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HEARD ON THE STREET

Chip Makers Feast on Phones Despite Slowing Sales

Smartphones are a maturing business, so selling more chips per phone is the right move



Apple is widely expected to delay the shipment of its redesigned, 10th-anniversary iPhone this fall due to possible component shortages. PHOTO: KIICHIRO SATO/ASSOCIATED PRESS

By *Dan Gallagher*

Updated July 10, 2017 2:44 p.m. ET

Today's smartphones are essentially a collection of processors and memory wedded tightly to a high-definition touch screen. Large smartphone manufacturers like Apple and Samsung design some chips themselves, but procure many others from a wide range of suppliers with different areas of expertise. Three of the largest chip makers by market cap— Intel , Broadcom and Qualcomm —have major business with smartphones.

But smartphones aren't the growth market they once were. Global smartphone unit sales rose barely 2% last year compared with 10% the year before, according to IDC. High-profile new designs this year from Apple and Samsung are expected to give a lift to upgrades. But unit sales are still expected to rise only 4% for the year, IDC predicts.

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The best play for investors is to find companies not limited to selling one chip per phone. Memory companies like Micron and Western Digital benefit from higher amounts of DRAM and NAND flash being built into new phones. Micron CEO Sanjay Mehrotra noted in the company's last

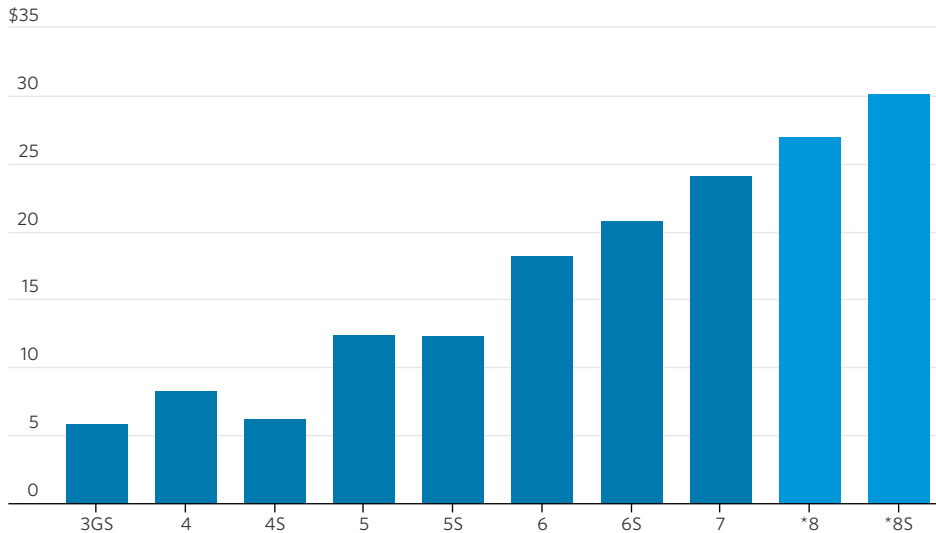
earnings call that DRAM in even low and midtier phones would double by next year.

Another opportunity comes from the so-called radio frequency, or RF, chips that amplify signals, filter interference and boost data speeds. Smartphone makers are packing more of these types of chips per device to make their products work across multiple networks around the world. That is good news for Broadcom, Skyworks and Qorvo . Ed Snyder of Charter Equity estimates total RF chip content in this year's new iPhone models alone will average about \$27 per unit—up 30% in just two years.

The trick here is timing. Most stocks in this group have already seen a strong run; Micron, Broadcom and Skyworks are all up more than 30% so far this year, thanks in part to their other strong businesses, including supplying the newly launched Galaxy S8.

Tuned In

Estimated RF chip content per iPhone model



Note: *unofficial names for future models

Source: Charter Equity

THE WALL STREET JOURNAL

And Apple is widely expected to delay the shipment of its redesigned, 10th-anniversary iPhone this fall due to possible component shortages. In a research note Monday, Andy Hargreaves of KeyBanc Capital Markets said expectations for an iPhone launch delay have already been incorporated into Wall Street's consensus estimates for several Apple suppliers—including Broadcom, Skyworks and Cirrus Logic .

That will likely curb projections in the coming earnings season. And it won't be clear until the iPhones actually ship which chips are actually inside. But Broadcom and Skyworks both trade at less than 15 times forward earnings—in line with the sector average. That could leave some room for an October surprise.

This column is part of a series on what is next for the booming semiconductor industry.

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