Samsung adds 11nm process to foundry portfolio

The latest process is in-between the 10-nanometre and 14-nanometre that the South Korean tech giant is currently offering.

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NOTE from WRP: (14/11)^2 is 1.62 but gain here is 0 power, 10 percent size, and 15 % “performance” – yet size ratio is enough to be a lotta dollars.

Samsung Electronics has added 11-nanometre FinFet process to its foundry portfolio, the company announced.

The 11-nanometre Low Power Plus, or 11LPP, was achieved from further scaling from the earlier generation 14-nanometre process, Samsung said. It offers 15 percent more performance and is 10 percent smaller, while power consumption is the same.

Production using the process will begin in the first half of 2018, the company added.

The South Korean tech giant has been using a more advanced 10-nanometre process for its own chips and clients since late last year. The firm is using a second generation 10-nanometre process for the processors that power the latest Galaxy Note 8.

The 10-nanometre is aimed at mobile processors for flagship phones, while the 11-nanometre will be for mid- to high-end phones, the company said.

The South Korean firm said it will offer a "wider range of options" for customers.

Samsung is competing with Taiwanese rival TSMC in clinching 10-nanometre clients and to become the first to deploy a 7-nanometre process.

The South Korean giant said it will have an advantage over TSMC in 7-nanometre in pricing and yield rate due to its sophistication in extreme ultra violet (EUV) lithography.

Samsung is looking to offer a 8-nanometre process first in the first half of 2018. It is likely a strategy to offer clients a more price-competitive but near level technology as TSMC's 7-nanometer process at the same time.

Samsung said it has processed 200,000 wafers using EUV lithography since 2014 and has achieved 80 percent yield for 256 megabit static random access memory.

Samsung promoted the contract chip making division into a business in May. It was previously under the logic chip business, which makes processors.