# Lattice Semiconductor Reference Designs



Monlithic Power Systems (MPS) offers an extensive portfolio of monolithic power solutions for Lattice Semiconductor ranging from highly flexible and simple to use PWM regulators to fully-integrated power modules. MPS has developed an innovative, proprietary process technology that delivers high efficiency, ultra-fast transient response, small size, and low solution cost. MPS technology and technical support makes powering FPGAs easier than ever.

ECP5	
ECP5-5G Versa	
MachX05	
MachX05 NX	
CrossLink-NX	
<u>CrossLink-NX</u>	



#### **AMD Xilinx Reference Designs**



Monolithic Power Systems (MPS) offers an extensive portfolio of monolithic power solutions for AMD Xilinx FPGAs ranging from highly flexible and simple to use PWM regulators to fully-integrated power modules. MPS has developed an innovative, proprietary process technology that delivers high efficiency, ultra-fast transient response, small size, and low cost. MPS technology and technical support makes powering FPGAs easier than ever.

VERSAL ACAP

## Upload your AMD Xilinx XPE file for design assistance

ZYNQ AI Core Zynq UltraScale+ MPSoC Prime Zynq UltraScale+ Cost Optimized <u>Premium</u> Zyng UltraScale+ RFSoC gen1 AI Edge (Commercial) Zynq UltraScale+ RFSoC gen2/gen3 AI Edge (Automotive) <u>Zynq-7000</u> <u>HBM</u> VIRTEX ARTIX Virtex UltraScale <u>Artix-7</u> Virtex UltraScale+ Artix UltraScale+ Cost Optimized Virtex-7 **SPARTAN** KINTEX Kintex UltraScale Spartan-7x Kintex UltraScale+ Kintex-7

## **MPS Power Devices Excel in all Categories**

Monolithic Power Systems offers a very large portfolio of high performance power solutions. MPS meets power requirements head on with our state of the art monolithic process. Our devices provide the best performance in the industry





# Power Solution for Space Constrained Designs

MPS power modules provide the perfect power solution for space-saving designs. Power modules integrate power inductors and reduce the solution footprint by as much as 70%.

### **PCIE Split Input Form Factor Design**

PCIE cards require a unique power solution, as the card power is limited to 75W. An auxiliary power connector can be added to the card to provide more power. MPS offers a unique solution that allows for the power supply to adapt to the changing load, and our device can be easily scaled to accommodate different designs.





## **High Current Demand Solutions**

FPGA and other power-demanding processors require a solution that can supply more that 150A while providing high efficiency in a small foot print. MPS has several scalable solutions available. From multi-phase controllers + DrMos to our latest fully integrated power modules, we have power density to support any project.

## **Intel-Altera Reference Designs**



Monlithic Power Systems (MPS) offers an extensive portfolio of monolithic power solutions for Intel-Altera FPGAs ranging from highly flexible and simple to use PWM regulators to fully-integrated power modules. MPS has developed an innovative, proprietary process technology that delivers high efficiency, ultra-fast transient response, small size, and low solution cost. MPS technology and technical support makes powering FPGAs easier than ever.

#### >MPS Reference Designs for Intel FPGAs



## **Achronix Reference Designs**



Monlithic Power Systems (MPS) offers an extensive portfolio of monolithic power solutions for Achronix FPGAs ranging from highly flexible and simple to use PWM regulators to fully-integrated power modules. MPS has developed an innovative, proprietary process technology that delivers high efficiency, ultra-fast transient response, small size, and low solution cost. MPS technology and technical support makes powering FPGAs easier than ever.

Speedster7t

Speedster22i

