

Powering Cyclone® V FPGAs and SoCs

with Intel® Enpirion® Power Solutions

HIGH BANDWIDTH
FLEXIBLE
LOW COST
ACCELERATED DESIGN



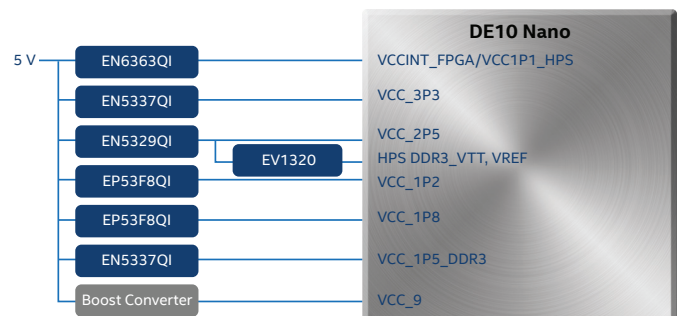
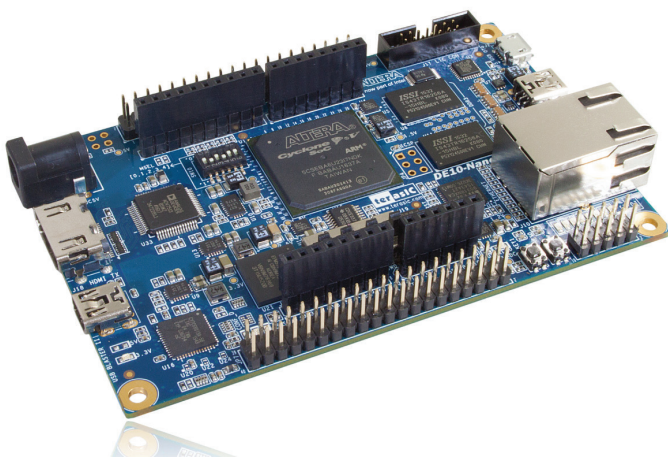
POWER DENSE
RELIABLE
EASY TO USE
FPGA-OPTIMIZED

Powering Cyclone V SoCs Is Easier with Intel Enpirion Power Solutions

Expedite your design schedule and get to market faster by combining Cyclone® V SoCs with Intel® Enpirion® Power Solutions. Intel Enpirion PowerSoCs integrate nearly all the components needed for Cyclone V SoC power rails, providing a family of fully validated, easy-to-use solutions with up to 96% efficiency[†]. This power solution will free up designers time on power supply design to focus on their unique intellectual property (IP) and FPGA design.

Power Reference Design for Terasic* DE10-Nano Platform

Intel recommends powering the Cyclone V SoC with Intel devices. Here are the recommended power supplies for the board.



Recommended Intel Enpirion Power Solutions for Cyclone V FPGAs and SoCs

POWER RAIL CURRENT REQUIREMENT	RECOMMENDED POWER SOLUTIONS
≤0.4 A	EP5348UI
≤0.6 A	EP5358xUI
≤0.8 A	EP5388QI
≤1.0 A	EP53A8xQI, EN6310QI
≤1.5 A	EP53F8QI, EN5319QI, EZ6301QI
≤2.0 A	EN5329QI
≤3.0 A	EN5339QI, EN6337QI, EN6338QI, EZ6303QI
≤4.0 A	EN6340QI, EN6347QI
≤6.0 A	EN6362QI, EN6363QI
≤8.0 A	EN6382QI
≤10.0 A	EN29A0QI
≤12.0 A	EN63A0QI

Related Links

- Intel Enpirion Power Solutions
www.intel.com/enpirion
- Cyclone V SoC FPGAs
www.intel.com/cyclonev
- Powering FPGAs with Intel Enpirion Power Solutions
www.intel.com/content/www/us/en/programmable/products/power/resource-center.html



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[†]Tests measure performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. Consult other sources of information to evaluate performance as you consider your purchase. For more complete information about performance and benchmark results, visit www.intel.com/benchmarks.