

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

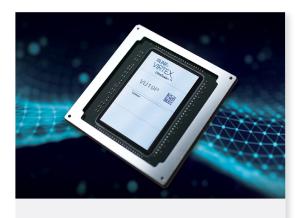
> Lidless flip-chip packaging for optimal cooling

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

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