

# RESEARCH BULLETIN

**MARCH 1, 2022**

## Semi Industry Capex Forecast to Jump 24% and Reach Over \$190 Billion This Year

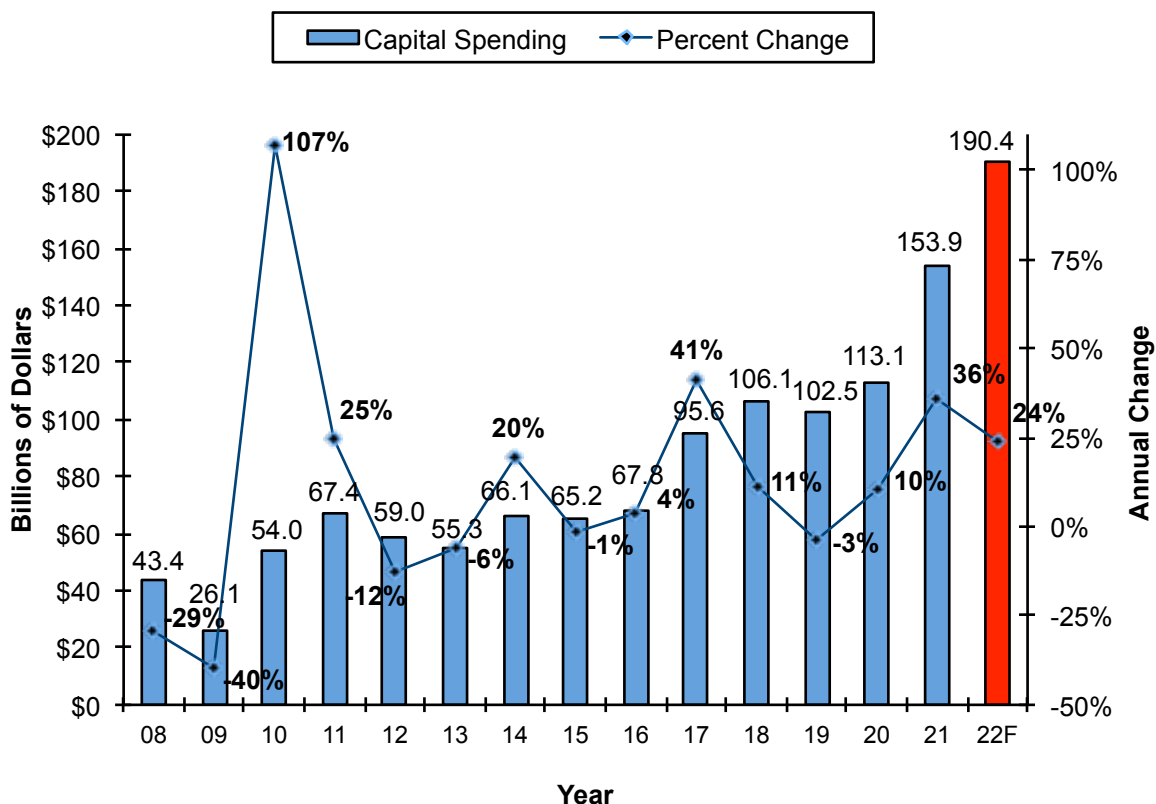
*2020-2022 expected to be the first 3-year period of double-digit capex growth since 1993-1995.*

Figure 1 shows that after surging 36% in 2021, semiconductor industry capital spending is forecast to jump 24% in 2022 to a new all-time high of \$190.4 billion, up 86% from just three years earlier in 2019. Moreover, if capital spending increases by  $\geq 10\%$  in 2022, it would mark the first three-year period of double-digit spending increases in the semiconductor industry since the 1993-1995 timeperiod.

### MORE INFORMATION CONTACT

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### Worldwide Semiconductor Capital Spending Trends (2008-2022F)



Source: IC Insights

Figure 1

With many supply chains strained or broken during the pandemic, the electronics industry, in many cases, was left unprepared for the current rebound in demand. Booming demand has pushed most fabrication facility utilization rates well above 90% with many of the semiconductor foundries operating at 100% utilization. With such strong utilization rates and the expectations of continued high demand, the combined semiconductor industry capital spending in 2021 and 2022 is forecast to reach \$344.3 billion!

Figure 2 shows a sampling of 13 companies that are expected to increase their capital outlays by  $\geq 40\%$  this year. In total, these 13 companies spent \$60.6 billion last year, which was up 62% from 2020, and are forecast to spend \$91.8 billion this year, up 52% from 2021. It is interesting to note that the big three memory suppliers (i.e., Samsung, SK Hynix, and Micron) are not on the list while the top three pure-play foundries (TSMC, UMC, and GlobalFoundries) are included. Moreover, illustrating the diversity of the listing, four of the top five leading analog IC suppliers (TI, Analog Devices, Infineon, and ST) are scheduled to significantly ramp up spending in 2022.

The combined outlays of the 13 companies shown in Figure 2 are expected to be almost 2.5x what they were two years earlier in 2020. However, the majority of these semiconductor manufacturers are responding to the current demand surge. Over the next few years, many companies' outlays are likely to revert to a capital spending as a percent of sales ratio of somewhere near pre-pandemic levels.

## Companies Expected to Increase Spending by $\geq 40\%$ in 2022

2022F Rank	Company	Headquarters	2019 (\$M)	2020 (\$M)	20/19 % Change	2021 (\$M)	21/20 % Change	2022F (\$M)	22/21 % Change
1	Winbond	Taiwan	433	284	-34%	352	24%	1,645	367%
2	GlobalFoundries	U.S.	773	592	-23%	1,766	198%	4,500	155%
3	Nanya	Taiwan	178	291	63%	404	39%	1,000	148%
4	Renesas	Japan	351	209	-40%	333	59%	800	140%
5	Analog Devices	U.S.	251	174	-31%	372	114%	800	115%
6	ONsemi	U.S.	535	384	-28%	445	16%	935	110%
7	ST	Europe	1,174	1,278	9%	1,828	43%	3,500	91%
8	Vanguard	Taiwan	279	128	-54%	477	273%	865	81%
9	UMC	Taiwan	566	952	68%	1,755	84%	3,000	71%
10	Intel	U.S.	16,213	14,259	-12%	18,733	31%	27,000	44%
11	TI	U.S.	847	649	-23%	2,462	279%	3,500	42%
12	Infineon	Europe	1,279	1,067	-17%	1,637	53%	2,300	41%
13	TSMC	Taiwan	14,937	17,240	15%	30,043	74%	42,000	40%
—	<b>Total</b>	—	<b>37,816</b>	<b>37,507</b>	<b>-1%</b>	<b>60,607</b>	<b>62%</b>	<b>91,845</b>	<b>52%</b>

Source: IC Insights, Company Reports

Figure 2

## Report Details: *The 2022 McClean Report*

*The McClean Report—A Complete Analysis and Forecast of the Semiconductor Industry*, is now available. A subscription to *The McClean Report* service includes the January *Semiconductor Industry Flash Report*, which provides clients with IC Insights' initial overview and forecast of the semiconductor industry for this year through 2026. In addition, the first of four *Quarterly Updates* to the report was released on February 24th, with additional *Quarterly Updates* to be released in May, August, and November of this year. An individual user license to the 2022 edition of *The McClean Report* is available for \$5,390 and a multi-user worldwide corporate license is available for \$8,590. The Internet access password and the information accessible to download will be available through November 2022.

<https://www.icinsights.com/services/mcclean-report/pricing-order-forms/>

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### About IC Insights

IC Insights, Inc., based in Scottsdale, Arizona USA, is dedicated to providing high-quality, cost-effective market research for the semiconductor industry. Founded in 1997, IC Insights offers coverage of global economic trends, the semiconductor market forecast, capital spending and fab capacity trends, product market details, and technology trends, as well as complete IC company profiles and evaluations of end-use applications driving demand for ICs.

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