

Semiconductor WEEK:

March 25, 2022

An overview of results and conclusions from recent reports at TechInsights

Chip Market Research Services

It's still hot but supply constraints are holding up growth

- Order activity for semiconductor equipment slipped to 113 degrees
- IC Inventory Levels

Semiconductor Analytics

Last Week in the Semiconductor Market:

Semiconductor sales jumped W/W in the third week of March, with sales passing 50% Y/Y. The IC weather heated up 6°F last week. The March forecast update was mostly unchanged, with memory raised slightly. Zooming in on Auto ICs this week, 13-wk MA growth has been holding around 23-24% Y/Y. Growth is forecasted to finish 2022 around +18% Y/Y, reaching \$33B.

TechInsights' IC Supply/Demand indices tightened significantly last week as overall conditions went from Tight to Shortage. More Moore Foundry rose to tight, while More than Moore Foundry went to Balanced. The 1Q22 NowCast remains Tight, with NAND tightening to Shortage and More Moore Foundry up to Balanced.

Electronics' Retail Price MAs continue to soar.

Chip History Center

How KLA-Tencor Meets Stringent Process Control

Requirements Ken Schroeder, then President & CEO of KLA-Tencor, discusses the history of process control and the role K-T played in improving wafer fab yields for semiconductor companies. **KLA 200 Series Reticle Inspection Systems** KLA's technical success was founded on how it used software to identify defects in optical images.

The Chip Insider

Strategy and Tactics: Lam Research's Selective Etcher. COVID Strikes Again.

Semiconductor Stocks

- *TechInsights' Semiconductor Stock Indices eked out a gain along with the market*
- *Semiconductor Stock Index was led up by Intel*
 - *Intel was this week's top performer*
- *Semiconductor Equipment Stock Index was led up by TEL*
- *EDA Stock Index slipped*
- *Electronics Materials Stock Index was led up by JSR*
- *Hottest Stocks: Intel, TEL, Advantest, SkyWater Technology, Nikon, AMD, and JSR*

TechInsights

The Chip Insider[®]'s Graphics File



March 2022

It's still hot but supply constraints are holding up growth

- Order activity for semiconductor equipment slipped to 113 degrees
- All segments held their ground at record levels, except for Memory where order activity fell for the third straight week
- TechInsights' Chip Price Performance Index slipped again



This issue contains the latest forecast.

Forecast as of March 2022:	2021	2022
Semi Equipment (\$B):	\$ 124.0	\$ 149.2
Sequential Change	34.2%	20.3%
Capacity Utilization:	97.2%	96.9%
ICs (\$B):	\$ 492.3	\$ 568.2
Sequential Change	27.4%	15.4%
IC Units (BU):	394.2	439.0
Sequential Change	23.7%	11.4%
Electronics (\$B) :	\$ 2,574	\$ 2,758
Sequential Change	18.9%	7.1%

[Contact us to access more details](#)

Workforce Development Solutions...

with Ajit Manocha of SEMI



What the conversation is about:

- Labor shortages have become the echo pandemic from the ravages COVID has had on the economy.
- This is no truer than in the semiconductor industry, where Workforce Development has long been on the To-Do lists of many.
- Most industry efforts appear to be more about lobbying others to do something about workforce development.
- It's really hard to do something substantive about it but SEMI is.

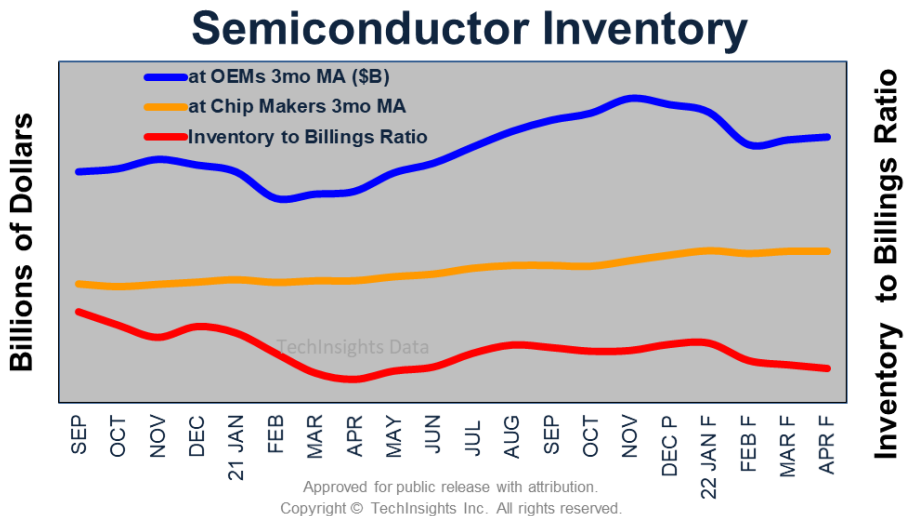
[Click here to watch online](#) or on the weVISION button in VLSI's mobile app

The Chip Insider[®] Graphics

IC Inventory Levels:

- Inventories are rising

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 Analytics

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TechInsights' IC Supply/Demand indices tightened significantly last week as overall conditions went from Tight to Shortage. More Moore Foundry rose to tight, while More than Moore Foundry went to Balanced. The 1Q22 NowCast remains Tight, with NAND tightening to Shortage and More Moore Foundry up to Balanced.

Electronics' Retail Price MAs continue to soar.



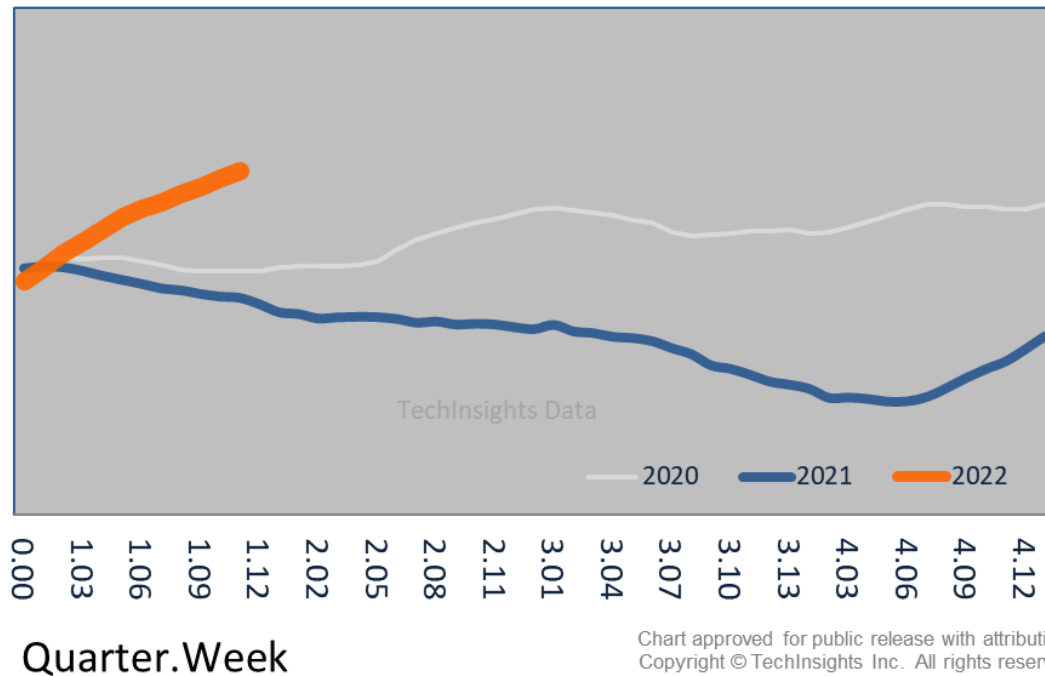
1: Measures Order Activity 2: Measures Pricing Power

Electronics Retail Pricing Trends:

for PC notebooks Tablets Smartphones Cell phones Digital Cameras Appliances TVs

Electronics' Retail Price MAs continue to soar. But there are signs of weakness in PCs and Consumer.

Electronics Pricing Barometer
indexed 13 week moving average



Source: Semiconductor Analytics

Chart approved for public release with attribution.
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Innovation in Memory ...

with Scott DeBoer of Micron
Technology



What the conversation is about:

- Scott DeBoer of Micron Technology has a conversation with Dan Hutcheson about what it takes to innovate in Memory today. Scott leads Micron's global technology development and engineering efforts – from silicon design to high-value system solutions.

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



Strategy and Tactics: *Lam Research's Selective Etcher. COVID Strikes Again.*

Summaries:

What's Happening and What's the Meaning: Lam

Research's Selective Etcher: *Lam has taken selective etch to new levels with selectivity numbers that reach as high as ..., so they can focus on GAA. What's different about Lam's selective etch technology is that they are employing new chemistries that allow them to dial down the mechanical nature essential to anisotropic etch while amping up the importance of chemical reactivity*. Moreover, they've come to market with three different chambers: Argos®... Prevos™ ... and Selis®...*

COVID Strikes Again: *You've probably read Shenzhen went into lockdown earlier this week. This means a substantial amount of the world's electronics production will go on hold as they wait the disease out. This could bring back the electronics shortage...*

Dan's Strategy Book Shelf: *Correction: Last week, I wrote about John Chen's new book, titled Leadership in Management. John got back to me to point out an error on my part... John actually formed TSMC's first R&D group...*

For Your Reference: *2021's Top Semiconductor Equipment Suppliers soared to record-highs despite severe supply chain shortages that kept them running hard to match demand. Applied Materials and ASML jumped past the \$20B mark while LAM Research and TEL cleared the \$16B bar...*

"I've always been more interested in the future than in the past"
— Grace Hopper

[Contact us to get the full report and more](#)



How KLA-Tencor Meets Stringent Process Control Requirements: Ken Schroeder, then President & CEO of KLA-Tencor, discusses the history of process control and the role K-T played in improving wafer fab yields for semiconductor companies in this 2005 video. K-T's Puma tool dark-field wafer inspection was introduced for the first time in this video. The Puma would go on to be one of the most popular wafer fab tools ever introduced. The 2800 broadband bright-field system was also introduced.



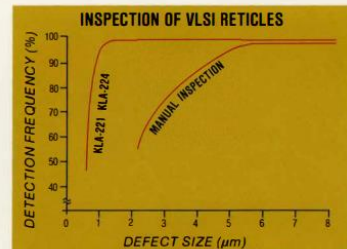
KLA 200 Series Reticle Inspection Systems: KLA's technical success was founded on how it used software to identify defects in optical images. KLA's business success was founded on its ability to shrink-wrap its software with a full system solution. There were plenty of others trying to do the same thing at the same time. The difference between KLA's success and the failure of other's was KLA's ability to tie its systems capabilities to key customer needs. You can see how they did it in this 1984 brochure.

KLARIS: Automatic inspection of reticles against a database . . .and

The Problem: How to Detect and Eliminate Killer Defects Before They're Repeated

VLSI circuits require more exacting and precise inspection of reticles and photomasks than ever before. The inability to compare a reticle or photomask die pattern to its database can lead to a fatal defect being repeated in hundreds of thousands of chips. However, installing a method of proper database comparison ensures that the geometry is correct, and that defects due to processing anomalies, contamination and handling will be located in time to prevent staggering losses . . . in both dollars and inventory.

Unfortunately, manual inspection simply doesn't work.



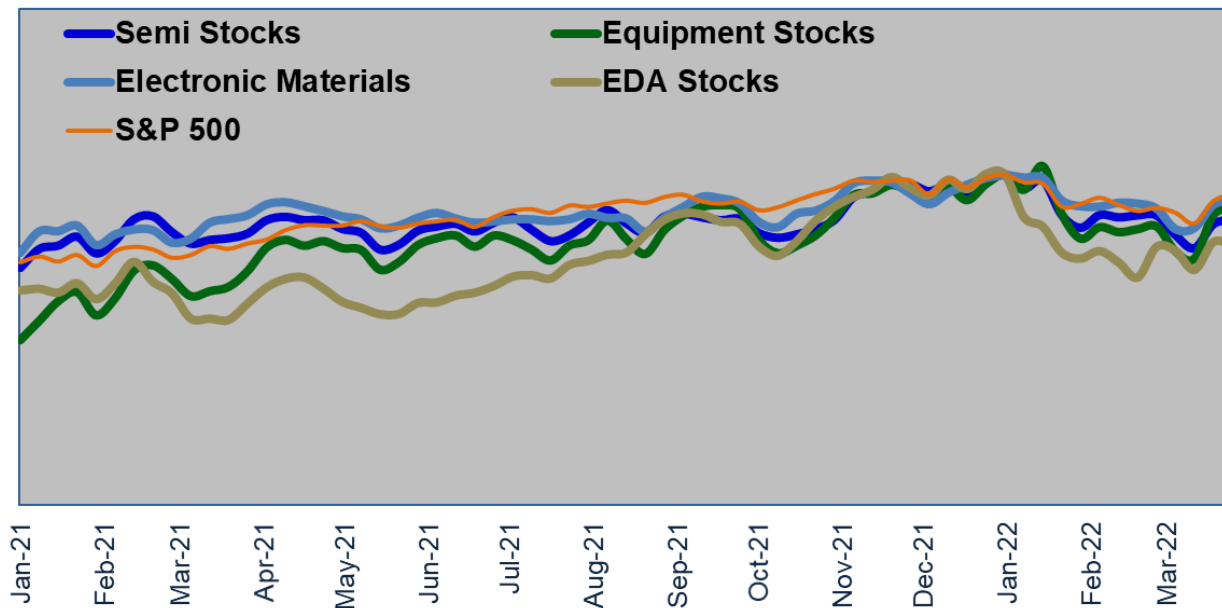
semiStockWEEK:

TechInsights' Semiconductor Stock Indices eked out a gain along with the market despite the geopolitical concerns still at the forefront.



Semiconductor Industry Stock Performance Indices

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



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TechInsights' Stock Indices:

Semiconductors +1.3%
Equipment +1.7%
Electronic Materials +1.3%
EDA -0.9%

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

TechInsights

Semiconductor Stocks:

Weekly Growth and Forward P/E Ratios by Company

Weekly Gains			3/25/2022		
Semiconductor Stocks	Price Change	Forward P/E	Semiconductor Stocks	Price Change	Forward P/E
IDM			Fab-lite to Fabless		
Intel	9.2%	13	AMD	5.5%	24
Micron	-1.6%	6	Analog Devices	1.3%	18
ON Semiconductor	3.0%	14	Broadcom	3.0%	16
Samsung Electronics	-1.3%	-	IBM	2.0%	12
SK hynix	-4.8%		Infineon	2.6%	15
STMicroelectronics	3.4%	12	MagnaChip Semiconductor	-1.5%	12
Western Digital	3.1%	6	MaxLinear	5.2%	15
Foundry & OSAT			MediaTek	0.2%	-
Amkor	1.7%	8	NVIDIA	4.7%	39
ASE	-2.1%	10	Panasonic	-0.6%	9
GLOBALFOUNDRIES	2.8%	28	Qualcomm	2.6%	12
JCET	-1.1%	15	Silicon Laboratories	-2.1%	46
SkyWater Technology	5.7%	-	Skyworks	2.1%	10
SMIC	-1.3%	11	Texas Instruments	2.7%	19
TSMC	0.0%	17			
UMC	-0.6%	9			

Above Avg

Top 4-6

Top 1-3

TechInsights' Semiconductor Stock Index was led up by Intel, who was this week's top performer, buoyed by huge spending plans announced this week for new fabs, including an "epicenter" in the EU. SkyWater Technology and AMD were also top performers.

IDM +1.6%
 Foundry & OSAT +0.6%
 Fabless & Fabless +2.0%

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

Chip Equipment & Related Stocks:

Weekly Growth and Forward P/E Ratios by Company

Weekly Gains			3/25/2022		
Equipment Stocks	Price Change	Forward P/E	Equipment Stocks	Price Change	Forward P/E
Wafer Fab:			Test:		
Applied Materials	1.4%	14	Advantest	8.1%	-
ASM International	-0.7%	26	Teradyne	0.9%	18
ASML	1.1%	31	FormFactor	0.7%	21
KLA	0.4%	15			
Lam Research	1.9%	14	Assembly:		
Onto Innovation	-2.3%	-	BESI	5.3%	-
Nikon	5.6%	-	Kulicke & Soffa	-1.0%	11
TEL	8.8%	-	ASM Pacific Technology	-5.5%	
Veeco Instruments	0.0%	15			

Above Avg

Top 4-6

Top 1-3

TechInsights' Semiconductor Equipment Stock Index was led up by TEL, followed by Advantest and Nikon who were three of the top six performers this week. Assembly slipped this week despite a solid performance from BESI.

WFE +1.8%
 Test +3.2%
 Assembly -0.4%

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

Electronic Materials Stocks:

Weekly Growth and Forward P/E Ratios by Company

Weekly Gains						3/25/2022
EDA & Electronic Materials Stocks	Price Change	Forward P/E	EDA & Electronic Materials Stocks	Price Change	Forward P/E	
EDA			DNP	0.8%	–	
Cadence	0.0%	38	DuPont de Nemours	0.5%	5	
Synopsys	0.2%	35	JSR	5.5%	–	
Ansys	-3.0%	36	Shin-Etsu	4.7%	–	
Electronic Materials			SOITEC	2.7%	–	
BASF	-4.4%	2	Tokyo Ohka	0.5%	–	
CMC Materials	0.4%	22				

Above Avg
Top 4-6
Top 1-3

TechInsights' EDA Stock Index slipped this week.

TechInsights' Electronic Materials Stock Index was led up by JSR.

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

The Prior Week's Close	TechInsights' 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							
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%
28-Jan-22	87.1	84.5	92.4	79.7	-3.4%	-6.6%	-1.5%	-1.7%	11	5.0%	-45	-21.8%	26.8%	93.0	0.8%
04-Feb-22	90.2	87.3	92.3	81.5	3.5%	3.3%	-0.1%	2.3%	41	17.5%	-13	-4.3%	21.8%	94.4	1.6%
11-Feb-22	89.6	86.1	93.2	78.7	-0.7%	-1.4%	1.0%	-3.4%	20	10.6%	-33	-8.9%	19.5%	92.7	-1.8%
18-Feb-22	90.1	86.8	93.0	75.0	0.6%	0.8%	-0.2%	-4.7%	28	12.2%	-26	-7.0%	19.2%	91.2	-1.6%
25-Feb-22	90.1	87.5	91.9	82.5	0.0%	0.8%	-1.3%	9.9%	30	14.7%	-25	-9.5%	24.2%	92.0	0.8%
04-Mar-22	85.3	81.4	86.8	81.5	-5.3%	-6.9%	-5.5%	-1.2%	7	6.4%	-48	-18.6%	25.0%	90.8	-1.3%
11-Mar-22	82.1	79.7	87.1	76.9	-3.7%	-2.2%	0.3%	-5.7%	9	9.7%	-45	-11.1%	20.8%	88.2	-2.9%
18-Mar-22	87.9	90.3	92.7	83.7	7.1%	13.3%	6.5%	8.8%	53	31.3%	-2	-5.9%	37.2%	93.6	6.2%
25-Mar-22	89.1	91.8	94.0	82.9	1.3%	1.7%	1.3%	-0.9%	36	9.2%	-16	-5.5%	14.7%	95.3	1.8%

Links to Conference Call Transcripts

March 25th

None this week.

March 18th and before

[Western Digital Corporation \(WDC\) Presents at Morgan Stanley 2022 Technology, Media & Telecom Conference \(Transcript\)](#)

[Cisco Systems, Inc. \(CSCO\) Management Presents at Morgan Stanley Technology, Media and Telecom Conference 2022 Transcript](#)

[International Business Machines Corporation \(IBM\) Management Presents at Morgan Stanley Technology, Media and Telecom Brokers Conference 2022 \[Transcript\]](#)

[Texas Instruments Incorporated \(TXN\) CEO Rich Templeton Presents at Morgan Stanley 2022 Technology, Media & Telecom Conference \(Transcript\)](#)

[IDT Corporation \(IDT\) CEO Shmuel Jonas on Q2 2022 Results - Earnings Call Transcript](#)

[Lam Research Corporation's \(LRCX\) Management Presents at Morgan Stanley Technology, Media and Telecom Conference 2022 \(Transcript\)](#)

[NXP Semiconductors N.V. \(NXPI\) Presents at Morgan Stanley Tech Conference, San Francisco Conference \(Transcript\)](#)

[Intel Corporation \(INTC\) CEO Patrick Gelsinger Presents at Morgan Stanley Technology, Media and Telecom Conference 2022 \(Transcript\)](#)

[NVIDIA Corporation \(NVDA\) Presents at Morgan Stanley 2022 Technology, Media and Telecom Conference \(Transcript\)](#)

Links to Conference Call Transcripts

- [Thermo Fisher Scientific Inc. \(TMO\) CEO Marc Casper on 42nd Annual Cowen Health Care Conference \(Transcript\)](#)
- [Qorvo \(QRVO\) CEO, Bob Bruggeworth Presents at Raymond James 43rd Annual Institutional Investors Conference - Company Call Transcript](#)
- [Broadcom's \(AVGO\) CEO Hock Tan on Q1 2022 Results - Earnings Call Transcript](#)
- [VAT Group AG \(VACNY\) CEO Mike Allison on Q4 2021 Results - Earnings Call Transcript](#)
- [Dell Technologies Inc. \(DELL\) Management on Q4 2022 Results - Earnings Call Transcript](#)
- [AIXTRON SE \(AIXXF\) CEO Felix Grawert on Q4 2021 Results - Earnings Call Transcript](#)
- [ChipMOS TECHNOLOGIES INC. \(IMOS\) Q4 2021 Results - Earnings Call Transcript](#)
- [ASM International NV \(ASMIY\) CEO Benjamin Loh on Q4 2021 Results - Earnings Call Transcript](#)
- [SkyWater Technology, Inc. \(SKYT\) CEO Thomas Sonderman on Q4 2021 Results - Earnings Call Transcript](#)
- [Lenovo Group Limited \(LNVGY\) CEO Yang Yuangqing On Q3 2022 Results - Earnings Call Transcript](#)
- [ASM Pacific Technology Limited \(ASMVF\) CEO Robin Gerard Ng on Q4 2021 Results - Earnings Call Transcript](#)
- [Agilent Technologies, Inc.'s \(A\) CEO Mike McMullen on Q1 2022 Results - Earnings Call Transcript](#)
- [BE Semiconductor Industries N.V. \(BESIJ\) CEO Richard Blickman on Q4 2021 Results - Earnings Call Transcript](#)
- [Keysight Technologies, Inc. \(KEYS\) CEO Ronald Nersesian on Q1 2022 Results - Earnings Call Transcript](#)
- [NVIDIA Corporation's \(NVDA\) CEO Jensen Huang on Q4 2022 Results - Earnings Call Transcript](#)
- [Magnachip Semiconductor Corporation \(MX\) CEO YJ Kim on Q4 2021 Results - Earnings Call Transcript](#)
- [Synopsys, Inc. \(SNPS\) CEO Aart de Geus on Q1 2022 Results - Earnings Call Transcript](#)
- [Veeco Instruments Inc. \(VECO\) CEO Bill Miller on Q4 2021 Results - Earnings Call Transcript](#)

Links to Conference Call Transcripts

[Applied Materials, Inc.'s \(AMAT\) CEO Gary Dickerson on Q1 2022 Results - Earnings Call Transcript](#)

[Analog Devices, Inc. \(ADI\) CEO Vincent Roche on Q1 2022 Results - Earnings Call Transcript](#)

[Cohu, Inc. \(COHU\) CEO Luis Müller on Q4 2021 Results - Earnings Call Transcript](#)

[ASE Technology's \(ASX\) Management on Q4 2021 Results - Earnings Call Transcript](#)

[Advanced Energy Industries, Inc. \(AEIS\) CEO Steve Kelley on Q4 2021 Results - Earnings Call Transcript](#)

[GlobalFoundries Inc. \(GFS\) CEO Tom Caulfield on Q4 2021 Results - Earnings Call Transcript](#)

[Onto Innovation Inc. \(ONTO\) CEO Michael Plisinski on Q4 2021 Results - Earnings Call Transcript](#)

[DuPont de Nemours, Inc. \(DD\) CEO Ed Breen on Q4 2021 Results - Earnings Call Transcript](#)

[ams-OSRAM AG \(AMSSY\) CEO Alex Everke on Q4 2021 Results - Earnings Call Transcript](#)

[Axcelis Technologies, Inc.'s \(ACLS\) CEO Mary Puma on Q4 2021 Results - Earnings Call Transcript](#)

[ON Semiconductor Corporation \(ON\) CEO Hassane El-Khoury on Q4 2021 Results - Earnings Call Transcript](#)

[Kulicke and Soffa Industries' \(KLIC\) CEO Fusen Chen on Q1 2022 Results - Earnings Call Transcript](#)

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