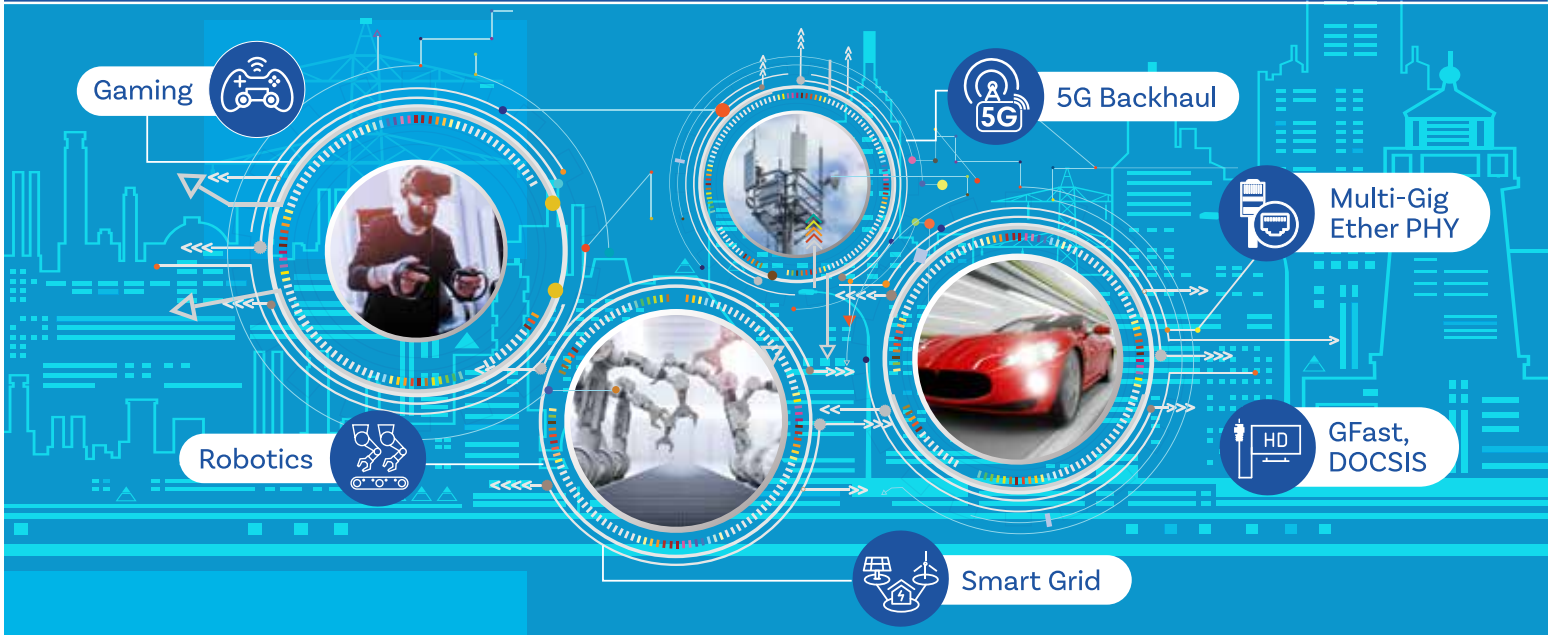
16nm PLATFORM TECHNOLOGIES FOR NEXT-GENERATION ASICs



YOUR BIGGEST IDEAS. NOW SMALLER THAN EVER.

With MegaChips' 16nm platform technologies, you're able to pack more innovation than ever into your products. We offer advanced process and packaging technologies, world-class mixed-signal IP, and a full suite of ASIC design services to help you create smaller, faster and smarter products for today's innovation-driven markets like automotive, communications, factory automation and office automation.

MegaChips

THE WORLD'S MOST ADVANCED TECHNOLOGIES & MIXED-SIGNAL IP

MegaChips has partnered with TSMC, UMC, and other leading foundries to bring our state-of-the-art mixed-signal IP to the latest 16nm platform technologies. Now you're able to achieve the dense integration, power savings, and cost advantages demanded by today's highly competitive markets.

Advanced platform technology is just the start. When you work with MegaChips, you also get access to our leading-edge analog IP, digital libraries, and MEMS technology. Plus, a dedicated team of experts to work with you from initial design specification through final test and production ramp-up. Our team has the market-specific experience you need to squeeze every bit of performance and cost savings out of your 16nm mixed-signal ASIC.

Technology moves fast—and so do we. We're already working to release the next generation of 12nm platform technologies in 2019, and 7nm beyond that. By partnering with us today, you're able to build a lasting advantage that keeps you ahead of the market for years to come.

MEGACHIPS' ADVANTAGES

- Total solutions provider with services covering everything from planning to packaging to final test
- Silicon-proven IP with more than 1500 ASICs delivered into 50-million products for the factory automation, office automation, and communications markets
- World-class analog, digital, and MEMS technology built on the most advanced platforms
- Wide range of packages with extensive system-in-package and package-on-package experience
- +15-year relationship with leading foundries like TSMC and UMC
- Roadmap for 12nm in 2019, and 7nm beyond

MAKE THE JUMP TO 16nm. AND LEAP PAST THE COMPETITION.

From factory robots to optical networks, just about everywhere you look markets are demanding faster, more power efficient and more capable products.

That's why smart engineers are making the move to 16nm FFC (FinFET Compact) technology today. It offers obvious performance benefits—50% faster and 60% lower power—over 28nm process technologies. Plus, it's more cost competitive than some would expect, since the combined benefits of optical shrink and process simplification maximize the advantages of 16nm die cost scaling.

16nm is the clear choice for applications like high-end mobile computing, high-speed networks, and next-gen consumer and automotive electronics.

MEGACHIPS' LEADING-EDGE 16nm IP LINEUP

ULTRAFAST SERDES INTERFACES

Easily build fast, compact devices with our 16nm SerDes IP. Capable of delivering up to 16Gbps over each of its four lanes, it's perfect for high-speed LVDS interfaces, such as PCI Express, XAUI, SATA, and USB 3.0. Available Q4 2019.

GIGABIT-CLASS DATA CONVERTERS

Designing 5G or other high-speed systems? Look no further. MegaChips offers the fastest 16nm data converter IP in the world, with 14-bit ADCs and 12-bit DACs capable of 3.4GBps and 6.8Gbps speeds. Available Q4 2019.

SILICON-PROVEN IP BUILDING BLOCKS

Get to market faster, with less risk. MegaChips has partnered with other leading IP vendors to give you thousands of options for interfaces and peripherals, analog building blocks, embedded memories, and processors and DSPs. Whether you need high performance, low power, or both, we have the IP you need to differentiate your SoC and win the race to market.

UNLEASH THE FULL POTENTIAL OF YOUR APPLICATIONS

Office and Factory Automation

Rotary encoders, servos, machine-to-machine (M2M) communication—across office floors and manufacturing plants, high-speed interfaces are enabling greater automation and powerful new capabilities. With MegaChips 16nm platform technologies, you're able to capitalize on these new opportunities and create the next generation of advanced printers, robots, and more.

Optical Networks

A world that moves at the speed of light demands ASICs built for speed and integration. MegaChips 16nm SerDes technology answers this demand by combining multi-gigabit data rates, ultralow power consumption, and dense mixed-signal functionality. So you're able to build smaller, faster, more power-efficient equipment—and win the race to the emerging 10G PON market.

Discover what you can do with MegaChips 16nm platform technologies: *www.megachips.com*

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