Virtex UltraScale+ VU19P FPGA

> Xilinx's highest capacity FPGA

> 3rd generation emulation-class devices, tools, IP, and flows

> Built for extreme logic capacity, interconnect, and bandwidth intensive applications

OVERVIEW

Virtex® UltraScale+™ VU19P devices provide the highest logic capacity, interconnect, and external memory bandwidth available in an FPGA with 9M logic cells, over 2,000 I/Os, and 80 high-speed transceivers. VU19P is tuned for extreme logic capacity, interconnect and bandwidth-intensive applications.

VU19P implements 1.6x more logic in a single device than the previous generation, which enables customers to implement large designs with fewer components. The UltraScale™ architecture, co-optimized with the Vivado Design Suite, enables 30% higher performance than its predecessor, which eases timing closure.

This is Xilinx's 3rd generation of emulation-class devices. Customers can take advantage of software, IP, and tool flow maturity to bring the world's largest designs to market quickly and confidently.

HIGHLIGHTS

Programmable System Integration

> 9M logic cells

> PCI Express® Gen3 x16 / Gen4 x8

> Enhanced routing, logic, and clocking

Increased System performance

> Offering high performance enabled by UltraScale architecture

> 2,072 GPIOs

> Support for up to 8x DDR4 x72 at 1.5 Tb/s bandwidth

> 80 high-speed transceivers with 2.3Tb/s I/O bandwidth
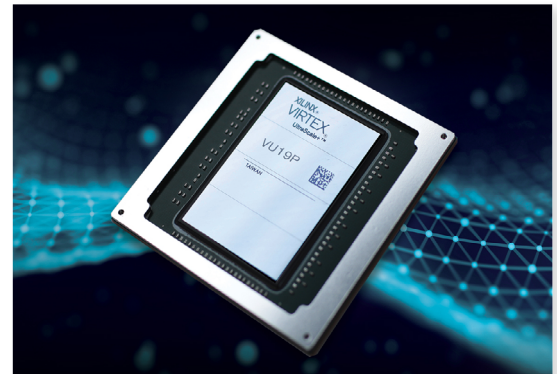
Superior Thermal Performance

> Lidless flip-chip packaging for optimal cooling

Comprehensive Tools and IP

> Co-optimized with Vivado Design Suite

> Enhanced visibility and debug with low resource utilization

> Superior place-and-route tuned for multi-FPGA platforms

TAKE THE NEXT STEP

For more information about Xilinx Virtex UltraScale+ VU19P FPGA, go to xilinx.com/vu19p.

TARGET MARKETS

> Emulation

> Prototyping

> Test & Measurement

> Data Center

> Wired Communications

> Aerospace & Defense