

RECONFIGURABLE COMPUTING SYSTEMS



XCT-SRT-HFT-X

Based on Stone Ridge Technology reconfigurable hardware, the XCT-SRT-HFT-X is designed for high-performance FPGA based processing. Typical application areas are High-Frequency Trading, Network and Signal processing. For C programmers the kit is available with the ImpulseC Co-Developer C-to-HDL compiler and Stone Ridge developed reference designs that will allow you to ramp up rapidly on your proprietary innovations. You can start programming the system right out of the box in familiar ANSI-C. For HDL coders, the kit includes IP cores for PCI-e, Ethernet and DDR memory reference designs and a clean API to get you started. Stone Ridge and XCT have designed this system for organizations developing high frequency trading systems capable of anything from complete trigger to trade systems fully in hardware or smart NIC network pre-processors that feed filtered data to user space memory with ultra-low latency.

Applications

High Frequency Trading
Network Processing
Encryption/Decryption
Compression/Decompression

Technical Specifications

Form Factor	1U
# of FPGAs	1 Xilinx Virtex 5
FPGA options	LX50T, LX85T, LX110T, LX155T, SX50T, SX90T, FX70T, FX100T
Memory	2 GB DDR2
Network	4 1G/2 10G ports
System Interface	PCIe x 8/Gen1.1
Software Development Tools	VHDL/Verilog/ImpulseC

XCT-SRT-RDX

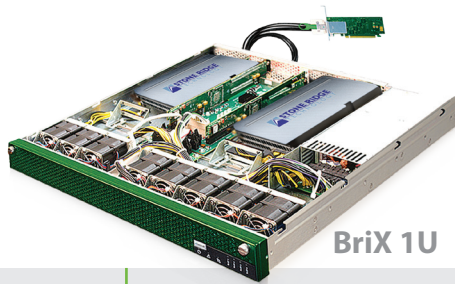
The XCT-SRT-RDX Development kit comes with everything you need to get started on reconfigurable computing right out of the box. Unlike other products, the RDX comes with IP cores for PCI-e, Ethernet and DDR memory which could take months to develop on your own. Reference designs that ship with the hardware allow you to focus your efforts on your application and not on basic infrastructure. The kit also comes with the RDX C++ API, an easy-to-use, host-based interface for communicating with the on-board reconfigurable hardware.

Applications

Reconfigurable Computing
Classroom instruction
Bioinformatics
Encryption/Compression

Technical Specifications

Form Factor	1U
# of FPGAs	2 Xilinx Virtex 5
FPGA options	LX50, LX85, LX110, or LX155
Memory	2 GB DDR2
Network	4 1G
System Interface	PCIe x 8/Gen1.1
Software Development Tools	VHDL/Verilog/ImpulseC



BriX 1U



BriX 2U



BriX SideCar

ENCLOSURE	<p>19" rack</p> <p>Dimensions: 17"W x 1.75"H x 21"D</p> <p>Removable front bezel with air filter</p> <p>Front Panel LEDs</p> <p>One Rear panel PCIe Gen 2 x16 interface</p>	<p>Dimensions: 17"W x 3.5" H x 21"D</p> <p>Removable front bezel with air filter</p> <p>Front Panel LEDs</p> <p>One or two rear panel PCIe Gen 2 x16 interface(s)</p> <p>4 individually removable fans</p>	<p>Dimensions: 7.5"w x 16.5"h x 19.5"d</p> <p>One rear panel PCIe x16 cable interface</p>
PCIE BACKPLANE	<p>Supports four full size PCIe x16 boards</p> <p>Single x16 PCIe input to rear of enclosure</p>	<p>Supports up to 8 full length, full height PCIe x16 boards</p> <p>Single x16 PCIe input to rear of enclosure</p>	<p>PCIe 2.0 compliant</p> <p>Two PCIe x16 slots (electrical and mechanical)</p> <p>One PCIe x8 slot (with x16 connectors)</p> <p>Two PCIe x4 slots (with x16 connectors)</p>
POWER SUPPLY	<p>Single 850W 1U removable power supply</p> <p>V1: +12V @70A</p> <p>V2: +5Vsb @ 3A</p>	<p>Single 850W 1U removable power supply</p> <p>V1: +12V @70A</p> <p>V2: +5Vsb @ 3A</p>	<p>750W Power Supply</p> <p>Each slot provides 3.3V & 12V plus a 6-pin 12V connector</p>
SYSTEM MONITORING/ALARMING	<p>Monitors up to 8 temp sensors</p> <p>Monitors up to 8 fan tachometers</p> <p>Monitors up to 3 voltages including standard +12V, +5V, +3.3</p>	<p>Monitors up to 8 temp sensors</p> <p>Monitors up to 8 fan tachometers</p> <p>Monitors up to 3 voltages including standard +12V, +5V, +3.3</p>	
OPERATING ENVIRONMENT	<p>Temperature Range:</p> <ul style="list-style-type: none"> • Operating: 0°C-35°C • Storage: -40°C- +85°C <p>Humidity:</p> <ul style="list-style-type: none"> • Operating: 10% to 90% relative humidity (non-condensing) • Non-operating 5% to 95% relative humidity (non condensing) <p>Altitude:</p> <ul style="list-style-type: none"> • Operating 0 to 10,000 feet • Storage 0 to 50,000 feet 	<p>Temperature Range:</p> <ul style="list-style-type: none"> • Operating: 0°C-35°C • Storage: -40°C- +85°C <p>Humidity:</p> <ul style="list-style-type: none"> • Operating: 10% to 90% relative humidity (non-condensing) • Non-operating 5% to 95% relative humidity (non condensing) <p>Altitude:</p> <ul style="list-style-type: none"> • Operating 0 to 10,000 feet • Storage 0 to 50,000 feet 	<p>Temperature Range:</p> <ul style="list-style-type: none"> • Operating: 0°C-50°C • Storage: -40°C- +85°C <p>Humidity:</p> <ul style="list-style-type: none"> • Operating: 10% to 90% relative humidity (non-condensing) • Non-operating 5% to 96% relative humidity (non condensing) <p>Altitude:</p> <ul style="list-style-type: none"> • Operating 0 to 10,000 feet • Storage 0 to 50,000 feet
AGENCY COMPLIANCE	<ul style="list-style-type: none"> • FCC Class B • CE • RoHS 	<ul style="list-style-type: none"> • FCC Class B • CE • RoHS 	<ul style="list-style-type: none"> • FCC Class B • CE • RoHS