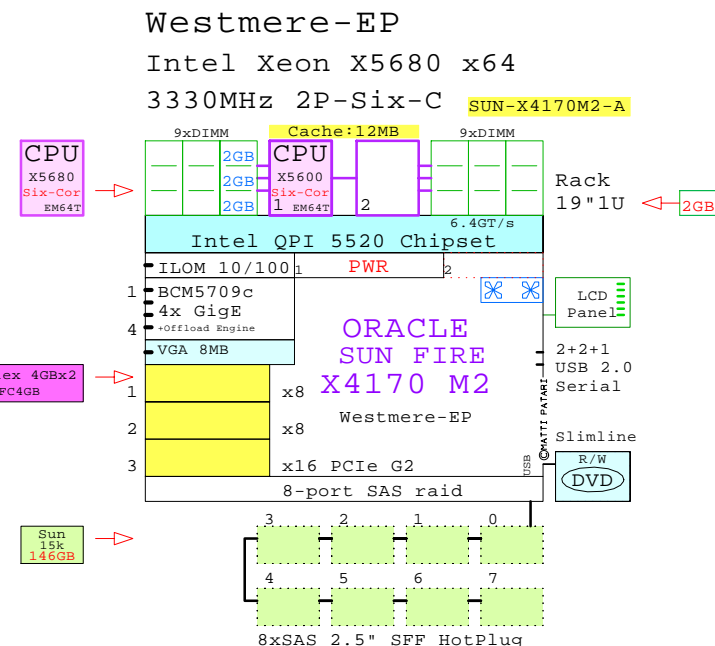


GOLDEN EGGS

Visual Cook Book for: ORACLE SUN X86-64 Servers

- 1 - Oracle SunFire Family Map
Rack Servers:
- 2 - X4170-M2 Intel Xeon 2P 1U
- 3 - X4270-M2 Intel Xeon 2P 2U
- 4 - X4470 Intel Xeon 4P 3U
- 5 - X4800 Intel Xeon 8P 5U
- 6 - X4140 AMD Opteron 2P 1U
- 7 - X4240 AMD Opteron 2P 2U
- 8 - X4640 AMD Opteron 8P 4U



This document is a collection of SUN x86-64 servers. It is prepared for End-customers, Partners and Sales personnel.
A picture talks all languages.

Created by:
 Matti.Patari@Kolumbus.Fi Helsinki

Tip for detail printing:
 - Zoom in area of interest
 - Print, Print Current View

Golden Eggs Home:
<http://www.goldeneggs.fi>

GE-SUN-BOOK-2011.pdf

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GOLDEN EGGS Visuals™ Helsinki	01-Jul-2011	GE-SUN-X86C
	Matti.Patari@Kolumbus.Fi	

ORACLE SUN x86-64, AMD and Intel
 GOLDEN EGGS Visuals, Helsinki

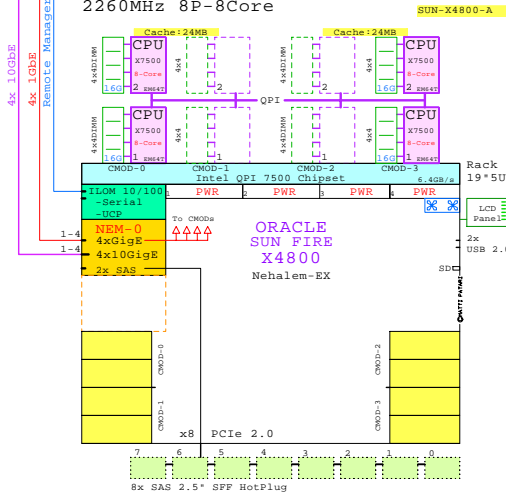
SUN SunFire x86 Server Family

GE-link to this document: <http://www.goldeneggs.fi/documents/GE-SUN-FAMILY-A.pdf>

SUN Rack Servers

Xeon 8P-5U

Intel Xeon X7560 x86-64
2260MHz 8P-8Core



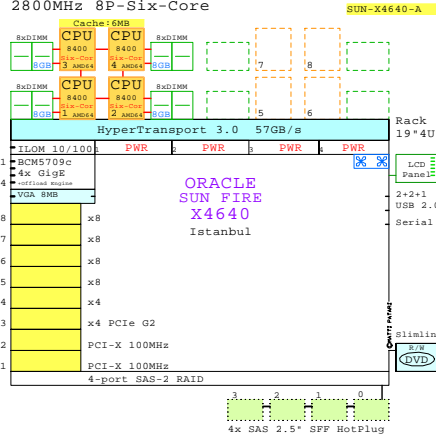
<http://www.goldeneggs.fi/documents/GE-SUN-X4800-A.pdf>



5U

Opteron 8P-4U

AMD Opteron 8439SE x86-64
2800MHz 8P-Six-Core



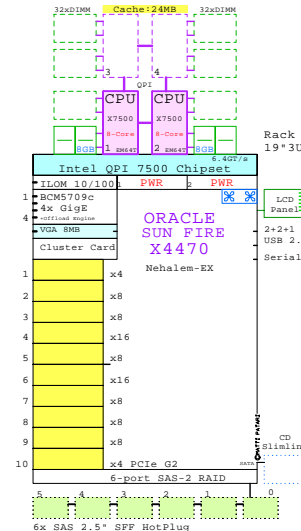
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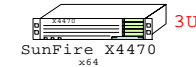
4U

Xeon 4P-3U

Intel Xeon X7560 x64
2260MHz 4P-8Core



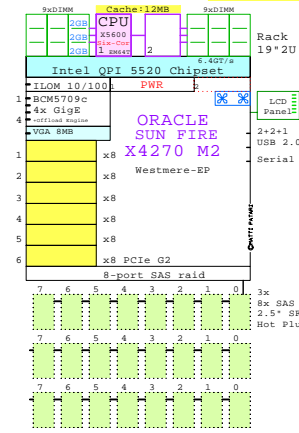
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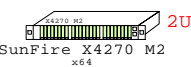
3U

Xeon 2P-2U

Intel Xeon X5680 x64
3330MHz 2P-Six-C



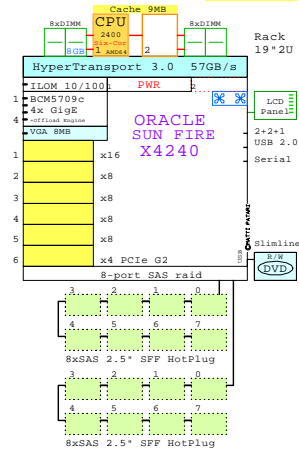
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2U

Opteron 2P-2U

AMD Opteron 2431 x86-64
2400MHz 2P Six-C



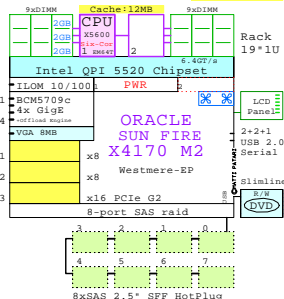
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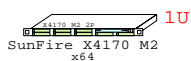
2U

Xeon 2P-1U

Intel Xeon X5680 x64
3330MHz 2P-Six-C



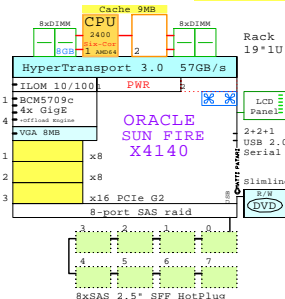
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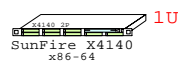
1U

Opteron 2P-1U

AMD Opteron 2431 x86-64
2400MHz 2P Six-C



<http://www.goldeneggs.fi/documents/GE-SUN-X4140-B.pdf>



1U

Note:
Link to X4140 GoldenEggs document

- Link to Dell family: <http://www.goldeneggs.fi/documents/GE-DELL-FAMILY-A.pdf>
- Link to IBM family: <http://www.goldeneggs.fi/documents/GE-IBM-FAMILY-A.pdf>
- Link to HP family: <http://www.goldeneggs.fi/documents/GE-HP-FAMILY-A.pdf>
- Link to Fujitsu family: <http://www.goldeneggs.fi/documents/GE-FUJITSU-FAMILY-A.pdf>

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Helsinki

Tip for detail printing:
- Zoom in area of interest
- Print, Print Current View

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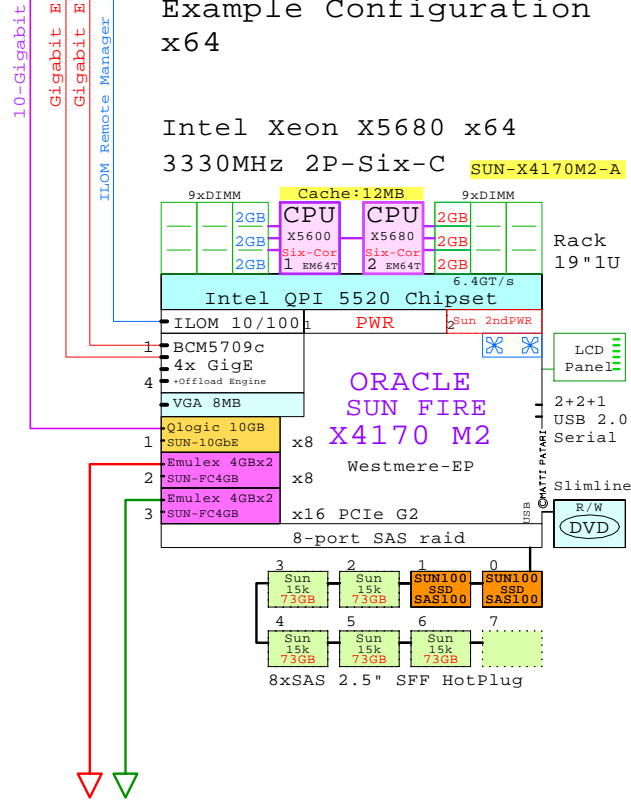
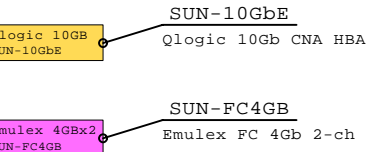
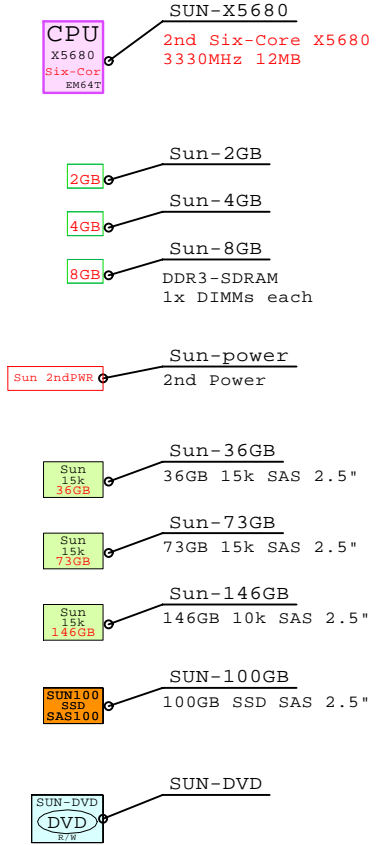
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		Matti.Patari@Kolumbus.fi

SUN x86 Server 8P,4P,2P Intel,AMD
GOLDEN EGGS Visuals, Helsinki

SUN X4170 M2
Xeon 5600

Internal Options:

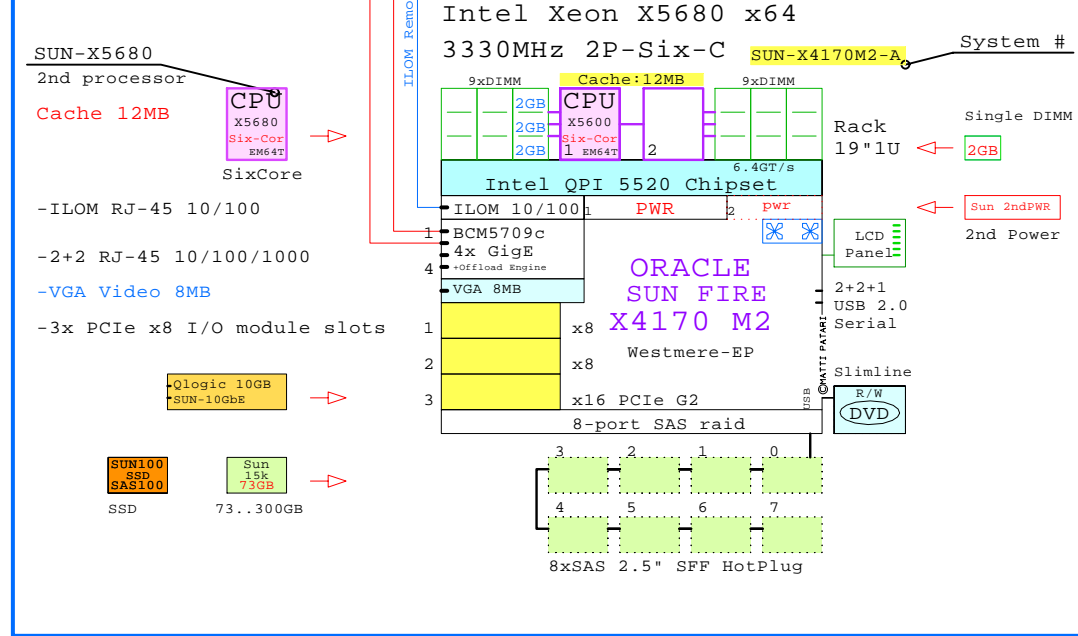


2x 4Gb Fibre Channel to external storage

Parts list for the 2P Six-Core SUN X4170 M2 system above

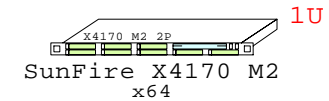
Part Number	Qty	Description
1	SUN-X4170M2	1 SUN x4170 M2 2P Six X5680-12MB 6GB 1U
1.1	SUN-100GB	2 SUN 100GB SAS SSD hot-plug disk 2.5"
1.2	SUN-10GbE	1 SUN Qlogic 10Gb CNA server adapter
1.3	SUN-FC4GB	2 SUN Emulex FC 4Gb 2-ch PCIe HBA
1.4	SUN-X5680	1 Xeon 6C X5680-12MB 3.33GHz for X4270
1.5	Sun-2GB	3 Sun 2GB Memory option kit 2x1GB
1.6	Sun-73GB	5 Sun 73GB SAS 15000r HotPlug 2.5" disk
1.7	Sun-power	1 Sun second power supply

Westmere-EP
3330MHz Six-Core



GE-link to this document:

<http://www.goldeneggs.fi/documents/GE-SUN-X4170M2-A.pdf>



MS Windows Server 2003 and 2008
LINUX: Red Hat, SuSE
VMware Virtualization Software

Tip for detail printing:
- Zoom in area of interest
- Print, Print Current View

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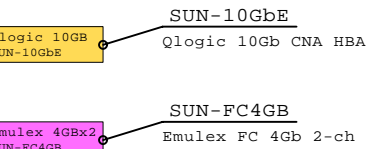
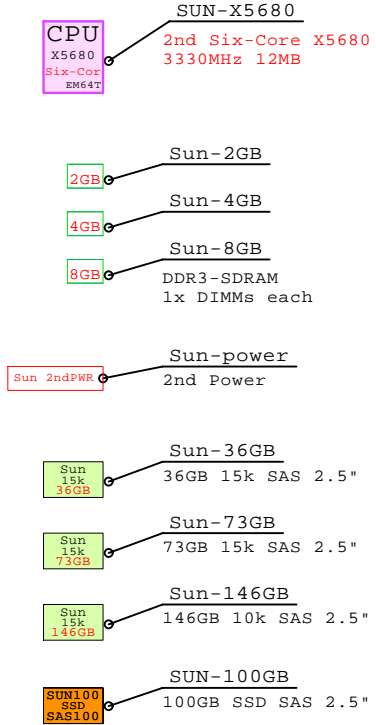
GOLDEN EGGS Visuals™ Helsinki	04-Oct-2010	GE-SUN-X4170M2-A
		Matti.Patari@Kolumbus.Fi

SUN X4170 M2 2P/1U x5680 3330MHz
GOLDEN EGGS Visuals, Helsinki

SUN FIRE X4170 M2 Intel Six-Core 5600 2P/1U

SUN X4270 M2
Xeon 5600

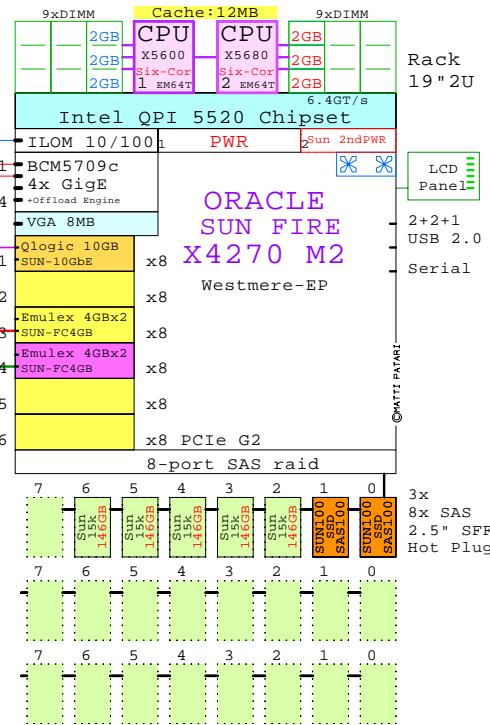
Internal Options:



Tip for detail printing:
- Zoom in area of interest
- Print, Print Current View

Example Configuration
x64

Intel Xeon X5680 x64
3330MHz 2P-Six-C SUN-X4270M2-A



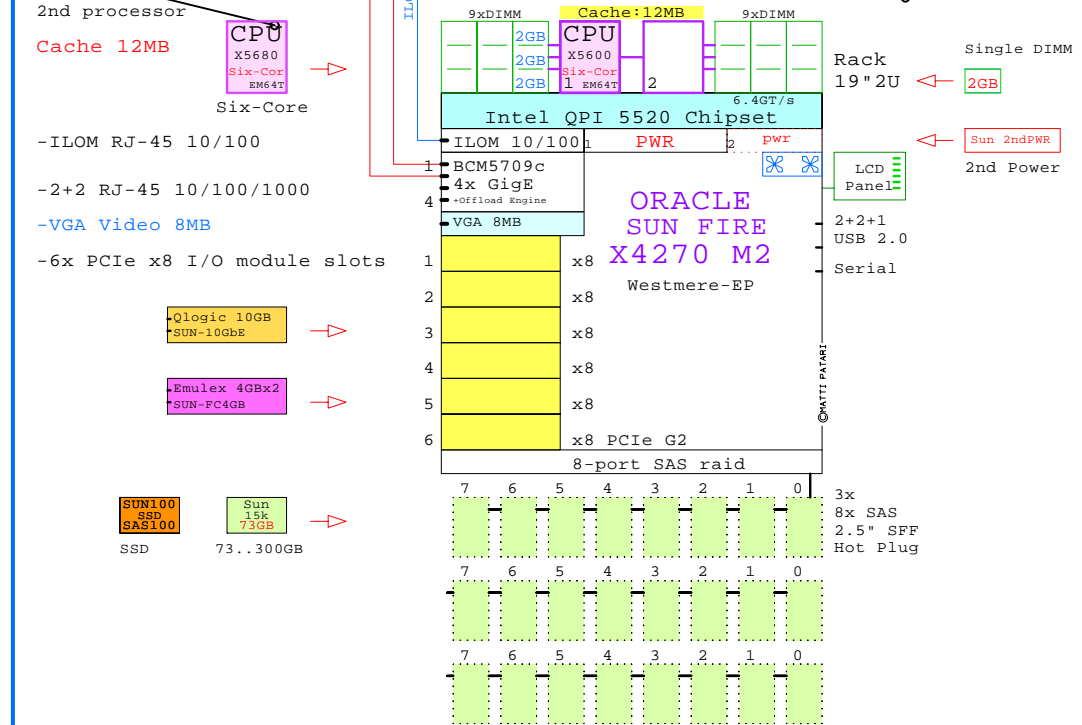
2x 4Gb Fibre Channel to external storage

Parts list for the 2P Six-Core SUN X4270 M2 system above

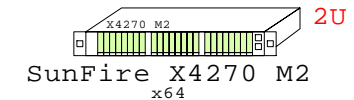
Part Number	Qty	Description
1	1	SUN-X4270M2 1 SUN x4270 M2 2P Six X5680-12MB 6GB 2U
1.1	2	SUN-100GB 2 SUN 100GB SAS SSD hot-plug disk 2.5"
1.2	1	SUN-10GbE 1 SUN Qlogic 10Gb CNA server adapter
1.3	2	SUN-FC4GB 2 SUN Emulex FC 4Gb 2-ch PCIe HBA
1.4	1	SUN-X5680 1 Xeon 6C X5680-12MB 3.33GHz for X4270
1.5	5	Sun-146GB 5 Sun 146GB SAS 15000r HotPlug 2.5" disk
1.6	3	Sun-2GB 3 Sun 2GB Memory option kit 2x1GB
1.7	1	Sun-power 1 Sun second power supply

Westmere-EP
3330MHz Six-Core

Intel Xeon X5680 x64
3330MHz 2P-Six-C SUN-X4270M2-A System #



GE-link to this document: <http://www.goldeneggs.fi/documents/GE-SUN-X4270M2-A.pdf>



MS Windows Server 2003 and 2008
LINUX: Red Hat, SuSE
VMware Virtualization Software

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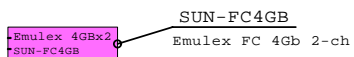
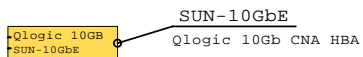
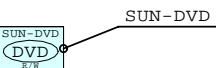
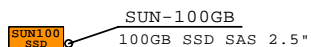
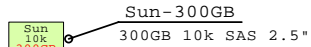
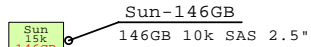
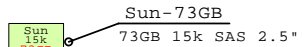
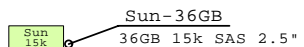
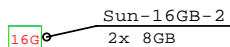
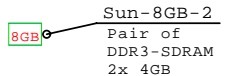
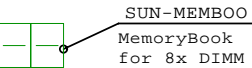
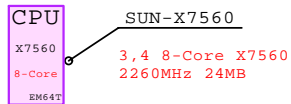
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GOLDEN EGGS Visuals™ Helsinki	04-Oct-2010	GE-SUN-X4270M2-A
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SUN X4270 M2 2P/2U x5680 3330MHz
GOLDEN EGGS Visuals, Helsinki

SUN X4470
Xeon 7500

Internal Options:

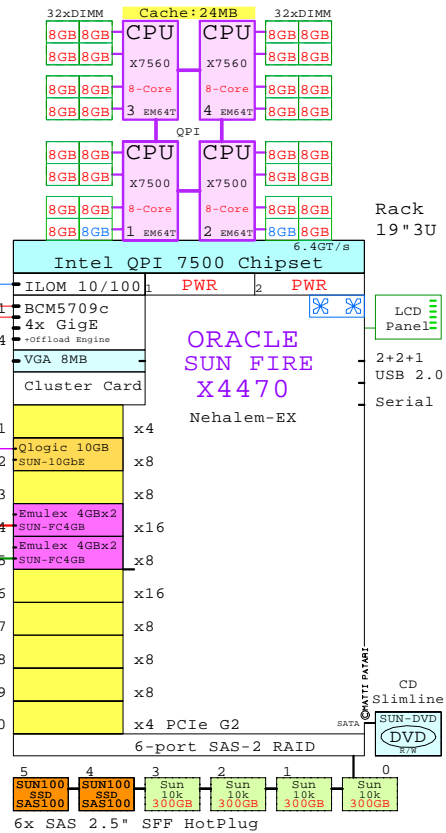


MS Windows Server 2003 and 2008
LINUX: Red Hat, SuSE
VMware Virtualization Software

Tip for detail printing:
- Zoom in area of interest
- Print, Print Current View

Example Configuration
x64

Intel Xeon X7560 x64
2260MHz 4P-8Core SUN-X4270-A



2x 4Gb Fibre Channel to external storage

Parts list for the 4P Eight-Core SUN X4470 system above

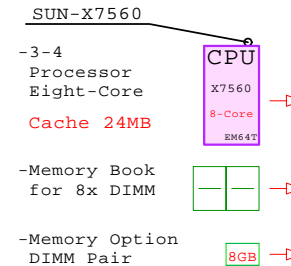
Part Number	Qty	Description
SUN-100GB	2	SUN 100GB SAS SSD hot-plug disk 2.5"
SUN-10GbE	1	Qlogic 10Gb CNA server adapter
SUN-DVD	1	SUN CD-RW/DVD-ROM Option kit, slimline
SUN-FC4GB	2	SUN Emulex FC 4Gb 2-ch PCIe HBA
SUN-MEMBOO	6	SUN Memory Expansion Book
SUN-X4470-A	1	SUN x4470 4P 8-C X7560-24MB 16GB 3U
SUN-X7560	2	SUN Xeon X7560 8-Core 2.26GHz 24MB Proce
Sun-300GB	4	Sun 300GB SAS 10000r HotPlug 2.5" disk
Sun-8GB-2	30	Sun 8GB Memory option kit 2x4GB

SUN FIRE X4470 Intel Eight-Core 7500 4P/3U

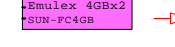
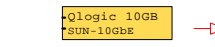
Nehalem-EX

2260MHz Eight-Core

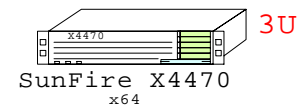
Intel Xeon X7560 x64
2260MHz 4P-8Core SUN-X4270-A



-3-4 Processor Eight-Core
Cache 24MB
-Memory Book for 8x DIMM
-Memory Option DIMM Pair 8GB =4+4
-ILOM RJ-45 10/100
-2+2 RJ-45 10/100/1000
-VGA Video 8MB
-Cluster module slots
-10x PCIe x8 I/O module slots



GE-link to this document: <http://www.goldeneggs.fi/documents/GE-SUN-X4470-A.pdf>



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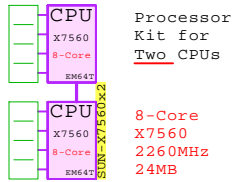
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		Matti.Patari@Kolumbus.Fi

SUN X4470 4P/3U x7560 2260MHz
GOLDEN EGGS Visuals, Helsinki

SUN X4800
Xeon X7560

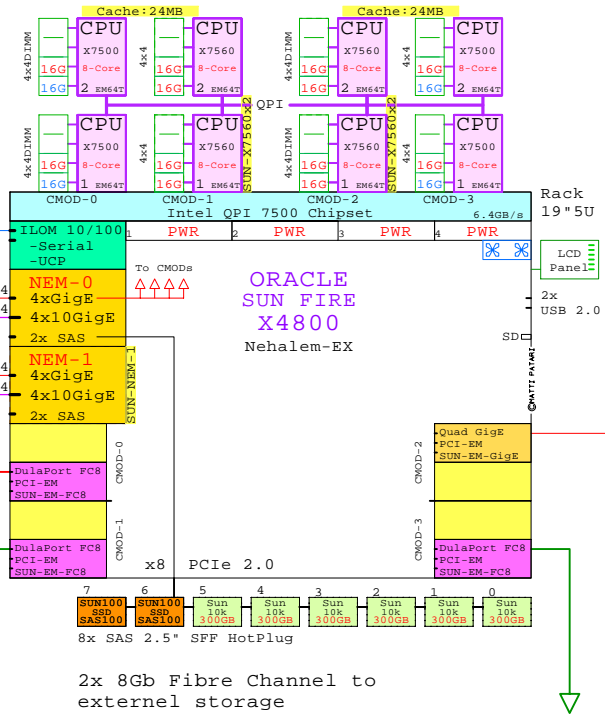
Internal Options:



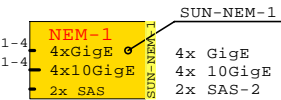
- Sun-16GB-4: Four x4GB DDR3-SDRAM 4x 4GB
- Sun-32GB-4: 4x 8GB
- Sun-64GB-4: 4x 16GB
- Sun-146GB: 146GB 15k SAS 2.5"
- Sun-300GB: 300GB 10k SAS 2.5"
- SUN-100GB: 100GB SSD SAS 2.5"

Example Configuration
x64

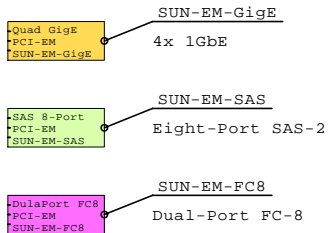
Intel Xeon X7560 x86-64
2260MHz 8P-8Core



Network ExpressModule



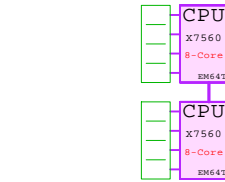
PCIe 2.0 ExpressModules



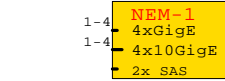
Parts list for the 8P Eight-Core SUN X4800 system above

Part Number	Qty	Description
1	1	SUN-X4800-A 1 SunFire X4800 8P 8-C X7560 24MB 64GB 5U
1.1	2	SUN-100GB 2 SUN 100GB SAS SSD hot-plug disk 2.5"
1.2	3	SUN-EM-FC8 3 SUN Dual Port FC8 PCI-EM
1.3	1	SUN-EM-GigE 1 SUN Quad-Port GigE PCI-EM
1.4	1	SUN-NEM-1 1 SUN NEM Network Express Module
1.5	1	SUN-X7560x2 1 SUN 2x Xeon X7560 8-Core 2.26GHz 24MB Ki
1.5.1	4	Sun-16GB-4 4 Sun 16GB Memory option kit 4x4GB
1.6	1	SUN-X7560x2 1 SUN 2x Xeon X7560 8-Core 2.26GHz 24MB Ki
1.6.1	4	Sun-16GB-4 4 Sun 16GB Memory option kit 4x4GB
1.7	4	Sun-16GB-4 4 Sun 16GB Memory option kit 4x4GB
1.8	6	Sun 300GB SAS 10000r HotPlug 2.5" disk

- Memory Kit, Four DIMMs 16GB =4x4GB
- Processor Kit for Two CPUs



- ILOM RJ-45 10/100, UCP, Serial
- Network Express Modules



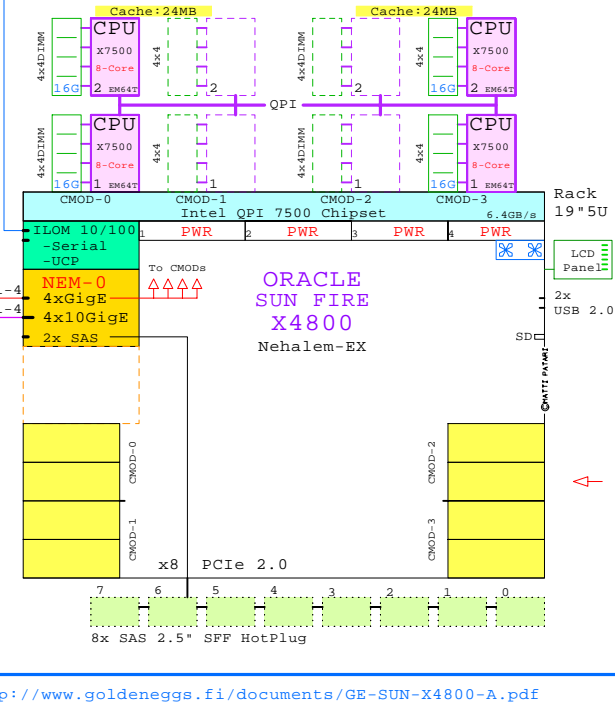
- 4+4 PCIe 2.0 Express Modules
- SUN-EM-GigE: Quad GigE PCI-EM SUN-EM-GigE
- SUN-EM-SAS: SAS 8-Port PCI-EM SUN-EM-SAS
- SUN-EM-FC8: Dual-Port FC8 PCI-EM SUN-EM-FC8

Nehalem-EX

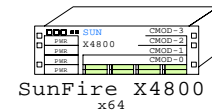
2260MHz Eight-Core

Max memory: 128x16GB DIMMs = 2TB

Intel Xeon X7560 x86-64
2260MHz 8P-8Core



GE-link to this document: <http://www.goldeneggs.fi/documents/GE-SUN-X4800-A.pdf>



Note, Modular Blade construction

MS Windows Server 2003 and 2008
LINUX: Red Hat, SuSE
VMware Virtualization Software

Tip for detail printing:
- Zoom in area of interest
- Print, Print Current View

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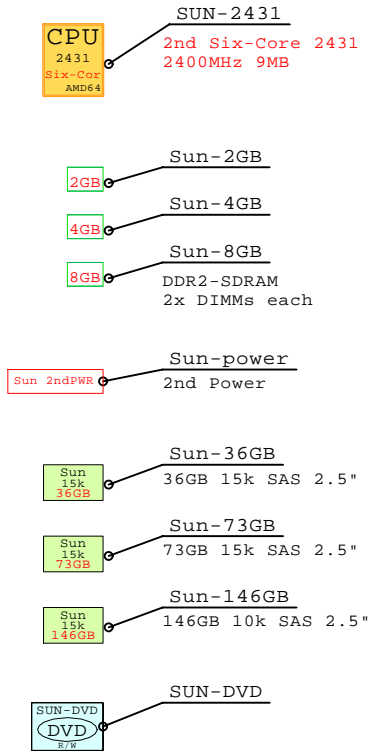
GOLDEN EGGS Visuals™ Helsinki	01-Nov-2010	GE-SUN-X4800-A
		Matti.Patari@Kolumbus.Fi

SUN FIRE X4800 Intel Eight-Core 7500 8P/5U

SUN X4800 8P/5U x7560 2260MHz
GOLDEN EGGS Visuals, Helsinki

SUN X4140
AMD Opteron

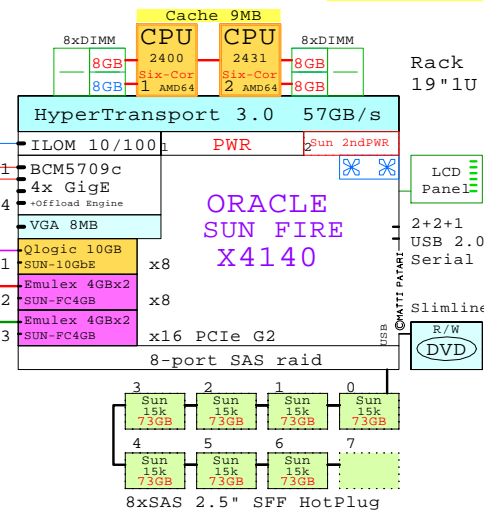
Internal Options:



10-Gigabit
Gigabit E
Gigabit E
ILOM Remote Manager

Example Configuration
x64

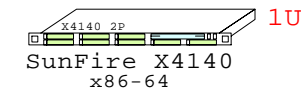
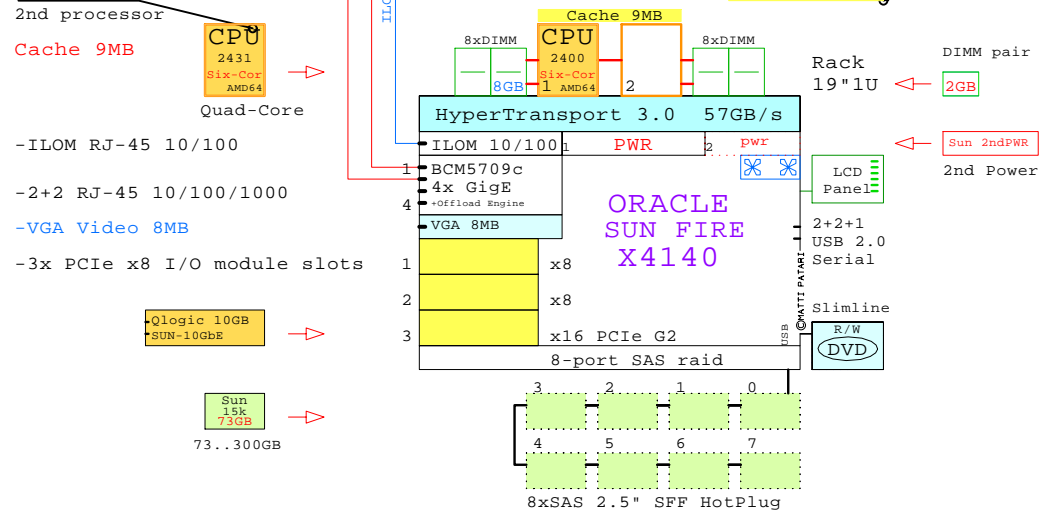
AMD Opteron 2431 x86-64
2400MHz 2P Six-C SUN-X4140-B



2x 4Gb Fibre Channel to external storage

Istanbul
2400MHz Six-Core

AMD Opteron 2431 x86-64
2400MHz 2P Six-C SUN-X4140-B System #



MS Windows Server 2003 and 2008
LINUX: Red Hat, SuSE
VMware Virtualization Software

Tip for detail printing:
- Zoom in area of interest
- Print, Print Current View

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GOLDEN EGGS Visuals™ Helsinki	10-Mar-2010	GE-SUN-X4140-B
Matti.Patari@Goldeneggs.Fi		

Parts list for the 2P Six-Core SUN X4140 system above

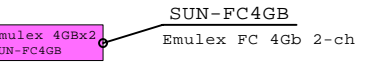
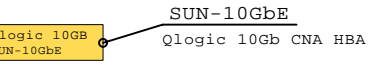
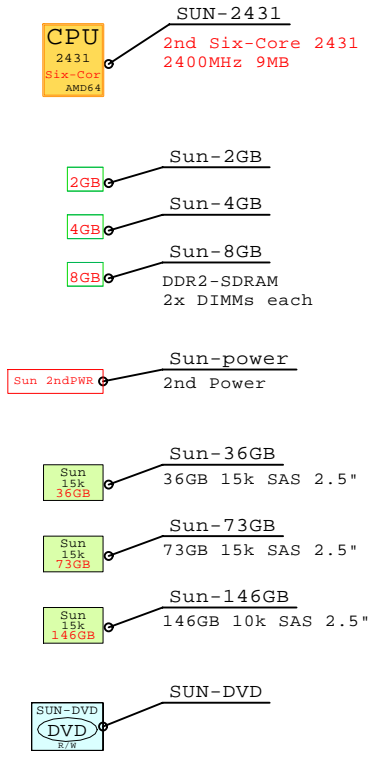
Part Number	Qty	Description
1	1	SUN-X4140-B 1 SUN X4140 2P 6C 2431 2.4GH 8GB AMD64 SAS
1.1	1	SUN-10GbE 1 SUN Qlogic 10Gb CNA server adapter
1.2	1	SUN-2431 1 AMD64 6C 2.4GHz 2431 CPU kit X4140
1.3	2	SUN-FC4GB 2 SUN Emulex FC 4Gb 2-ch PCIe HBA
1.4	7	SUN-73GB 7 Sun 73GB SAS 15000r HotPlug 2.5" disk
1.5	3	SUN-8GB 3 Sun 8GB Memory option kit 2x4GB
1.6	1	SUN-power 1 Sun second power supply

SUN FIRE X4140 AMD Six-Core 2P/1U

SUN X4140 2P/1U AMD Opteron Six-C
GOLDEN EGGS Visuals, Helsinki

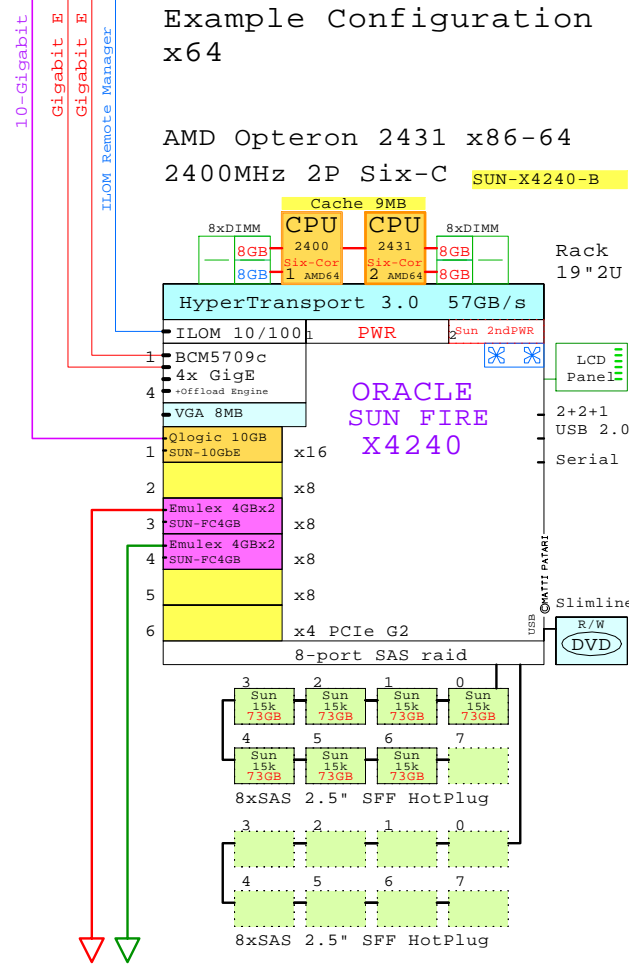
SUN X4240
AMD Opteron

Internal Options:



++ Plus many more std PCIe I/O modules...

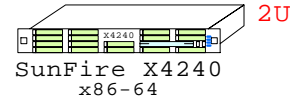
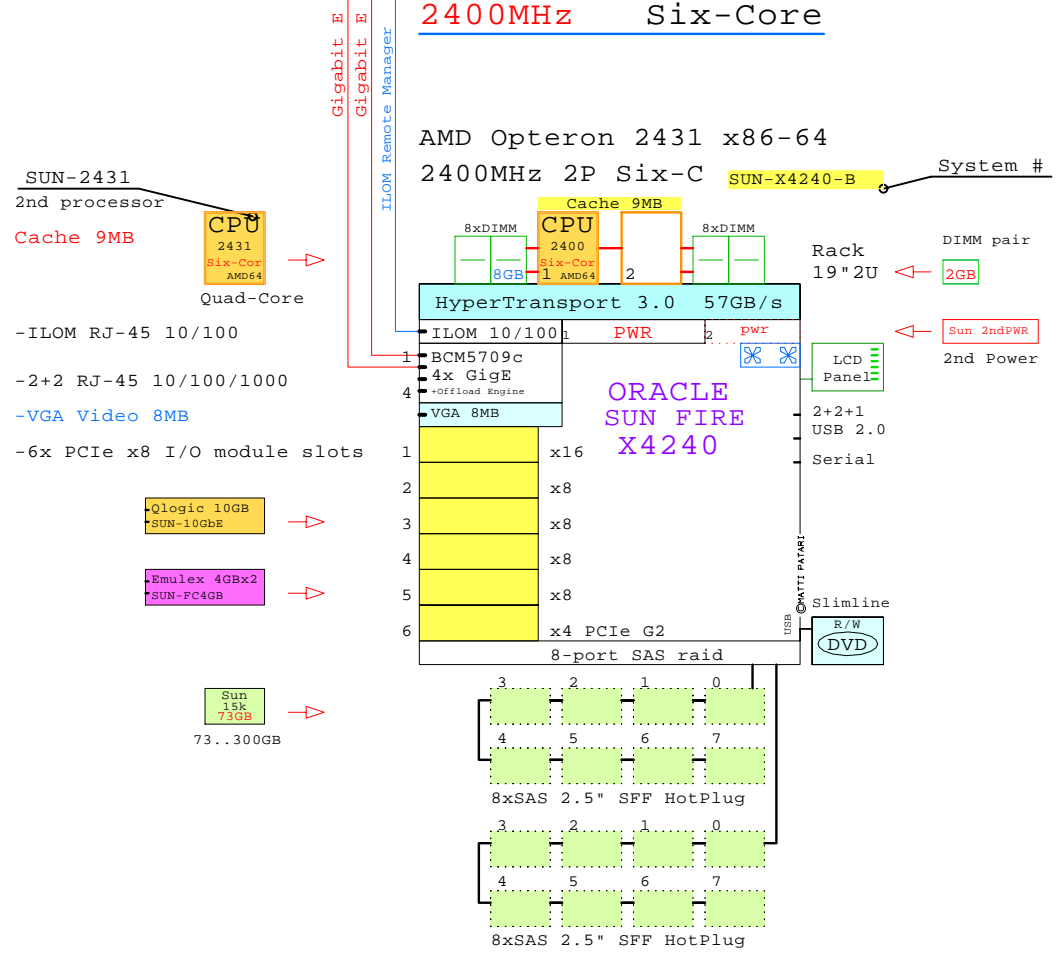
Tip for detail printing:
- Zoom in area of interest
- Print, Print Current View



2x 4Gb Fibre Channel to external storage

Parts list for the 2P Six-Core SUN X4240 system above

Part Number	Qty	Description
1	1	SUN-X4240-B 1 SUN X4240 2P 6C 2431 2.4GH 8GB AMD64 SAS
1.1	1	SUN-10GbE 1 SUN Qlogic 10Gb CNA server adapter
1.2	1	SUN-2431 1 AMD64 6C 2.4GHz 2431 CPU kit X4140
1.3	2	SUN-FC4GB 2 SUN Emulex FC 4Gb 2-ch PCIe HBA
1.4	7	Sun 73GB SAS 15000r HotPlug 2.5" disk
1.5	3	Sun-8GB 3 Sun 8GB Memory option kit 2x4GB
1.6	1	Sun-power 1 Sun second power supply



MS Windows Server 2003 and 2008
 LINUX: Red Hat, SuSE
 VMware Virtualization Software
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GOLDEN EGGS Visuals™ Helsinki	10-Mar-2010	GE-SUN-X4240-B
Matti.Patari@Goldeneggs.Fi		

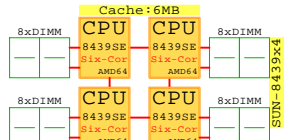
SUN X4240 2P/2U AMD Opteron Six-C
 GOLDEN EGGS Visuals, Helsinki

SUN FIRE X4240 AMD Six-Core 2P/2U

SUN X4640
AMD Opteron

Internal Options:

Processor Kit for Four CPUs



AMD 8439SE
Six-Core
2800MHz 6MB

Sun-8GB-2
Pair of
DDR3-SDRAM
2x 4GB

Sun-16GB-2
2x 8GB

Sun-36GB
36GB 15k SAS 2.5"

Sun-73GB
73GB 15k SAS 2.5"

Sun-146GB
146GB 10k SAS 2.5"

Sun-300GB
300GB 10k SAS 2.5"

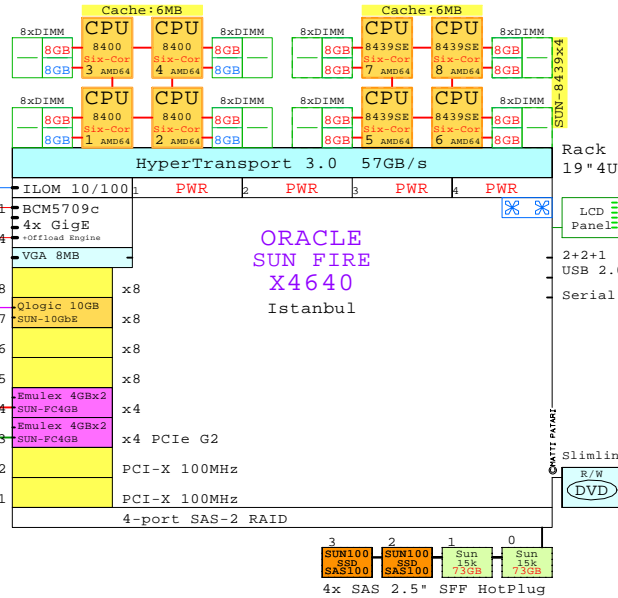
SUN-100GB
100GB SSD SAS 2.5"

SUN-10GbE
Qlogic 10Gb CNA HBA

SUN-FC4GB
Emulex FC 4Gb 2-ch

Example Configuration
x64

AMD Opteron 8439SE x86-64
2800MHz 8P-Six-Core



2x 4Gb Fibre Channel to
external storage

Parts list for the 8P Six-Core SUN X4640 system above

	Part Number	Qty	Description
	SUN-X4640-A	1	Sun X4640 8P Six-C 8439SE 6MB 32GB 4U
1.1	SUN-100GB	2	SUN 100GB SAS SSD hot-plug disk 2.5"
1.2	SUN-10GbE	1	SUN Qlogic 10Gb CNA server adapter
1.3	SUN-8439x4	1	5-8P CPU AMD64 6C 8439SE 2.8GHz X4640
1.3.1	Sun-8GB-2	8	Sun 8GB Memory option kit 2x4GB
1.4	SUN-FC4GB	2	SUN Emulex FC 4Gb 2-ch PCIe HBA
1.5	Sun-73GB	2	Sun 73GB SAS 15000r HotPlug 2.5" disk
1.6	Sun-8GB-2	4	Sun 8GB Memory option kit 2x4GB

Istanbul

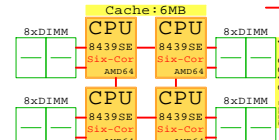
2800MHz Six-Core

Max memory:
64x 16GB DIMMs
= 1TB

-Memory Option,
DIMM Pair
8GB = 4+4



-Processor Kit for Four CPUs



-ILOM RJ-45 10/100

-Four RJ-45 100/1000

-VGA Video 8MB

-6x PCIe x8 I/O module slots

-2x PCI-X 100MHz I/O slots

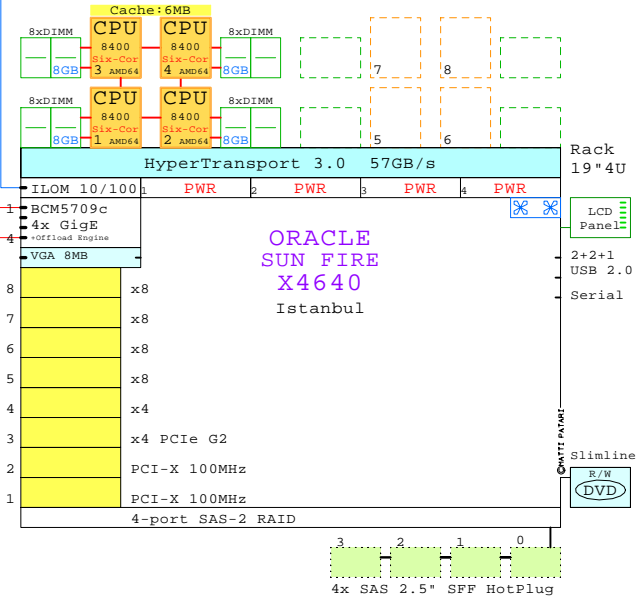
Qlogic 10Gb
SUN-10GbE

Emulex 4GBx2
SUN-FC4GB

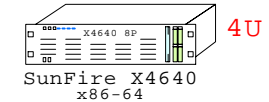
SUN100
SSD
SAS100

Sun
15k
73GB

AMD Opteron 8439SE x86-64
2800MHz 8P-Six-Core



GE-link to this document: <http://www.goldeneggs.fi/documents/GE-SUN-X4640-A.pdf>



MS Windows Server 2003 and 2008
LINUX: Red Hat, SuSE
VMware Virtualization Software

Tip for detail printing:
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GOLDEN EGGS Visuals™ Helsinki	26-Oct-2010	GE-SUN-X4640-A
		Matti.Patari@Kolumbus.Fi

SUN FIRE X4640 AMD Six-Core 8439SE 8P/4U

SUN X4640 8P/4U AMD 8439SE 2.8GHZ
GOLDEN EGGS Visuals, Helsinki

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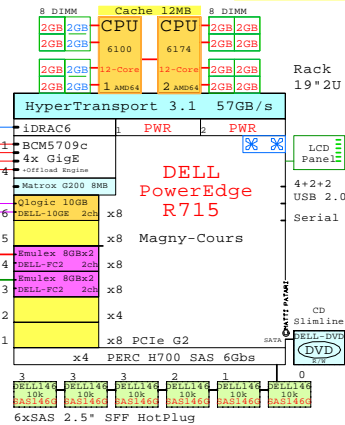
<http://www.goldeneggs.fi>

A picture is worth of one thousand words.
It talks all Global languages.

x86-64 servers: **Dell** **IBM** **HP** **Fujitsu** **SUN** **Acer** **Lenovo** and **Cisco**

AMD Opteron 6174 x86-64

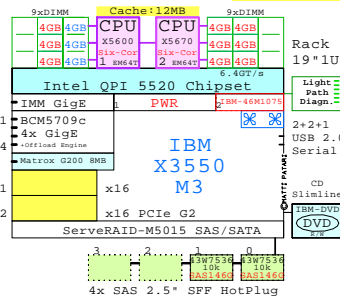
2200MHz 2P 12-Cor **DELL-R715-Axx**



2x 8Gb Fibre Channel to external storage

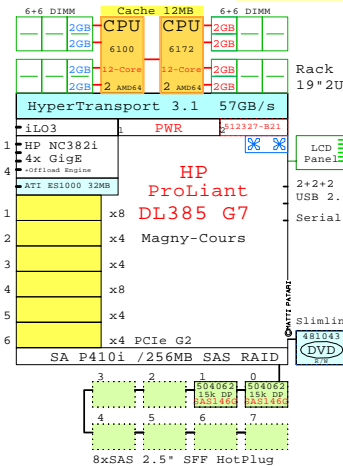
Intel Xeon X5670 x86-64

2930MHz 2P-Six-C **IBM-7944-M2x**



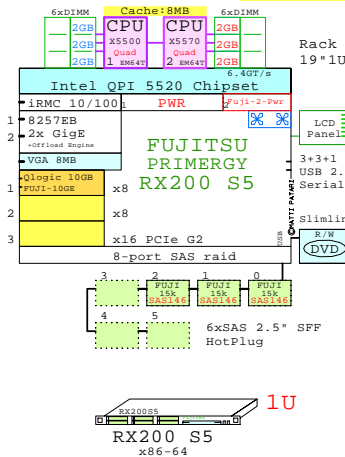
AMD Opteron 6172 x86-64

2100MHz 2P 12-Cor **573088-421 EU**



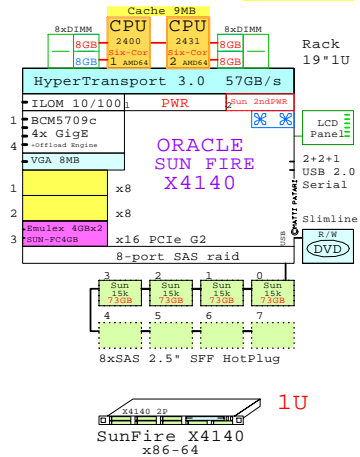
Intel Xeon X5570 x86-64

2930MHz 2P-Quad **FUJII-RX200S5A**



AMD Opteron 2431 x86-64

2400MHz 2P Six-C **SUN-X4140-B**



The present GoldenEggs multi vendor x86-64 website.

<http://www.goldeneggs.fi>

Older GoldenEggs are still available at:

DEC/Compaq/HP: VAX, Alpha, Storage and ProLiant Servers.

<http://h18000.www1.hp.com/info/GECPQA/>

OpenVMS.org: Alpha, Storage, ProLiant and Itanium Servers

<http://www.openvms.org/pages.php?page=GoldenEggs>

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Your comments,improvements,are welcome.

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- <http://www.goldeneggs.fi/documents/GE-CISCO-FAMILY-A.pdf>

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- <http://www.goldeneggs.fi/documents/GE-COMPARE-2P-2U-A.pdf>
- <http://www.goldeneggs.fi/documents/GE-COMPARE-4P-4U-A.pdf>
- <http://www.goldeneggs.fi/documents/GE-COMPARE-8P-8U-A.pdf>
- <http://www.goldeneggs.fi/documents/GE-COMPARE-TOWER-A.pdf>

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