

BEE4 Hardware Platform

BEE4 vs. BEE3

FPGA

- Capacity: 3.5x
- Speed: 1.15x

DRAM

- Capacity: 2x
- Speed: 2x

Network I/O

- Speed: 2x
- Copper & Optical

PCI Express

- Speed: 2x

Expansion

- SFP+, SFP, ADC/DAC, HDMI

Inter-FPGA

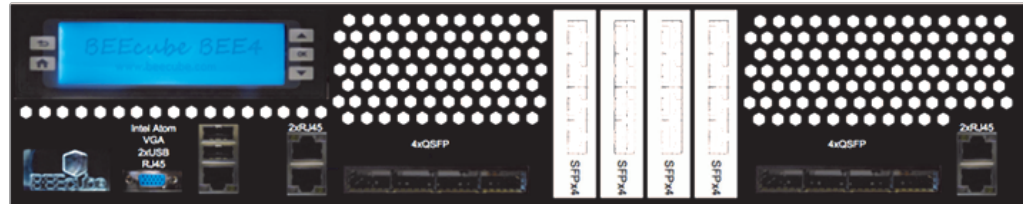
- Symmetrical Full Mesh

System Control

- Multi-User Remote Access

Contact Info:

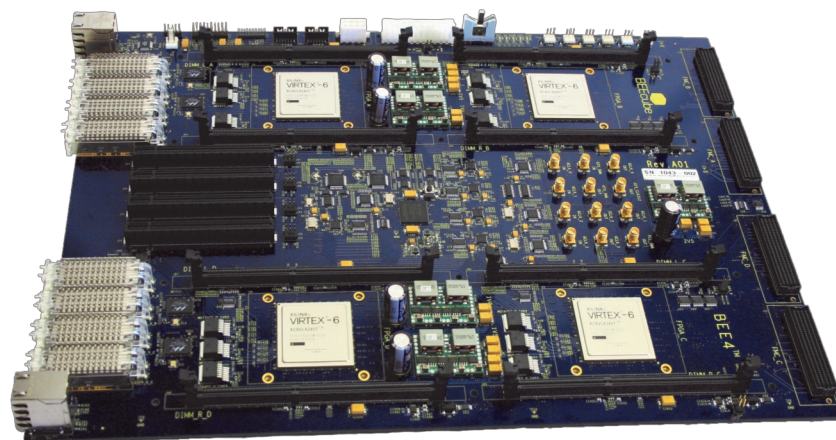
+1 (510) 252-1136
sales@beecube.com



The BEE4, the newest generation of BEEcube's successful BEE (Berkeley Emulation Engine) Hardware Platforms, is the ultimate mixed signal, full speed FPGA Prototyping Platform.

BEE4 Capabilities

- Scalable Full Speed Interconnected Modules – Up to 80 Modules per Cluster
- Flexible PC Environment – Control, Setup, and Management
- Multi-user Remote Access
- Full Speed Network I/O – 640Gbps/Module
- Massive Memory – 128 GB/Module
- Large Designs – 20 MGates/Module
- Flexible Expansion Options – SFP/SFP+, ADC/DAC, HDMI



Over 150 BEE systems have been deployed worldwide to leading universities and companies



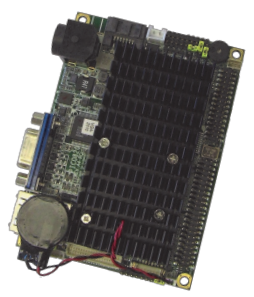
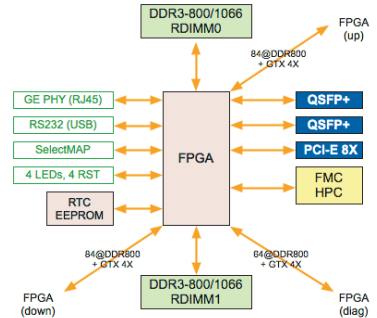
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BEE4 Hardware Platform

BEE4 Features

- Xilinx Virtex-6 FPGAs
 - Up to 500 MHz
 - LXT240/365/550
 - SXT315/475
- QSFP+, 20 Gbps (8x)
- FMC (HPC) Expansion Slots (4x)
- Gen2 PCI Express 8-lane (4x)
- DDR3-800/1066 ECC RDIMM (8x)
- Gigabit Ethernet (4x)
- Independent Globally Synchronous Clock Trees (4x)
- Integrated Atom PC Module
- 2U Rack-Module



Atom Module

BEEcube Technology

- Honeycomb™ - Symmetrical FPGA Array Based Architecture
 - High Availability, Scalable, Multi-User and Cluster Support
- Nectar OS™ - Distributed OS with Local Monitoring and Control
 - Full Speed Debugging and Trace
- Sting I/O™ - Full Speed Interfaces
 - Supports Real-time Workloads and Streaming
- BEEcube Platform Studio (BPS™) – IDE for Automatic Algorithm and Interface Deployment
 - RTL or Implementation Knowledge not Required

