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Drive breakthrough performance with the new

Terasic Mercury A2700 Accelerator Card!

Next-Generation Platform for Accelerated Computing

The Terasic Mercury A2700 accelerator card leverages the Intel industry's highest performance Agilex® 7 I-Series FPGA with 2700K logic elements to address the most compute and bandwidth-demanding applications in the data center, in the cloud, and in embedded devices.

As the first Terasic accelerator that provides PCIe 5.0 x16 and Compute Express Link (CXL) support, the Mercury A2700 accelerator card enables 2X higher bandwidth compared with PCIe 4.0 interface for higher data throughput, as well as high-speed, low-latency, and efficient performance between CPU and FPGA.

In addition, armed with two 200G QSFP-DD connectors, and four DDR4 SO-DIMM sockets, the Mercury A2700 accelerator card accelerates every workload across the data center and edge in computer vision, high performance computing, and other compute-intensive applications.

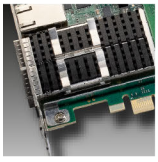
Key Benefits

FPGA

Intel® Agilex® 7 I-Series FPGA with 2700K Logic Elements. Core Speed Grade: -2 / XCVR Speed Grade: -1 or -2

PCI EXPRESS

PCI Express Gen 5.0 x16 and CXL x16 (Note*) with full-height, 3/4-length form-factor package

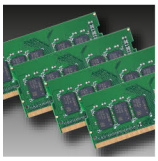


QSFP-DD

Two QSFP-DD connectors for 200/100/40/25/10 GbE network interface

MCIO

Two MCIO 8x connectors to support PCIe and CXL (Note*)



DDR4

Four DDR4 SO-DIMM sockets with error correction code (ECC) for both FPGA and HPS fabric

HPS Interface

HPS communication interface with USB to UART, MicroSD socket, Gigabit PHY, and USB OTG

Note*: available only for transceiver speed -1

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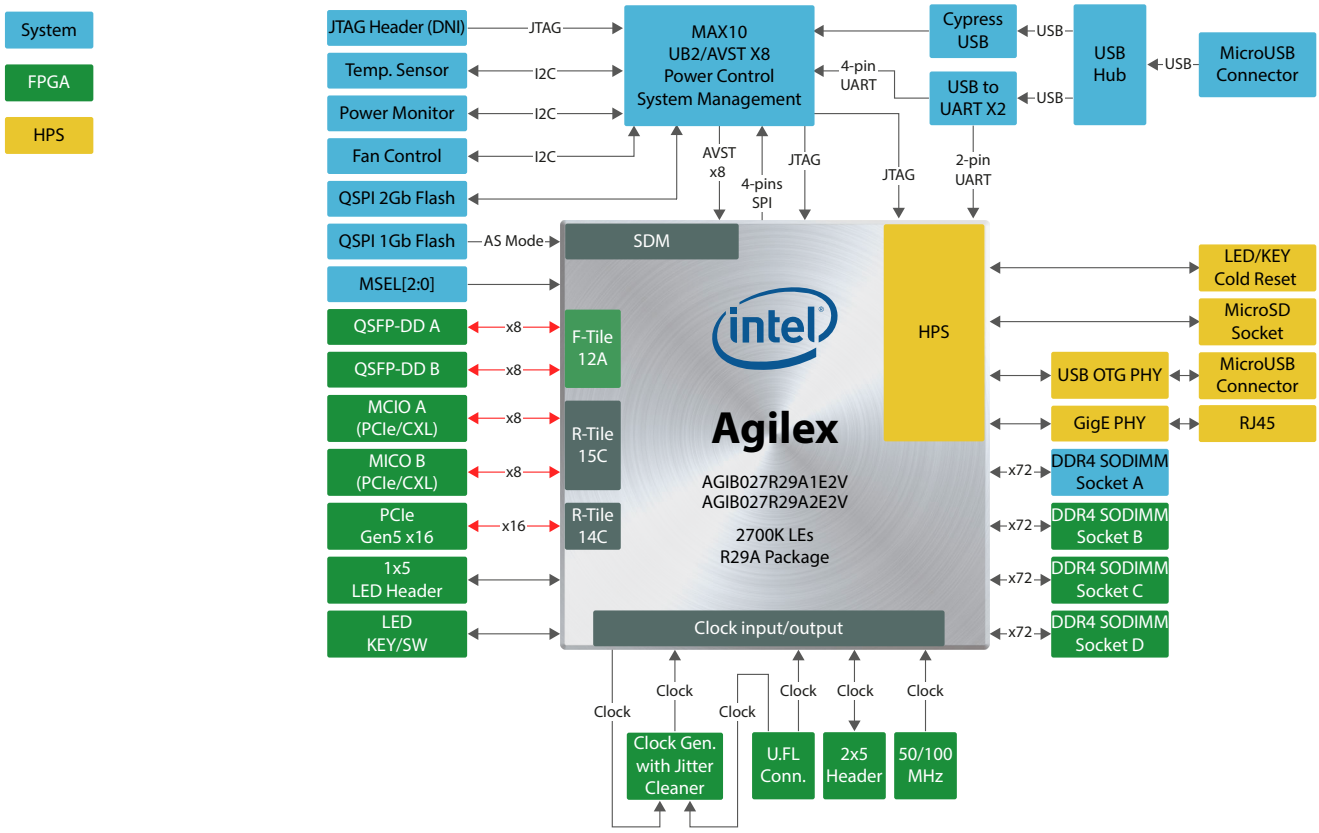
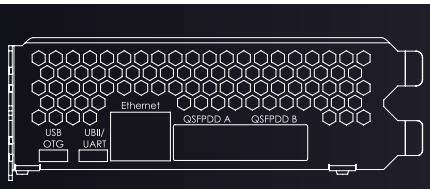
Targeted Applications

- Data center acceleration
- AI and deep learning
- High-performance computing
- High-end test and measurement
- Medical
- Communications

Block Diagram





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