CRITICAL LINK

In collaboration with altera

Holoscan Sensor Bridge

Multi-Sensor Input to Nvidia GPU

Sensors

Multimodal Sensor Inputs

Up to 8x MIPI

I2C

Holoscan Sensor Bridge

MitySOM-A5E: Agilex® 5 FPGA Dev Kit

25G Ethernet over SFP+

NVIDIA Platform

AI Inferencing with Orin, Jetson AGX Thor, or Jetson Nano

Stream high-speed data from multiple sensors with ultra-low latency for these target applications:

- Robotics / Humanoids
- Multi-camera AGVs
- Robotic Surgery Equipment
- Diagnostic Imaging
- Industrial Automation
- Visual Inspection
- Critical Safety Analysis
- Biometrics
- Pattern Analysis
- Scientific Instrumentation

Simplify Edge AI and Sensor Fusion

Holoscan Sensor Bridge (HSB) is a low-latency, FPGA-based interface that integrates heterogeneous sensor data for real time GPU-based AI inferencing.

Key Features of Critical Link's HSB Solution:

- Agilex® 5 FPGA aggregates sensor inputs
- 8 MIPI 4-Lane CSI-2 camera interfaces
- Dual 10Gb or 25Gb Ethernet transport
- FMC connector for additional sensor inputs
- Direct transfer to any NVIDIA GPU
- Precision timing for HW-based multi-sensor synchronization
- Utilizes production ready, long-lifespan SOMs
- Reference design available using IMX678 imager

Contact info@criticallink.com for access

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MitySOM

WWW.CRITICALLINK.COM

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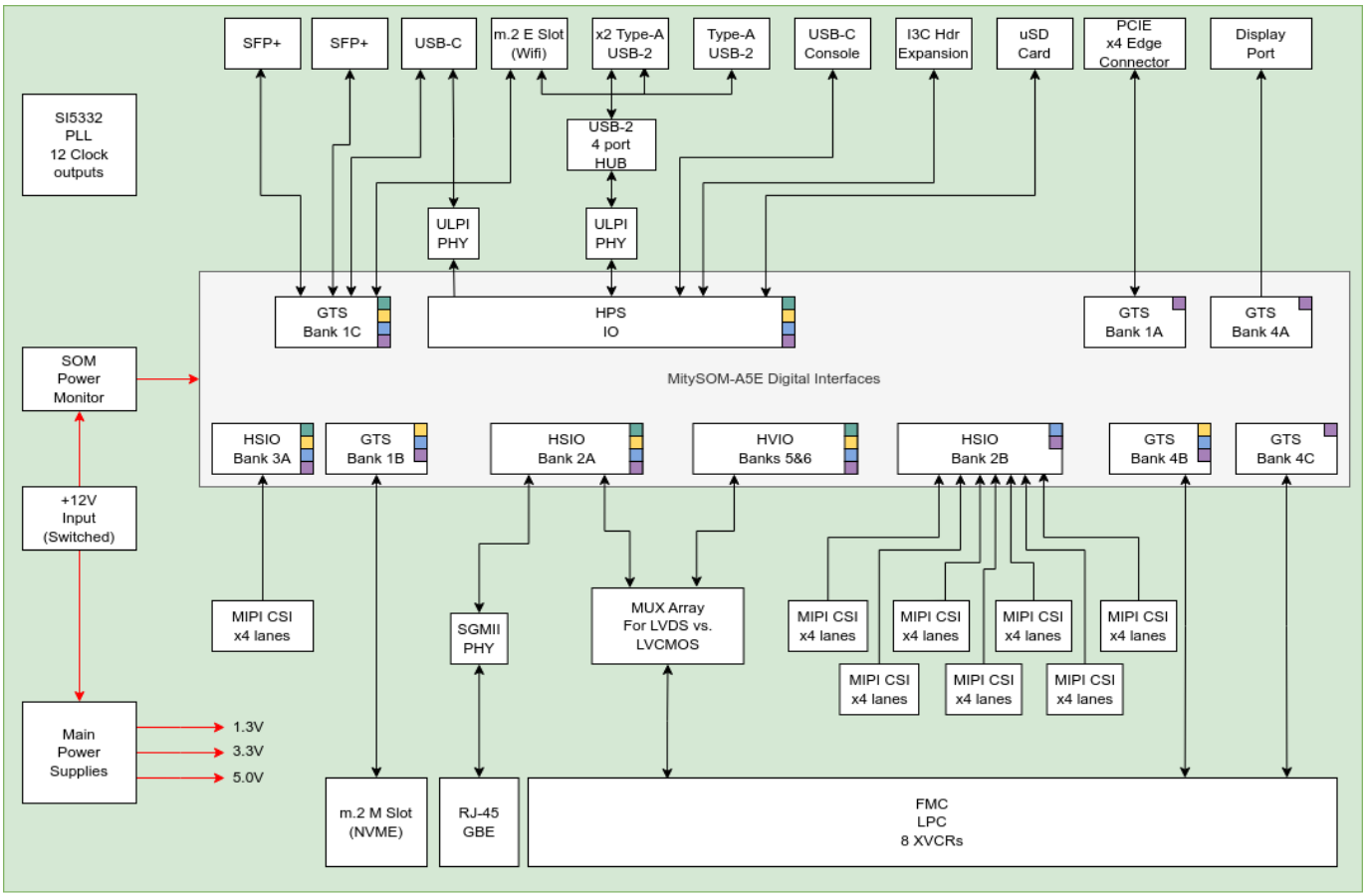
Holoscan Sensor Bridge with Altera Agilex® 5 FPGA



Why Design with Critical Link:

- **Support:** Product support is second to none
- **Availability:** Continuity of supply, even in the tightest markets
- **Longevity:** SOM lifecycles average more than 15 years
- **Quality:** US-Based design, assembly, and engineering support

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