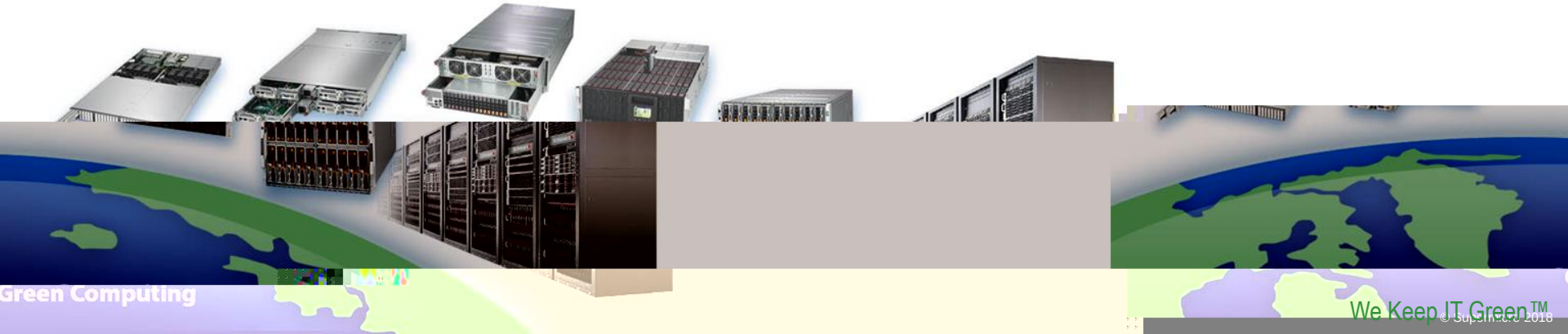
Confidential

SuperBlade®

Raphael Wong

Computex 2018



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4U / 6U / 8U SKYLAKE-SP Blade Servers

4U (2 Sockets)

- Lowest Cost X11 Servers
- Highest Density (14 in 4U)
- Best for Cloud & Data Centers

6U (1 Socket / 2 Sockets)

- Disaggregated Architecture for Best ROI
- 4x 25/10GbE Switches, 3TB DDR4, 2 U.2 NVMe
- Free-Air Cooling wit h 205W CPU

8U (2 Sockets / 4 Sockets)

- Highest Performance & Density (20 DP/10MP in 8U)
- 25GbE, 100G IB or OPASwitches, 6TB DDR4, 8 U.2 NVMe
- Free Air Cooling with 205W CPU

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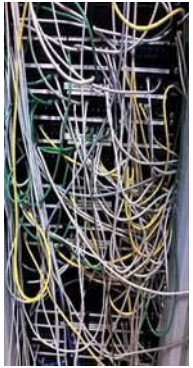
Resource Saving Servers: Save Money & the Earth

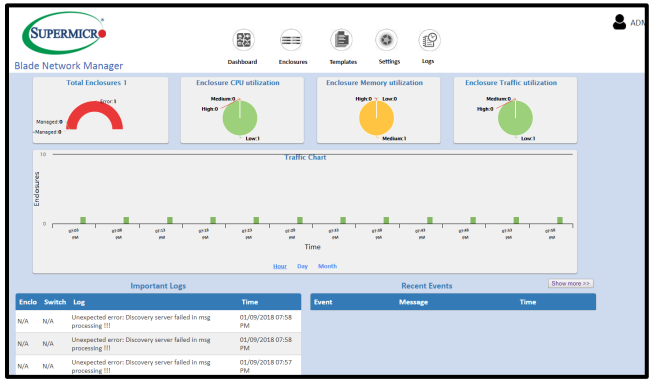
- 60% Space Savings
- 50% Energy Savings
- e-Waste Savings

Learn more at www.supermicro.com/GreenIT

95% Cable Reduction over 1U Servers
Easier to Deploy & Maintain, Better Cooling



Automatic Switch Provisioning – 80% Faster with New Blade Switch Management Software



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8U SuperBlade®

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8U SuperBlade®

- Highest Performance - 205W Intel® Xeon® Scalable processors
- Highest Density - 10x 4-socket (48 DIMM + 14 NVMe) blade servers
- Highest Density - 20x 2-socket (16 DIMM + 7 NVMe) blade servers
- Fastest Switches - 100G EDR IB, Intel Omni-Path, 25GbE switches
- Redundant (N+1/N+N) Platinum (96% efficiency) AC power supplies
- Redundant (N+1/N+N) DC power supplies
- Battery Backup Power (BBP) modules
- Free Air Cooling
- Supermicro RSD and Redfish RESTful APIs

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8U SuperBlade® Servers

2-Socket Blade Servers

4-Socket Blade Servers

NVMe/SAS3

NVMe/SATA3

NVMe/SAS3

NVMe/SATA3

100G Omni-Path
AOC-OPH-WFR

100G EDR IB
AOC-IBH-X4ES

25GbE
AOC-B25G-X4D

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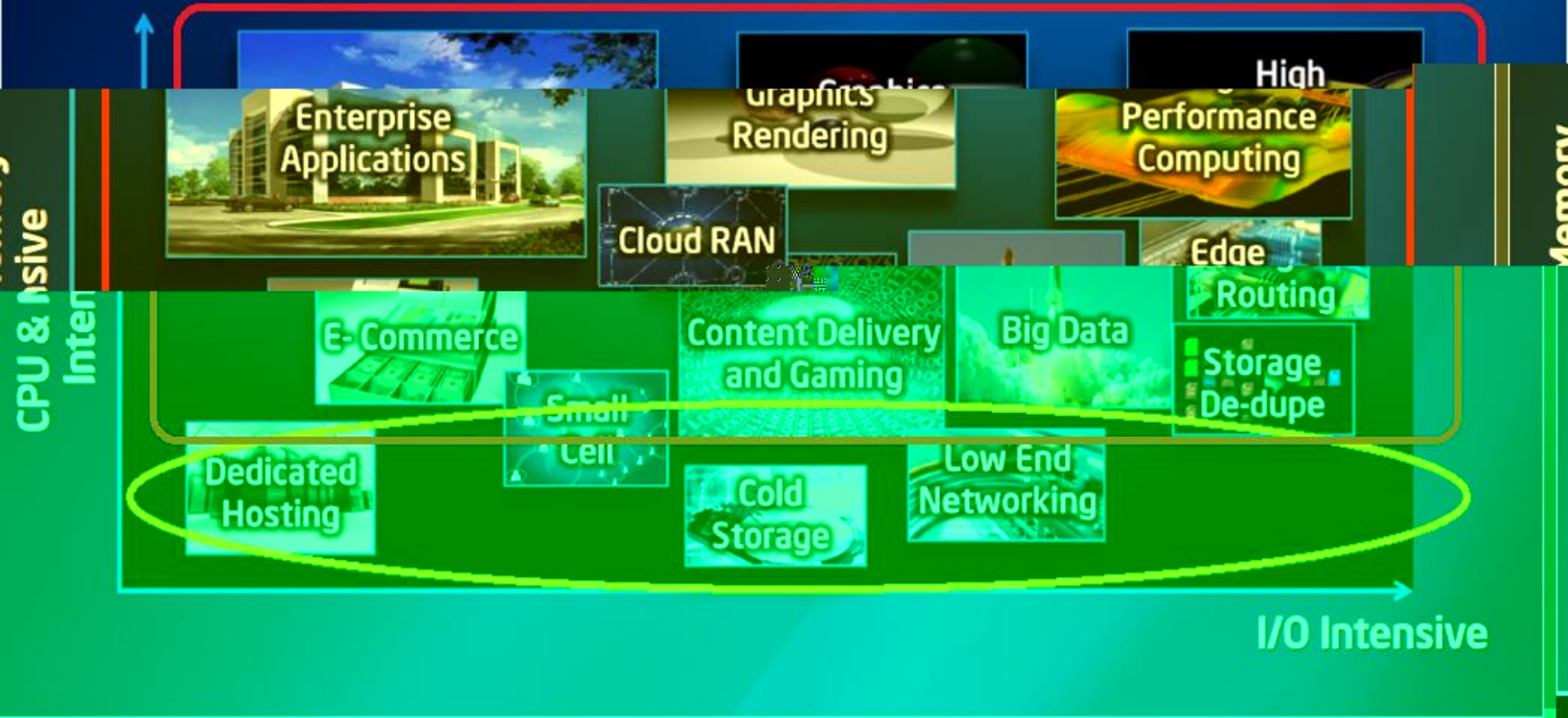
Diversity of Datacenter Workloads

X11 SuperBlade



2-Socket Blade Servers

SBI-4129P-C2N (2 Drives)

- 2 NVMe/SAS3/SATA3

SBI-4129P-T3N (3 Drives)

- 2 NVMe + 1 SATA3
- 3 SATA3

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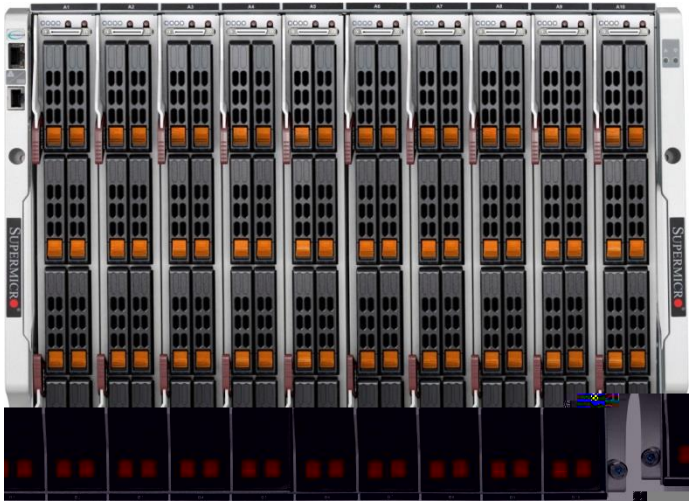
4-Socket Blade Servers

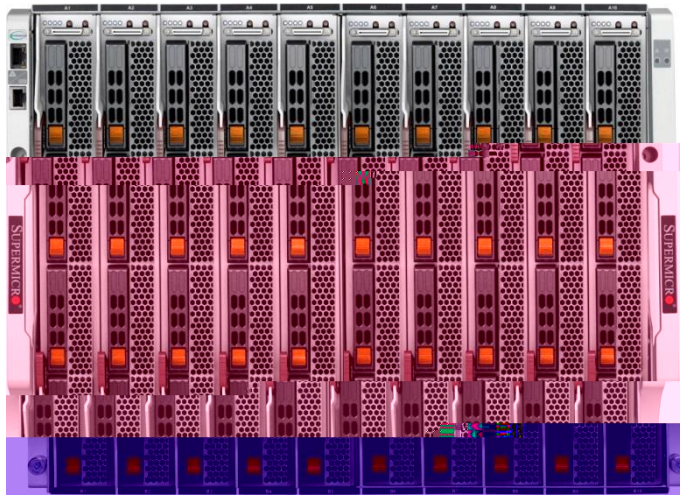
SBI-8149P-T8N (8 Drives)

- **8x NVMe or 4x SATA3**



SBI-8149P-C4N (4 Drives)

- **4x NVMe or 4x SAS3/SATA3**



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Search Appliance or Ke

Find Supported Intel® Systems

Narrow your Search

Vendor

- Cisco Systems Inc.
- Dell
- Fujitsu Technology Solutions
- Hewlett Packard Enterprise
- Hitachi
- Huawei Technologies Co. Ltd
- NEC Corporation
- Super Micro Comp
- VCE

CPU Type

Search Results

as of 2018-04-04

In addition to certified appliances SAP also supports the following configurations to be used with SAP HANA (please see Details page).
The hardware was tested by the hardware partner with SAP LinuxLab.

2 models found.

Compare

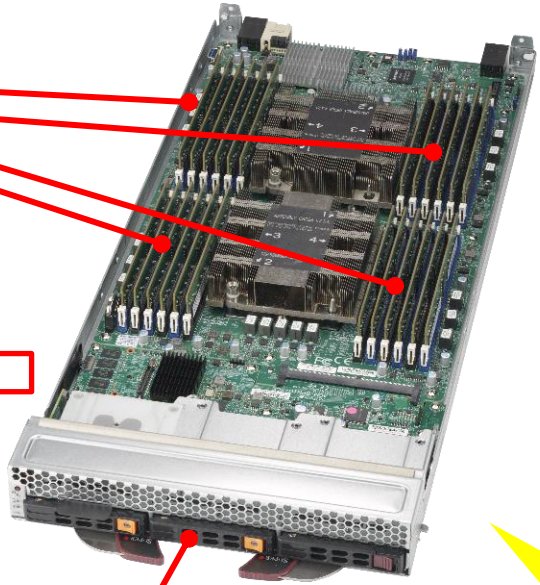
Super Micro Computer Inc., Intel Skylake SP
clear selection

Vendor	Model	CPU Type	Valid for
Super Micro Computer Inc...		Intel Skylake SP	
Super Micro Computer Inc...	SBI-8149P-C4N	Intel Skylake SP	SAP HANA 1.0 SPS 12, SAP HANA 2.0 SPS 00-02

SBI-6129P-C3N (2-Socket)

24 DIMM Slots
Up to 3TB

Storage Module



Compute Module

2 U.2 NVMe + 1 SAS3/SATA3
Or 3 SAS3/SATA3

Future Proof

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4U SuperBlade®

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4U SuperBlade ®

- 14x 2-socket blades
- 2x 10G switches
- 1x CMM
- Redundant AC or DC power supplies
- BBP options
- Free Air Cooling

SBE-414E Series

- 2x Intel Xeon SP
- 16x DIMM slots
- 2x hot-plug U.2 NVMe or SATA3
- 1x M.2 NVMe
- 2x 10GbE

SBI-4429P-T2N

Lowest Initial HW Acquisition Cost
Highest Density – 140x 2S Blade Servers per 42U Rack

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Networking

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25G/100G Total Solution

25G/100G Ethernet Switch
SBM-25G-100

100G EDR InfiniBand Switch
SBM-IBS-E3616

100G Omni-Path Switch
SBM-OPA-4020

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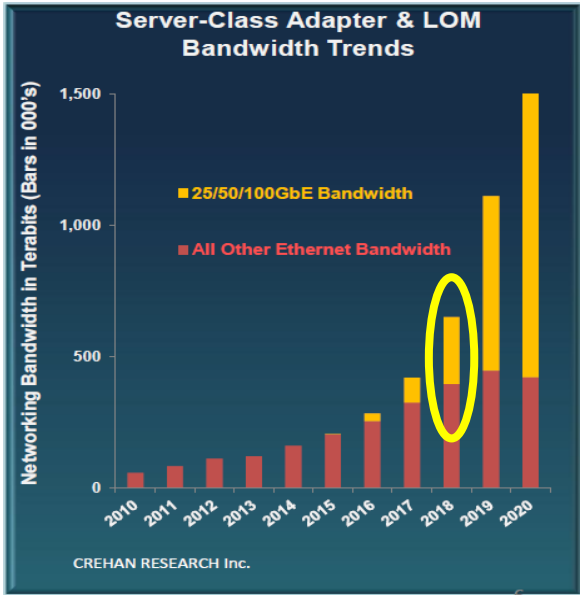
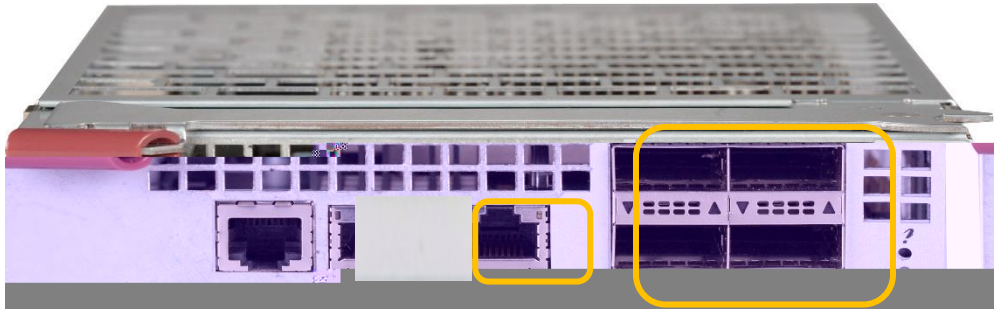
25G Blade Switch – SBM-25G-100



20x 25G downlinks



1G

4xQSFP28 (40/100G)
- 40G split to 4x10G
- 100G split to 4x25G

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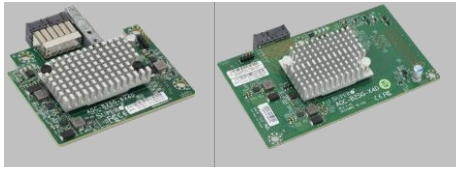
25G/100G Total Solution



AOC-B25G-X4D (8U)
AOC-B25G-6X4D (6U)

SBM-25G-100

Blade Network Manager

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Features of 25G Switch and Mezzanine cards

- Mellanox ConnectX-4 LX
- Latency 0.71 us
- Power 7.4 W
- Supports RDMA/RoCE
- Supports DPDK
- 75 Million packet per second
- Virtualization 32xPFs; 254xVFs
- Packet pacing
- Flow steering
- Ethernet offloads (HDS, RSS, TSS, LRO, LSOv2)

- Standard based layer 2 feature sets:
- STP, RSTP, MST
- VLAN & VLAN trunking
- LACP 25G bundling
- M-LAG for 100G uplinks
- Auto speed for 10/25G down links
- Multicast IGMP support
- Web, CLI and SNMP based management
- Centralized management with BNM

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