. Unlike classic business, the business of technology is about constant change. It's time to bring core-technology and market analysis together, which explains why TechInsights has acquired VLSIresearch.

[Click here to watch online](#) or on the weVISION button in VLSI's mobile app

[Click here to read more about this development](#) or on the VLSI RELEASES button in VLSI's mobile app

# Semiconductor Stocks:

## Weekly Growth and Forward P/E Ratios by Company

Weekly Gains			1/21/2022		
Semiconductor Stocks	Price Change	Forward P/E	Semiconductor Stocks	Price Change	Forward P/E
<b>IDM</b>			<b>Fab-lite to Fabless</b>		
Intel	-6.6%	14	AMD	-13.2%	35
Micron	-15.8%	7	Analog Devices	-7.3%	19
ON Semiconductor	-17.3%	17	Broadcom	-10.6%	15
Samsung Electronics	-2.2%	-	IBM	-3.6%	13
SK hynix	-7.4%	-	Infineon	-9.0%	19
STMicroelectronics	-9.5%	18	MagnaChip Semiconductor	-9.8%	17
Western Digital	-13.3%	6	MaxLinear	-12.0%	18
<b>Foundry &amp; OSAT</b>			MediaTek	0.5%	-
Amkor	-13.6%	9	NVIDIA	-13.2%	45
ASE	-9.6%	9	Panasonic	-1.7%	10
GLOBALFOUNDRIES	-14.0%	29	Qualcomm	-12.6%	14
JCET	-2.3%	17	Silicon Laboratories	-13.4%	69
SkyWater Technology	-20.3%	-	Skyworks	-10.1%	11
SMIC	5.1%	16	Texas Instruments	-6.1%	21
TSMC	-11.5%	23	Xilinx	-5.4%	46
UMC	-6.9%	11			

Above Avg

Top 4-6

Top 1-3

**VLSI's Semiconductor Stock Index** plummeted this week. SMIC and MediaTek were the only two companies to finish in positive territory. SMIC was this week's biggest winner with a 5.1% gain. Panasonic was also a top performer this week.

IDM -10.3%  
 Foundry & OSAT -9.1%  
 Fabless & Fablite -8.5%

AMD <sup>AMD</sup> Analog Devices <sup>ADI</sup> Amkor <sup>AMKR</sup>  
 ASE <sup>ASX</sup> Broadcom <sup>AVGO</sup>  
 GLOBALFOUNDRIES <sup>GFS</sup> IBM <sup>IBM</sup>  
 Infineon <sup>IFNYY.PK</sup> Intel <sup>INTC</sup> JCET <sup>600584.SS</sup>  
 Micron Technology <sup>MU</sup> On Semiconductor <sup>ON</sup>  
 Panasonic <sup>PC</sup> MagnaChip Semiconductor <sup>MX</sup>  
 MaxLinear <sup>MXL</sup> MediaTek <sup>2454.TW</sup>  
 NVIDIA <sup>NVDA</sup> Qualcomm <sup>QCOM</sup>  
 Samsung Electronics <sup>005930.KS</sup> Silicon  
 Laboratories <sup>SLAB</sup> SkyWater Technology <sup>SKYT</sup>  
 Skyworks <sup>SWKS</sup> SMIC <sup>SMI</sup>  
 STMicroelectronics <sup>STM</sup> Texas Instruments  
 TXN TSMC <sup>TSM</sup> UMC <sup>UMC</sup> STMicroelectronics <sup>Western</sup>  
 Digital <sup>WDC</sup> Xilinx <sup>XLNX</sup>

# Chip Equipment & Related Stocks:

## Weekly Growth and Forward P/E Ratios by Company

Weekly Gains			1/21/2022		
Equipment Stocks	Price Change	Forward P/E	Equipment Stocks	Price Change	Forward P/E
<b>Wafer Fab:</b>			<b>Test:</b>		
Applied Materials	-19.1%	15	Advantest	-10.0%	-
ASM International	-11.3%	28	Teradyne	-12.9%	22
ASML	<b>-6.7%</b>	31	FormFactor	<b>-8.8%</b>	23
KLA	-16.2%	17			
Lam Research	-17.0%	16	<b>Assembly:</b>		
Onto Innovation	-15.6%	-	BESI	<b>-4.8%</b>	-
Nikon	<b>-5.8%</b>	-	Kulicke & Soffa	-13.3%	10
TEL	-11.8%	-	ASM Pacific Technology	<b>0.8%</b>	
Veeco Instruments	-15.4%	17			

Above Avg    Top 4-6    Top 1-3

**VLSI's Semiconductor Equipment Stock Index** plunged this week. ASM Pacific Technology came out on top this week with a positive 0.8% gain.

WFE -13.2%  
 Test -10.6%  
 Assembly -5.8%

Applied Materials <sup>AMAT</sup>    Advantest <sup>ATEYY</sup>  
 ASM International <sup>ASMIY</sup>  
 ASM Lithography <sup>ASML</sup>    ASM Pacific <sup>0522.HK</sup>  
 BE Semiconductor <sup>BESIIY.PK</sup>  
 FormFactor <sup>FORM</sup>    KLA <sup>KLAC</sup>  
 Kulicke & Soffa <sup>KLIC</sup>    Lam Research <sup>LRCX</sup>  
 Onto Innovation <sup>ONTO</sup>    Nikon <sup>7731</sup>  
 Teradyne <sup>TER</sup>    Tokyo Electron Limited <sup>8035</sup>  
 Veeco <sup>VECO</sup>

# Electronic Materials Stocks:

## Weekly Growth and Forward P/E Ratios by Company

Weekly Gains			1/21/2022		
EDA & Electronic Materials Stocks	Price Change	Forward P/E	EDA & Electronic Materials Stocks	Price Change	Forward P/E
<b>EDA</b>			DNP	-1.8%	-
Cadence	-8.3%	42	DuPont de Nemours	-8.8%	5
Synopsys	-7.0%	34	JSR	-2.5%	-
Ansys	-6.5%	41	Shin-Etsu	-3.6%	-
<b>Electronic Materials</b>			SOITEC	-18.3%	-
BASF	-4.1%	3	Tokyo Ohka	-1.4%	-
CMC Materials	-4.1%	22			

Above Avg
Top 4-6
Top 1-3

VLSI's EDA Stock Index plummeted this week.

VLSI's Electronic Materials Stock Index fell this week. DNP and Tokyo Ohka claimed two of the top six stock spots.

Ansys, Inc. <sup>ANSS</sup>    BASF <sup>BASFY</sup>  
 CMC Materials <sup>CCMP</sup>    Cadence <sup>CDNS</sup>  
 DNP <sup>7912</sup>    DuPont <sup>DD</sup>    JSR <sup>4185</sup>  
 Shin-Etsu <sup>4063</sup>    SOITEC <sup>SOI.PA</sup>  
 Synopsys <sup>SNPS</sup>    Tokyo Ohka <sup>4186</sup>



The Prior Week's Close	VLSI's Indices of Chip Industry Stocks				Weekly Growth				Companies Up	Max Growth	Companies Down	Min Growth	Range of Growth	S&P 500	S&P 500 Growth
	Semi Stocks	Equipment Stocks	Materials Stocks	EDA Stocks	Semi Stocks	Equipment Stocks	Materials Stocks	EDA Stocks							
18-Jun-21	86.2	82.6	88.4	71.4	-2.1%	-3.2%	-1.1%	1.0%	15	9.1%	-39	-8.4%	17.5%	87.4	-1.9%
25-Jun-21	88.3	85.3	88.7	73.0	2.4%	3.2%	0.4%	2.2%	44	13.9%	-10	-7.6%	21.5%	89.8	2.7%
02-Jul-21	89.6	84.1	89.2	75.2	1.5%	-1.3%	0.6%	3.1%	29	10.6%	-26	-7.6%	18.2%	91.3	1.7%
09-Jul-21	86.6	81.9	89.2	75.6	-3.3%	-2.7%	0.0%	0.5%	19	7.3%	-36	-10.5%	17.8%	91.7	0.4%
16-Jul-21	83.9	79.2	88.8	74.8	-3.2%	-3.2%	-0.5%	-1.0%	12	6.9%	-42	-10.8%	17.7%	90.8	-1.0%
23-Jul-21	85.3	82.9	89.2	78.1	1.7%	4.6%	0.5%	4.5%	36	9.4%	-18	-73.1%	82.5%	92.6	2.0%
30-Jul-21	88.4	84.2	90.6	79.1	3.7%	1.6%	1.5%	1.2%	39	24.0%	-15	-37.0%	61.0%	92.2	-0.4%
06-Aug-21	91.4	88.9	89.6	80.6	3.4%	5.6%	-1.1%	1.9%	46	29.1%	-8	-14.3%	43.4%	93.1	0.9%
13-Aug-21	88.2	84.4	89.4	81.1	-3.5%	-5.0%	-0.1%	0.6%	15	3.7%	-40	-14.0%	17.7%	93.7	0.7%
20-Aug-21	85.9	80.8	86.2	85.5	-2.6%	-4.3%	-3.6%	5.4%	7	8.1%	-48	-13.5%	21.6%	93.2	-0.6%
27-Aug-21	89.7	86.6	89.6	89.0	4.5%	7.1%	4.0%	4.2%	52	36.9%	-2	-4.3%	41.2%	94.6	1.5%
03-Sep-21	90.5	90.0	92.2	90.6	0.8%	4.0%	2.9%	1.7%	33	23.7%	-21	-6.0%	29.7%	95.2	0.6%
10-Sep-21	89.6	92.2	94.7	90.4	-1.0%	2.4%	2.7%	-0.2%	24	11.4%	-29	-8.1%	19.5%	93.5	-1.7%
17-Sep-21	88.9	92.6	94.3	88.6	-0.8%	0.4%	-0.4%	-2.0%	23	5.5%	-30	-6.8%	12.3%	93.0	-0.6%
24-Sep-21	89.2	91.7	93.1	88.1	0.3%	-1.0%	-1.3%	-0.5%	22	5.8%	-30	-5.2%	11.0%	93.5	0.5%
01-Oct-21	85.8	84.2	88.6	82.6	-3.8%	-8.2%	-4.8%	-6.2%	6	4.3%	-48	-14.7%	19.0%	91.4	-2.2%
08-Oct-21	84.7	81.0	87.3	80.3	-1.4%	-3.8%	-1.5%	-2.8%	15	2.9%	-39	-14.3%	17.2%	92.1	0.8%
15-Oct-21	85.5	82.8	90.6	83.9	1.0%	2.2%	3.8%	4.4%	39	8.1%	-14	-11.8%	19.9%	93.8	1.8%
22-Oct-21	86.8	85.3	91.3	88.9	1.5%	3.0%	0.8%	5.9%	40	15.7%	-14	-11.6%	27.3%	95.4	1.6%
29-Oct-21	89.0	89.6	93.7	92.2	2.6%	5.0%	2.6%	3.8%	38	24.6%	-16	-8.3%	32.9%	96.6	1.3%
05-Nov-21	94.4	95.0	98.0	94.6	6.1%	6.1%	4.6%	2.5%	45	30.5%	-8	-29.8%	60.3%	98.6	2.0%
12-Nov-21	95.9	95.5	98.7	96.4	1.5%	0.4%	0.7%	1.9%	31	8.5%	-16	-12.1%	20.6%	98.3	-0.3%
19-Nov-21	98.3	97.5	98.2	99.4	2.6%	2.1%	-0.4%	3.2%	39	12.2%	-16	-16.8%	29.0%	98.6	0.3%
26-Nov-21	97.7	96.0	95.5	96.8	-0.6%	-1.6%	-2.8%	-2.7%	16	11.8%	-39	-9.6%	21.4%	98.6	0.1%
03-Dec-21	95.9	94.5	92.9	95.0	-1.9%	-1.6%	-2.7%	-1.9%	12	6.0%	-44	-11.1%	17.1%	95.2	-3.5%
10-Dec-21	97.5	96.9	95.7	98.8	1.6%	2.6%	3.0%	4.0%	40	13.2%	-15	-7.5%	20.7%	98.9	3.8%
17-Dec-21	94.7	93.8	97.7	96.5	-2.9%	-3.2%	2.1%	-2.3%	12	25.6%	-43	-15.6%	41.2%	96.9	-1.9%
24-Dec-21	98.6	97.7	99.3	100.2	4.1%	4.2%	1.7%	3.8%	50	13.8%	-6	-2.8%	16.6%	99.2	2.3%
31-Dec-21	100.0	100.0	100.0	100.0	1.5%	2.3%	0.7%	-0.2%	44	8.1%	-11	-2.7%	10.8%	100.0	0.9%
07-Jan-22	96.6	96.3	99.4	89.7	-3.4%	-3.7%	-0.6%	-10.3%	10	7.4%	-45	-17.5%	24.9%	98.1	-1.9%
14-Jan-22	98.5	102.0	99.3	87.4	2.0%	5.9%	-0.1%	-2.5%	36	23.7%	-20	-4.9%	28.6%	97.8	-0.3%
21-Jan-22	90.1	90.4	93.8	81.0	-8.5%	-11.4%	-5.6%	-7.3%	3	5.1%	-53	-20.3%	25.4%	92.3	-5.7%

# Links to Conference Call Transcripts

January 21<sup>st</sup>

[ASML Holding N.V.'s \(ASML\) CEO Peter Wennink on Q4 2021 Results - Earnings Call Transcript](#)

January 14<sup>th</sup> and before

[Taiwan Semiconductor Manufacturing Company Limited \(TSM\) CEO C. C. Wei on Q4 2021 Results - Earnings Call Transcript](#)

[NVIDIA Corporation's \(NVDA\) Management Presents at 24th Annual Needham Growth Conference \(Transcript\)](#)

[Aehr Test Systems' \(AEHR\) CEO Gayn Erickson on Q2 2022 Results - Earnings Call Transcript](#)

[Micron Technology, Inc. \(MU\) CEO Sanjay Mehrotra on Q1 2022 Results - Earnings Call Transcript](#)

[Carl Zeiss Meditec AG \(CZMWF\) CEO Dr. Ludwin Monz on Q4 2021 Results - Earnings Call Transcript](#)

[Broadcom Inc. \(AVGO\) CEO Hock Tan on Q4 2021 Results - Earnings Call Transcript](#)

[NVIDIA Corporation \(NVDA\) Presents at Deutsche Bank Autotech Conference \(Transcript\)](#)

[QUALCOMM Incorporated \(QCOM\) CEO Cristiano Amon Presents at Barclays Global Technology, Media and Telecommunications Conference \(Transcript\)](#)

[Lam Research Corporation \(LRCX\) Management Presents at Barclays Global Technology, Media and Telecommunications Conference \(Transcript\)](#)

[Cisco Systems, Inc. \(CSCO\) CEO Chuck Robbins Presents at Barclays Global Technology, Media and Telecommunications Conference Call \(Transcript\)](#)

[Qorvo, Inc. \(QRVO\) CEO Bob Bruggeworth Presents at Barclays 2021 Global TMT Conference \(Transcript\)](#)

# Links to Conference Call Transcripts

[ASML Holding N.V. \(ASML\) Management Presents at UBS Global TMT Virtual Brokers Conference \(Transcript\)](#)

[Advanced Micro Devices, Inc. \(AMD\) Management Presents at Barclays Global Technology, Media and Telecommunications Conference Call \(Transcript\)](#)

[Intel Corporation \(INTC\) Presents at UBS 2021 Global TMT Conference \(Transcript\)](#)

[NXP Semiconductors N.V.'s \(NXPI\) Kurt Sievers Presents at Barclays Global Technology, Media and Telecommunications Conference - \(Transcript\)](#)

[Lam Research Corporation \(LRCX\) Management Presents at UBS Global TMT Conference Call \(Transcript\)](#)

[Marvell Technology, Inc. \(MRVL\) CEO Matt Murphy Presents at UBS Global TMT Virtual Conference \(Transcript\)](#)

[NVIDIA Corporation \(NVDA\) Management Presents at UBS Global TMT Virtual Conference \(Transcript\)](#)

[Cisco Systems, Inc. \(CSCO\) Presents at Raymond James 2021 Technology Investors Conference \(Transcript\)](#)

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[Synopsys, Inc. \(SNPS\) CEO Aart de Geus on Q4 2021 Results - Earnings Call Transcript](#)

[NVIDIA Corporation \(NVDA\) Annual Virtual Wells Fargo TMT Summit Conference \(Transcript\)](#)

[NXP Semiconductors N.V. \(NXPI\) Presents at Credit Suisse 25th Annual Technology Conference \(Transcript\)](#)

[Micron Technology's \(MU\) CEO Sanjay Mehrotra Presents at Credit Suisse 25th Annual Technology Conference \(Transcript\)](#)

[Western Digital Corporation \(WDC\) Presents at NASDAQ 45th Investor Conference \(Transcript\)](#)

[HP Inc. \(HPQ\) CEO Enrique Lores on Q4 2021 Results - Earnings Call Transcript](#)

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- Semiconductor Forecast – V21.12
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- Advanced Packaging – V21.11
- Design Completions – V21.11

### **Equipment Database Module:**

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- IC Equipment Market Shares:
  - Yearly – V20.05
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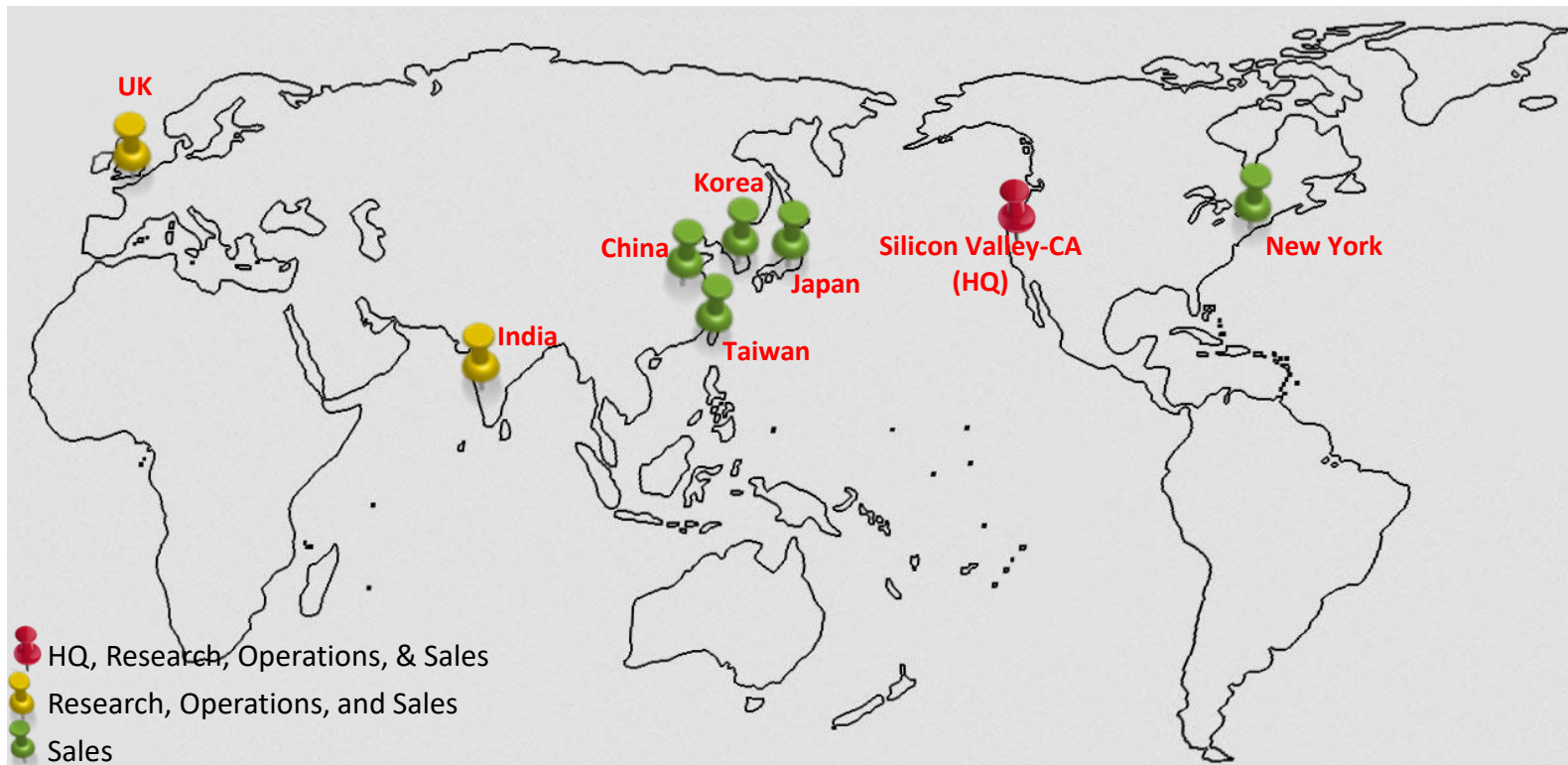
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# Meet the Team



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