

**Tradition Group**

**Personal Supercomputer  
for  
Everyone**



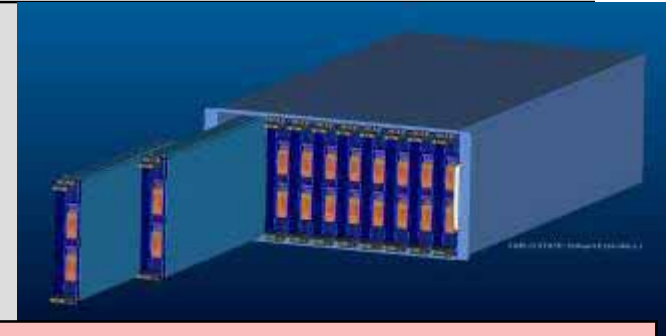
# Miniaturisation of supercomputers

- **New breakthrough in computer industry delivers ultracompact supercomputers to server rooms and even personal desktop. Due to original form-factor, Low Acoustic Noise, and low power consumption personal supercomputers Typhoon series are the most convenient and economic cluster systems available.**  
**Personal supercomputers represent a tremendous leap for customers who require performance-on-demand to reach their efficiency goals and get outstanding results.**
- **Mini clusters can be used to solve comparably small tasks of workgroups, research laboratories, design bureau for engineering and scientific calculations, graphical and industrial designs, GIS tasks and to create ASP Internet platforms.**
- **Unifying supercomputer in a GRID, it is possible to create powerful on demand regional or national management systems to provide optimized access to territorial GIS resources, registrars and municipal resources and services.**

# Personal Typhoon

Special offer!  
Price of  
**1TFLOP**  
at \$200k

Blade server  
\$40K-95K



Tower server 2/4/8-Way SMP  
\$10K-35K



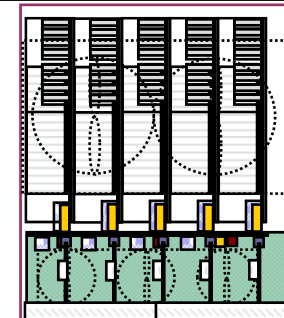
Personal  
Supercomputer and  
Work Station  
\$15K-50K  
**Typhoon**



Typhoon-I



Typhoon-II



Typhoon-III (2008)

# Product line of Typhoon series



**T-600 serie**  
 Five-node (1 Head + 4 Compute Nodes) Personal Cluster System  
 CPU: Intel Xeon™ 5148 LV or Intel Xeon 5310 LV  
 Memory: Max. 60GB memory space (DDR-2 FBDIMM)  
 HDD: Max. Seven SATA I / II HDD ( 3 on Head Node, 1 per Computer Node)  
 Network: Integrated Dual GE Switch  
 Integrate IB switch for monitoring all compute nodes if needed  
 Free 600W system PSUs, with Quiet FANs  
 Low Acoustic Noise: <50db  
 OS - Windows CCS2003 and Linux

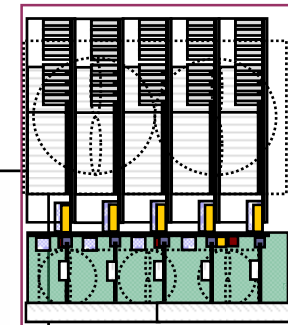


T-630 DX



T-650 QX

T-7/8xx TY-III



T-360 BX/DX

**Four-node (1 Head + 3 Compute Nodes) Personal Cluster System**  
 CPU: AMD Opteron™ 2xx HE  
 Memory: Max. 64GB memory space  
 HDD: Max. Four SATA I / II HDD 4  
 Power: <1500W  
 Low Acoustic Noise: <45db  
 OS - Windows CCS2003 and Linux

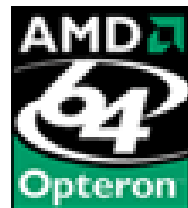


T-560 DX

# Personal Supercomputer benefits

## LESS.....

- Price
- Power consumption
  - Heat generation
  - Administration
- Complex settings
  - Dimension



## MORE.....

- Productivity
- Easy using
- Flexibility
- Applications
- Instruments
- Results



# Typhoon-I B2881 Rename to **T-360 BX/DX**

## ■ Typhoon T-360 BX/DX PSC

- TyanPSC system bases on Typhoon-I B2881 BB
- Available today
- T-360 BX support AMD Opteron™ 246/48/50 HE single core Processors
- T-360 DX support AMD Opteron™ 260/65/70/75 HE dual core Processors

## ■ Typhoon-I B2881 is for BB

## ■ Typhoon B5372 offer in BB only

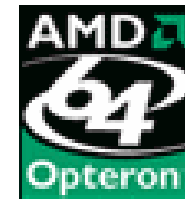
- Head Node: Tyan S5372
- Compute Node: Tyan S5372
- Total 8 Intel Xeon™ 5100 dual core processors
- Max. 48GB DDR-2 FBDIMM
- RoHS Compliant and available in BB format today



# Typhoon T-360 BX/DX

## Product Key Features & Benefits

- Up to 140Gflops\* peak performance
- Low noise < 45 dB
- Low power < 1400 Watt for AC wall outlet
- Desk-side small floor space
- Budgetary : Starting from \$10,000\*\*
- Easy to use and easy to maintain
- Support Microsoft Server CCS2003 & Linux
- Mobility ( 2 handles on top, 4 rollers on bottom)
- Support user friendly expansion with interconnect multiple PSC systems for a large cluster
- System Feature Highlight:
  - Head Node: S2882 (x1)
  - Compute Node Tyan S2881 (x3)
  - Total 8 Opteron™ 2xx HE processors
  - Max. 64GB DDR-333 RDRAM

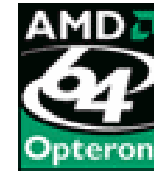


\*\* System price may vary due to system configuration

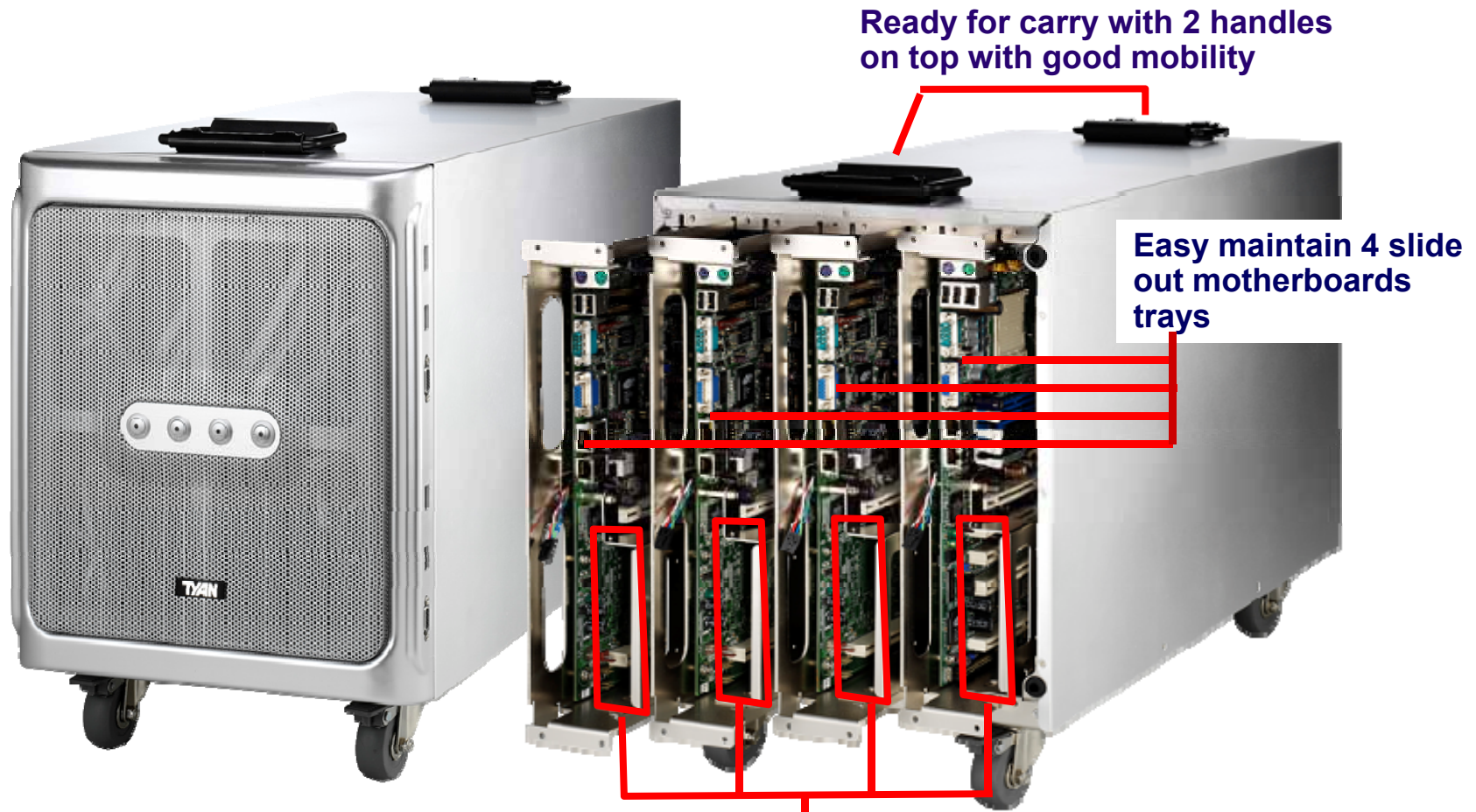
\* Up to 140Gflops peak performance with Opteron275HE

# Typhoon T-360 features

- Productivity: Max. 140 GFLOP
- Dimension: 360x321x680 (mm)
- Low Acoustic Noise: <45dB
- Power consumption: 1400 W
- Four Dual CPU motherboards supported Dual Core AMD Opteron™ HE
- Memory: Max. 64Gb memory space
- HDD: Max. four HDD SATA I / II till 3Tb of HDD space
- Power: Four PSU 350W
- Network: Nine Gigabit Ethernet LAN ports
- Temperature & voltage monitoring
- Graphics: Video ATI Rage XL 8Mb
- IPMI 2.0 Remote System Mgmt card (optional)
- OS SUSE Linux Enterprise Server 9, RedHat Enterprise Linux 4 or Microsoft Windows Compute Cluster Server 2003



# Typhoon T-360 BX/DX Feature Highlights

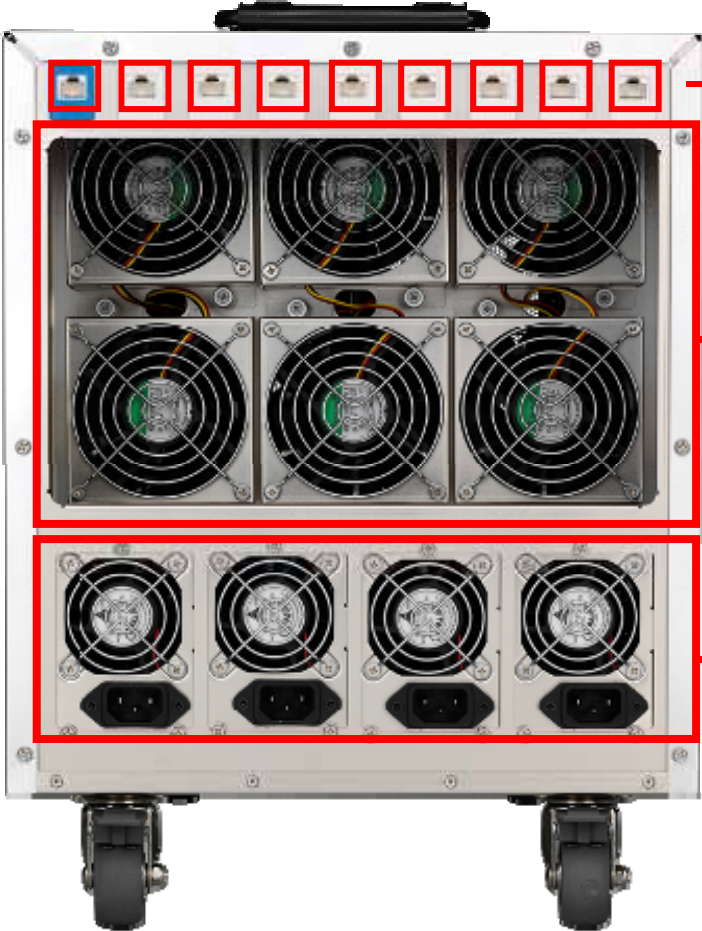


Ready for carry with 2 handles on top with good mobility

Easy maintain 4 slide out motherboards trays

Easy install HDD bracket  
1Tb 3.5" & 2.5" SATA , up to  
4Tb/system

# Typhoon T-360 BX/DX Real End



GE (x8) rear LAN connector for Inter-node networking. One LAN connector for uplink

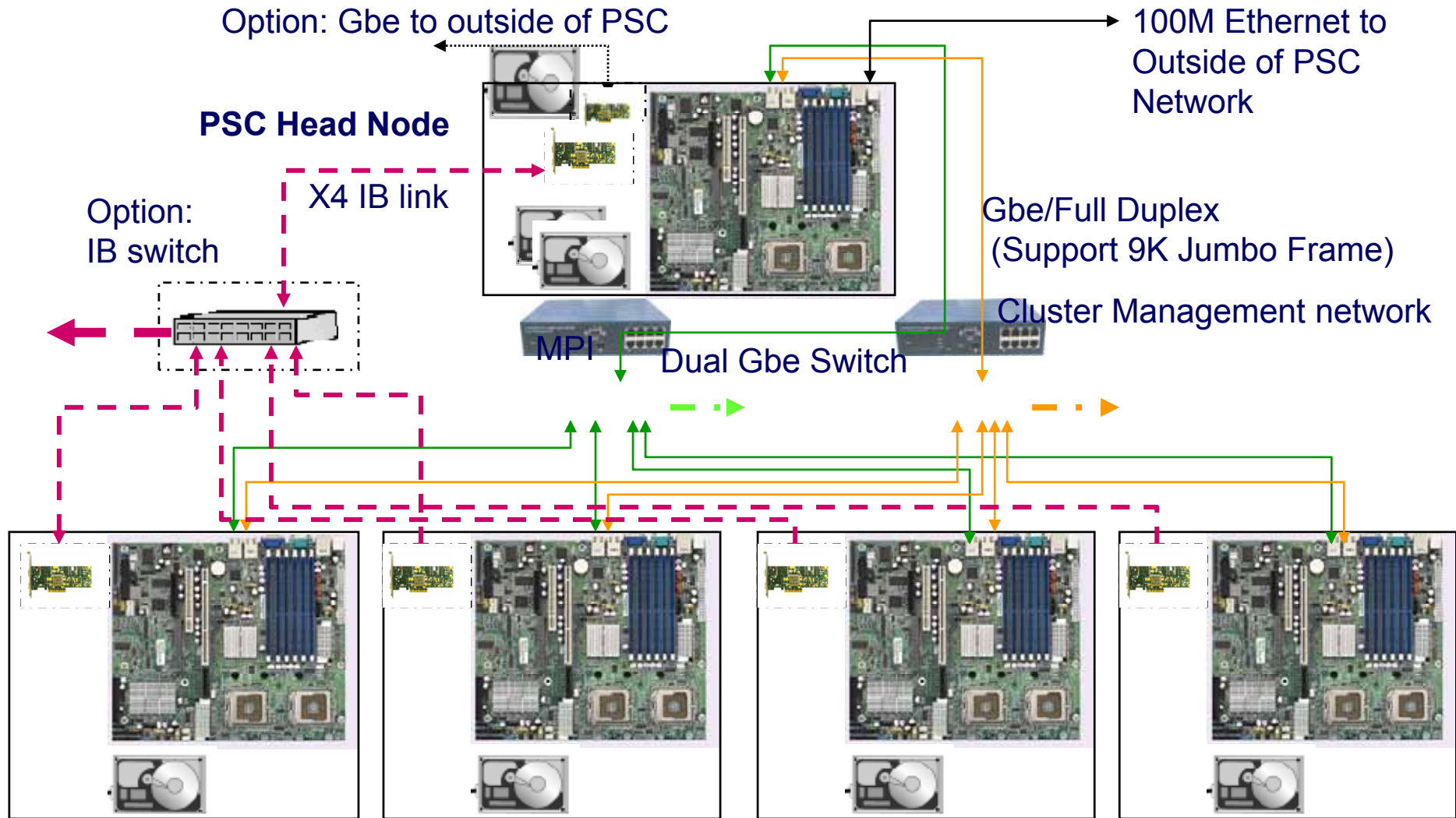
6 x easy swap fans (92\*92\*32 mm)

4 x 350W 3AC Power Supply

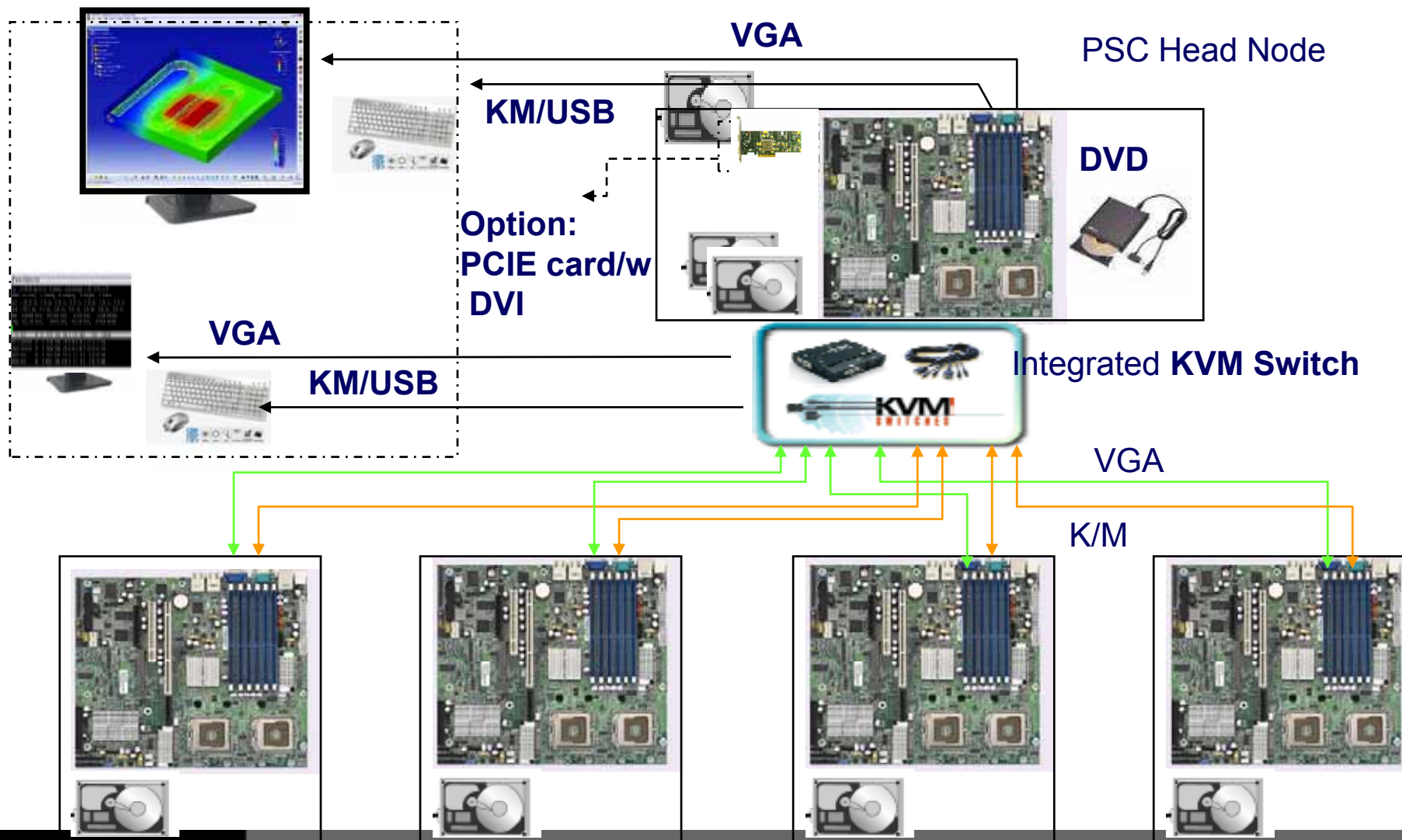
# Typhoon-II Feature Highlights

- **Productivity: up to 256 GFlops**
- **Dimension: 527x356x700mm;**
- **Low Acoustic Noise: <50 dB;**
- **Power consumption: < 1800B, three PSU 600W;**
- **Five-node (1 Head + 4 Compute Nodes) Personal Cluster System**
- **CPU: Dual or Quad Core CPU (Intel® Xeon™ series 5100 или 5300);**
- **Network: two Gigabit Ethernet LAN ports;**
- **Graphics: slot for graphic cart on control node;**
- **Integrated KVM switch**
- **One Gigabit Ethernet port and four InfiniBand ports (optional);**
- **Memory: up to 60Gb of FB-DIMM DDRII-533/667;**
- **HDD: seven HDD SATA I / II up to 5TB of HDD space;**
- **OS: SUSE Linux Enterprise Server 10, RedHat Enterprise Linux 4 or Microsoft Windows Compute Cluster Server 2003**

# Typhoon-II Platform Block Diagram

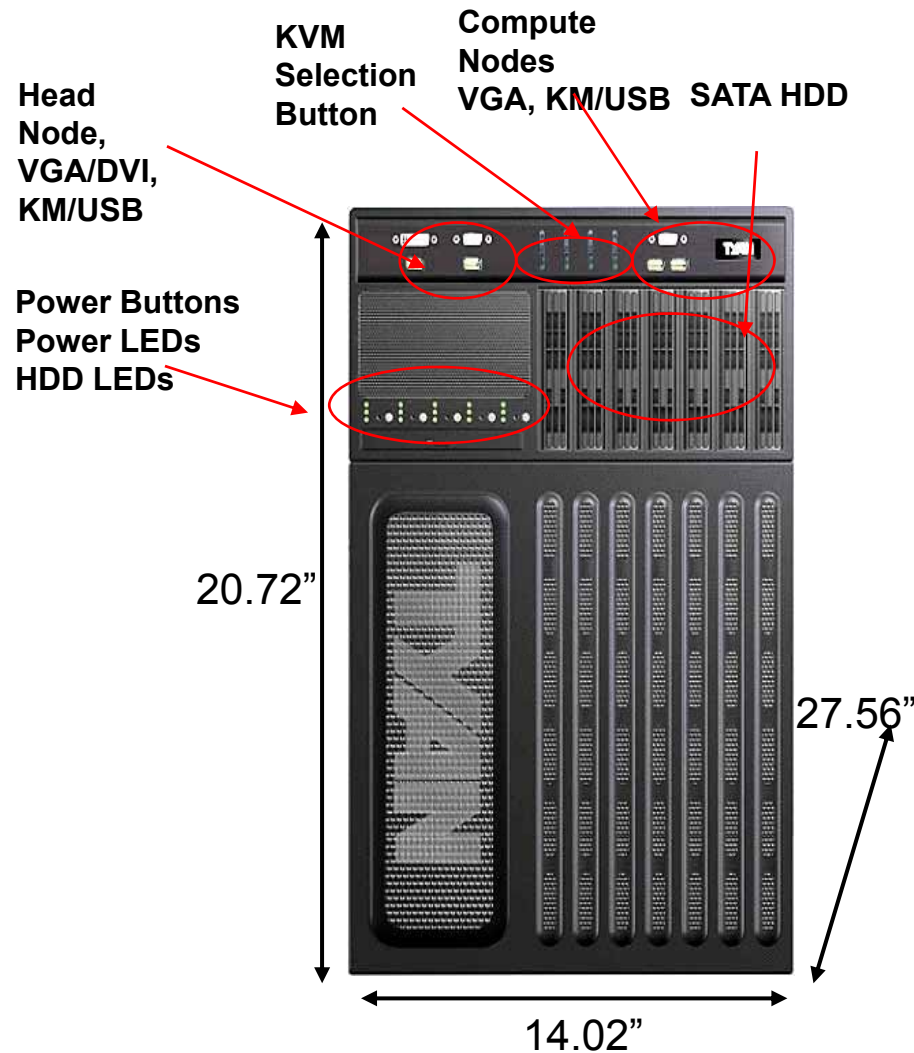


# Typhoon-II Platform Service and Monitor



# Typhoon-II T-630 DX /T-650 QX

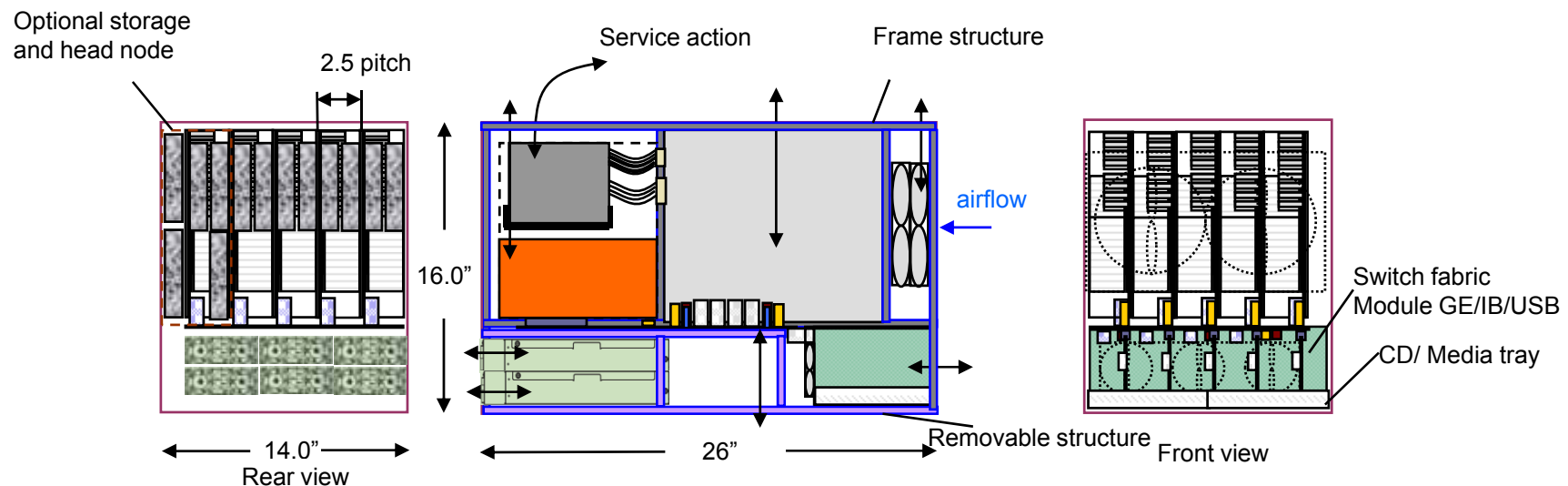
## Availability and Warranty



- **Typhoon T-6xx PSC systems support Intel Xeon™ processor**
- **Available from Q1'07**
  - T-630 DX supports Intel Xeon™ 5148 LV dual core processor
  - Available now
  - T-650 QX supports Intel Xeon™ 5310 LV quad core processor
  - Available from Q3'07
- **TY-II PSC to support AMD Opteron™ Socket-F dual core processor**
  - Available from Q3'07
- **One year factory warranty**
- **Five years with support agreement**

# Typhoon III – Next generation

- Complete new system architecture
- Customize MB form factor and modular design
- Cable less and improve serviceability
- Integrated GE/IB switch with system management
- Support full range of add-on features
- Launch in 2008



# Rack-mount storage systems



- TL-NAS28 – 2U rack-mount storage system with eight HDD SATAII (up to 8TB connected to LAN). Perfect decision not only for file storage but also for database operations.



- TL-NAS312 – 3U rack-mount storage system with eight HDD SATAII (up to 12TB connected to LAN). Perfect decision not only for file storage but also for database operations.

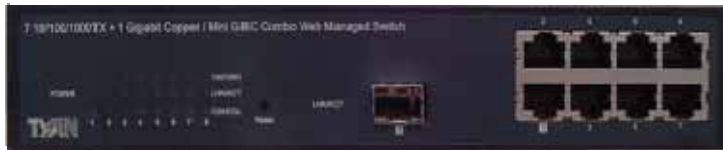


- TL-NAS416 – 4U rack-mount storage system with sixteen HDD SATAII (up to 16TB connected to LAN). Perfect decision not only for file storage but also for database operations.



- TL-NAS524 – 4U rack-mount storage system with twenty four HDD (up to 24TB connected to LAN). Perfect decision not only for file storage but also for database operations.

# TYAn 8 ports Level 2 Gigabit Switch for T-360 BX/DX



## Features

■ Web Management	■ Back Pressure for Half-duplex
■ DHCP Client	■ Flow Control for Full-duplex
■ Auto-MDIX on all ports	■ Store-and-Forward Switching Architecture
■ 16Gbps Back-Plane	■ 144Kbytes Memory Buffer
■ N-Way Auto-Negotiation	■ True Non-Blocking Switching
■ Port Trunk	■ Class of Service
■ Firmware update	■ 9K Jumbo Frame Support
■ 8K MAC address table	■ Spanning Tree

## Order Information

Part number	Product Name	Description
34075410009	CSWT-T1P7	7 10/100/1000T + 1 10/100/1000T/Mini-GBIC Combo Web-Smart 8.5"

# GROUP Competence and solutions

- CPU architectures — AMD64, IA32EM64T и AMD64
- Interconnects — Gigabit Ethernet, InfiniBand, Myrinet, Quadrics,
- OS Linux SUSE и RedHat, Windows Cluster Server
- Engineering environment — GNU, PGI, Intel, Absoft, PathScale
- MPI implementation — MPICH, LAM, Scali MPI Connect
- Computer-programming language C/C++/C# and program interface MPI
- System storages: SAN, NAS, SAS, DAS
- System Management
- Space monitoring and geoinformation modeling
- Graphic Clusters, 3D Media Production