

TheNational

Big fish in chips may batter Intel

David George-Cosh -- June 20, 2010 7:50PM UAE

<http://www.thenational.ae/apps/pbcs.dll/article?AID=/20100620/BUSINESS/706209937&SearchID=73394378175249>

Globalfoundries has teamed up with Samsung and IBM to help design smaller, more efficient chips for mobile phones in a move that will put the Abu Dhabi-owned microchip maker in direct competition with the global giant Intel.



A Samsung Electronics semiconductor plant in Suwon, South Korea. Globalfoundries has teamed up with Samsung and IBM. Samsung Electronics via AP Photo

The agreement between the three technology heavyweights highlights a major push in the industry to provide the next generation of hardware for smaller devices such as smartphones and tablet computers.

Globalfoundries has embarked on aggressive expansion efforts since the Advanced Technology Investment Company (ATIC), owned by the Abu Dhabi Government, purchased a 65.8 stake in the company from Advanced Micro Devices. It recently increased its stake to 73 per cent.

Globalfoundries has about 150 customers it supplies with customised semiconductors including Qualcomm, the chip maker that recently produced a chip called Snapdragon that analysts consider to be a breakthrough in mobile communications.

"This is yet another indication that some of the strongest players in the semiconductor industry are working with Globalfoundries on next generation technology," said Ibrahim Ajami, the chief executive of ATIC.

"Leveraging the strength of the ecosystem is an essential step to meeting customer needs as the demand for innovative mobile technology continues to grow."

The partnership with IBM and Samsung is intended to produce mobile and embedded chips at a faster design and production rate using 32-nanometre and 28-nanometre processors.

Designing microchips at that level has been a challenge for semiconductor makers to produce processors that are energy efficient and powerful and half the size of current models.

[Boris Petrov, the managing partner of the Petrov Group, a semiconductor research company, said the announcement was a shot across the bows of Intel in the battle for the mobile device processor market.](#)

While Intel is the market leader in building microchips for personal computers, it has only recently started designing components for smaller devices such as Nokia smartphones.

"Intel is developing Atom-based communication processors for mobile devices, primarily phones, but they have not been successful," Mr. Petrov said. "Of course, Intel has nearly infinite cash resources and it might eventually grab market share in phones."

Mr Petrov said competing against Intel in this market were companies that had adopted the standards set by the chip designer ARM, such as Texas Instruments, Qualcomm, MediaTek and Marvell.

ARM designs the blueprints behind processor chips and has technology in almost every mobile phone and desktop computer in the world. The company is largely behind the design of the core technology for the Apple iPad tablet device and is expected to play a vital role in similar devices.

Last February, Globalfoundries signed a deal with ARM to make microchips for smartphones and tablets and hopes to begin production by the end of the year.

"They do not want to see Intel diversifying beyond its computer processor monopoly, so ARM licensees are battling Intel's attempts," said Mr. Petrov. "For that they need 28-nanometre technology ... the announcement offers to IC vendors assurances and maximum support for design for mobile applications with a tailored 'platform'. The intention is to accelerate the time-to-market of the design and development while reducing the enormous financial risks of unsuccessful designs."

The technology that IBM can provide could lead to closer ties between ATIC and IBM, Mr. Petrov said.

"IBM is more comfortable to deal with governments than individual companies," he said. "It is an aircraft carrier versus small fishing boats of natives."