

**DECEMBER 3, 2020**

## **DRAM Leads in Revenue, NAND With Top Percentage Growth in 2020**

*21 of 33 IC product categories to see positive growth in 2020 demonstrating remarkable resilience of IC market during pandemic-induced global economic downturn.*

IC Insights is in the process of updating its comprehensive forecasts and analyses of the IC industry for its 24th edition of *The McClean Report*, which will be released in January 2021. Among the revisions is a complete update of the sales and unit shipment growth forecast growth rates through 2025 for the 33 main product categories classified by the World Semiconductor Trade Statistics organization (WSTS). Shown in this bulletin are the top five largest product categories for sales and revenue growth for 2020.

### **MORE INFORMATION CONTACT**

Bill McClean  
President  
Phone: +1-480-348-1133  
Email: bill@icinsights.com

Coming as no surprise, each of the top-five IC product categories in terms of sales all have ties to computing or communication applications. With estimated sales of \$65.2 billion, DRAM tops the list with the greatest sales revenue in 2020, followed in second place by NAND flash (Figure 1). Computer and cellphone processors also make the list along with Computer—Special Purpose Logic.

### **Leading IC Product Segments in 2020 Sales and Revenue Growth**

Rank	Sales	\$M	Revenue Growth	20/19 % Chg
1	DRAM	\$65,215	NAND Flash	25%
2	NAND Flash	\$55,154	Cellphone Application MPUs	24%
3	Computer CPU	\$43,848	Wired Comm—Spcl Purp Analog	20%
4	Computer and Periph—Spcl Purp Logic	\$31,340	Computer and Periph—Spcl Purp Logic	15%
5	Cellphone Application MPUs	\$26,615	Wireless Comm—Spcl Purp Logic	12%

Source: IC Insights

Rankings apply to IC product categories with more than \$100M in annual sales.

**Figure 1**

DRAM has been the largest revenue-generating IC segment since 2017, even through the steep memory market downturn in 2019. DRAM is forecast to retain its place as the largest IC market in 2021, as well.

Computer CPUs are expected to place third in terms of revenue in 2020. The Covid-19 pandemic led to upgrades in computing systems as consumers and businesses transitioned to home-based online activities. In addition, an increase in shipments of data center servers to process and store all this information also helped sales in the segment. Sales of higher-priced 5G processors in the second half of 2020 have been key to the rise in cellphone application MPU sales this year.

In terms of the strongest revenue growth percentage for 2020, NAND flash is expected to top the list with a sales surge of 25% this year. NAND flash sales were exceptionally strong in the first quarter of this year as strong demand from makers of data center servers led to a steep increase in the average selling price. Prices for NAND flash continued to rise through the remainder of the year, but at a much more modest pace, resulting in a solid 25% increase in sales for this segment.

The advent of 5G processors that power new smartphones is expected to boost cellphone application MPU sales 24% this year. Most 5G processors are based on 5nm process technology—leading-edge technology that comes at a higher price. Faster and more technology-rich 5G smartphones also helped provide a strong increase to sales in other communications-related IC product segments.

The IC industry has been one of the most resilient markets during this corona-virus plagued year. Although causing a deep global recession in 2020, the Covid-19 pandemic spurred an acceleration of the global digital transformation resulting in 21 of 33 IC product categories that survived (and even thrived) with positive growth. With the promise of a vaccine being developed and administered worldwide next year, a strong global GDP rebound and double-digit IC market increase are forecast for 2021.

### **Report Details: *The 2021 McClean Report***

The 2021 edition of *The McClean Report—A Complete Analysis and Forecast of the Integrated Circuit Industry*, will be released in January 2021. A subscription to *The McClean Report* includes **free** monthly updates from March through November (including a 180+ page *Mid-Year Update*), and **free** access to subscriber-only pre-recorded webcasts through November. An individual-user license to the 2021 edition of *The McClean Report* is priced at \$5,390 and includes an Internet access password. A multi-user worldwide corporate license is available for \$8,590.

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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.

**Web Site:** [www.icinsights.com](http://www.icinsights.com) • **Phone:** +1-480-348-1133 • **E-mail:** [info@icinsights.com](mailto:info@icinsights.com)