

HP Unified Cluster Platform 3000

Planning Template:  
-Single Rack  
-Gigabit Ethernet  
-Xeon EM64T

HP Cluster Platform 3000, Single Cabinet, Gigabit Ethernet, 32x ProLiant Xeon EM64T Nodes

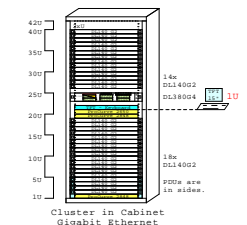
-DL140 G2 3600MHz, SATA disks  
-DL360 G4p 3600MHz, SCSI disks

#1 Single Cabinet, max 32 nodes

Compute Nodes: Intel Xeon EM64T

Console Network

Control Node:



BOM for one Compute Node DL140 G2 SATA Disks

Part Number	Qty	Description
1	1	383504-421 1 DL140 G2 1P 3600MHz-2M 1GB SATA 80GB EM64T
1.1	1	343055-821 1 1GB PC2 FC3200 DDR2 SDRAM kit(2x512MB)
1.2	1	149046-821 1 24x CD-ROM Optical Slim Line
1.3	1	178281-821 1 Intel Xeon 3600MHz-2M EM64T processor kit
1.4	1	383410-821 1 80GB SATA NHP 7200r disk 1*

BOM for one Compute Node DL360 G4p SCSI Disks

Part Number	Qty	Description
1	1	376236-421 1 DL360 G4p 1P 3600MHz-2MB 1GB SCSI EM64T
1.1	2	286778-822 2 72.8GB 15000r U320 disk 1*
1.2	1	343055-821 1 1GB PC2 FC3200 DDR2 SDRAM kit(2x512MB)
1.3	1	376241-821 1 Xeon 3600MHz-2MB EM64T proc.DL360G4p kit

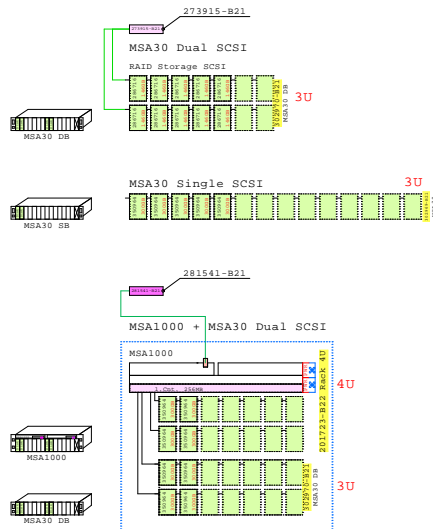
BOM for the Control Node DL380 G4 and Switches

Part Number	Qty	Description
1	1	370596-421 1 DL380 G4 1P 3200MHz-1MB 1GB EM64T 2U
1.1	1	290563-821 1 NC7771 PCI-X 10/100/1000-T Server Adapter
1.2	1	430408-821 1 DL380 G3 Hot Plug Blower Kit, 3x Fans
1.3	1	343055-821 1 1GB PC2 FC3200 DDR2 SDRAM kit(2x512MB)
1.4	1	347708-821 6 146.8GB 15000r U320 disk 1*
1.5	1	35892-821 1 DL380 G4 second AC power supply
1.6	1	374492-821 1 Intel Xeon 3200MHz 1MB EM64T proc. kit
2	1	J4899A 1 ProCurve 2650 10/100-T 48+2=50 Port 1U
3	1	J4904A 2 ProCurve 2848 10/100/1000-T 44+4=48 Port

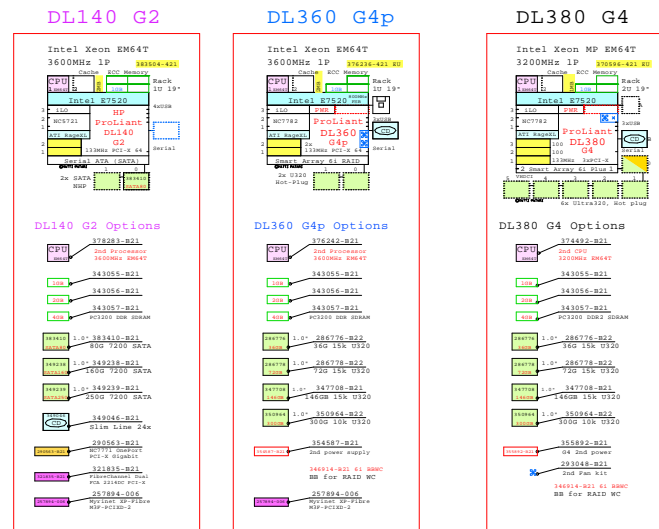
BOM for Optional Storage

Part Number	Qty	Description
1	1	201723-822 1 MSA1000 RAID Array 256MB Rack 4U
1.1	1	302970-821 1 MSA30 Dual Buss Ultra320 7+7 1*
1.1.1	1	350964-822 4 3000B 10000r U320 disk 1*
1.2	1	350964-822 4 3000B 10000r U320 disk 1*
2	1	302969-821 1 MSA30 Single Buss Ultra320 14x1*
2.1	1	350964-822 5 3000B 10000r U320 disk 1*
3	1	302970-821 1 MSA30 Dual Buss Ultra320 7+7 1*
3.1	1	286716-822 10 146.8GB 10000r U320 disk 1*
4	1	273915-821 1 Smart Array 6402/128 Ultra320 2-chan
5	1	281541-821 1 HBA 2Gb/s PCI PCA2214 for Linux

Optional Storage



Compute Nodes



Control Node

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When this diagram has supported your planning process, please let me know. All feedback is also appreciated. Matti.Pataari@Lumibia.fi GE-Architect.

When you need a customized PDF diagram from this template, please let me know your "wish list".

Date: 18-Jun-2005

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GOLDEN EGGS 18-Jun-2005 CP3000GigE32  
Matti.Pataari@Lumibia.fi

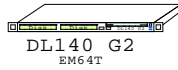
HP Cluster Platform 3000 EM64T  
GOLDEN EGGS Visuals, Helsinki

For more detailed configuring, please consult the latest HP QuickSpecs.

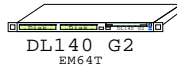
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CP3000GigE32



DL140 G2  
EM64T



DL140 G2  
EM64T



DL380 G4  
EM64T

Compute Nodes: Intel Xeon EM64T

Console Network

External LAN  
Control Node:

Node #4

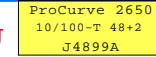
Node #3

Node #2

Node #1

1U

1U



2650

Ports used:  
16+16+1<50

1U

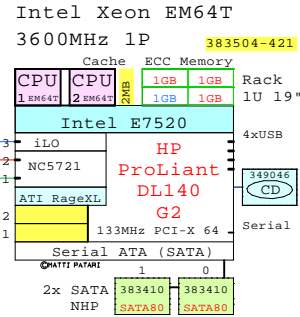
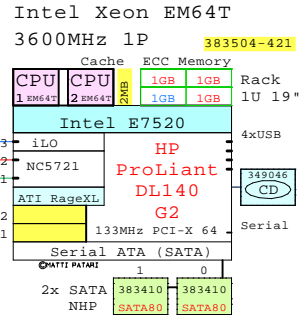


Intel Xeon MP EM64T  
3200MHz 1P

2U

DL140 G2  
2xXeon  
3.6GHz  
4x1GB  
2x80GB

DL140 G2  
2xXeon  
3.6GHz  
4x1GB  
2x80GB

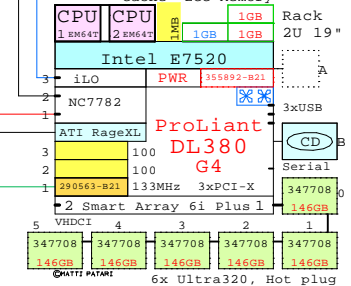
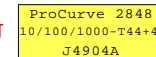


DL140 G2

Ports used:  
16+16+1<48

Admin Network  
2848

1U



Admin Network

Cluster Interconnect

Gigabit Ethernet

Node #20

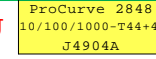
Node #19

Node #18

Node #17

1U

1U



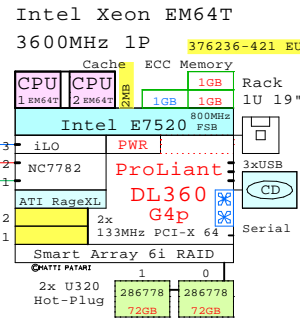
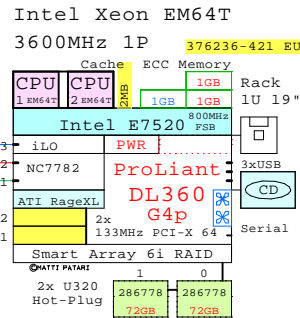
2848

Cluster Interconnect  
Ports used:  
16+16+1<48

DL360 G4p

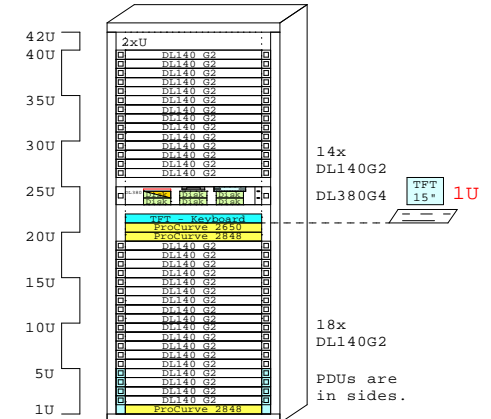
DL360 G4p  
2xXeon  
3.6GHz  
3x1GB  
2x72GB

DL360 G4p  
2xXeon  
3.6GHz  
3x1GB  
2x72GB



Admin Network

Cluster Interconnect



Cluster in Cabinet  
Gigabit Ethernet

BOM for one Compute Node DL140 G2 SATA Disks

Part Number	Qty	Description
1	383504-421	1 DL140 G2 1P 3600MHz-2M 1GB SATA 80GB EM6
1.1	343055-B21	3 1GB PC2 PC3200 DDR2 SDRAM kit(2x512MB)
1.2	349046-B21	1 24x CD-ROM Option Slim line
1.3	378283-B21	1 Intel Xeon 3600MHz-2M EM64T processor ki
1.4	383410-B21	1 80GB SATA NHP 7200r disk 1"

BOM for one Compute Node DL360 G4p SCSI Disks

Part Number	Qty	Description
1	376236-421	1 DL360 G4p 1P 3600MHz-2MB 1GB SCSI EM64T
1.1	286778-B22	2 72.8GB 15000r U320 disk 1"
1.2	343055-B21	2 1GB PC2 PC3200 DDR2 SDRAM kit(2x512MB)
1.3	376242-B21	1 Xeon 3600MHz-2MB EM64T proc.DL360G4p kit

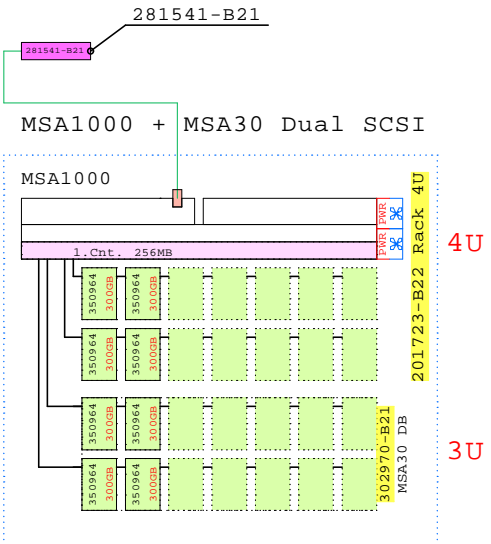
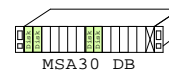
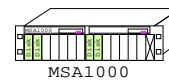
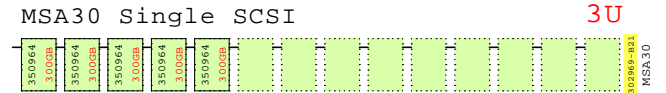
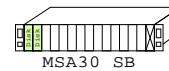
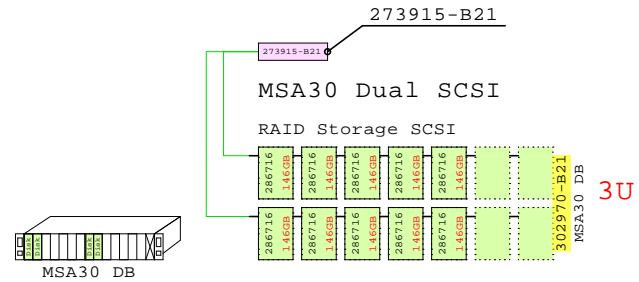
BOM for the Controll Node DL380 G4 and Switches

Part Number	Qty	Description
1	370596-421	1 DL380 G4 1P 3200MHz-1MB 1GB EM64T 2U
1.1	290563-B21	1 NC7771 PCI-X 10/100/1000-T Server Adapte
1.2	293048-B21	1 DL380 G3 hot plug blower kit,3x fans
1.3	343055-B21	2 1GB PC2 PC3200 DDR2 SDRAM kit(2x512MB)
1.4	347708-B21	6 146.8GB 15000r U320 disk 1"
1.5	355892-B21	1 DL380 G4 second AC power supply
1.6	374492-B21	1 Intel Xeon 3200MHz 1MB EM64T proc. kit
2	J4899A	1 ProCurve 2650 10/100-T 48+2=50 Port 1U
3	J4904A	2 ProCurve 2848 10/100/1000-T 44+4=48 Port

BOM for Optional Storage

Part Number	Qty	Description
1	201723-B22	1 MSA1000 RAID Array 256MB Rack 4U
1.1	302970-B21	1 MSA30 Dual Buss Ultra320 7+7 1"
1.1.1	350964-B22	4 300GB 10000r U320 disk 1"
1.2	350964-B22	4 300GB 10000r U320 disk 1"
2	302969-B21	1 MSA30 Single Buss Ultra320 14x1"
2.1	350964-B22	5 300GB 10000r U320 disk 1"
3	302970-B21	1 MSA30 Dual Buss Ultra320 7+7 1"
3.1	286716-B22	10 146.8GB 10000r U320 disk 1"
4	273915-B21	1 Smart Array 6402/128 Ultra320 2-chan
5	281541-B21	1 HBA 2Gb/s PCI FCA2214 for Linux

Optional Storage



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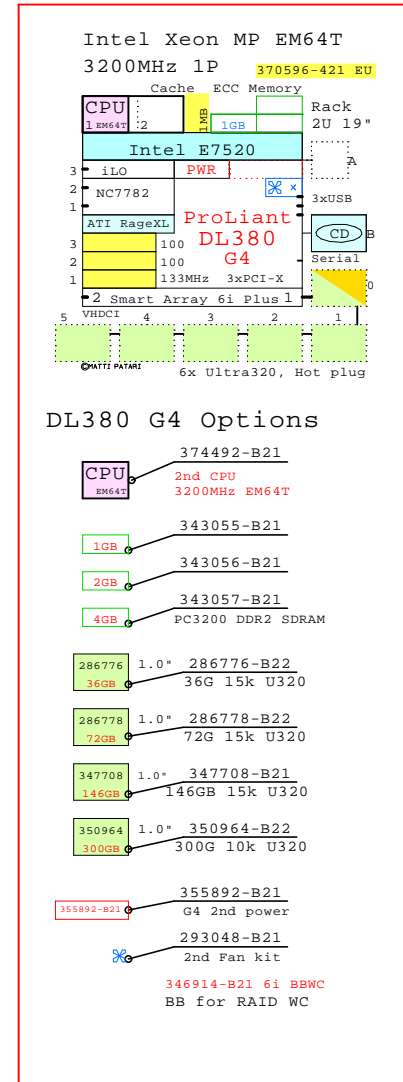
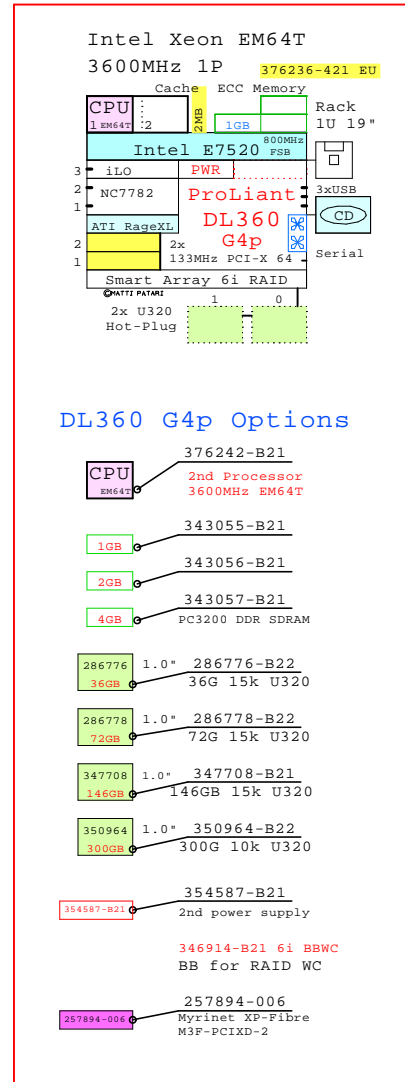
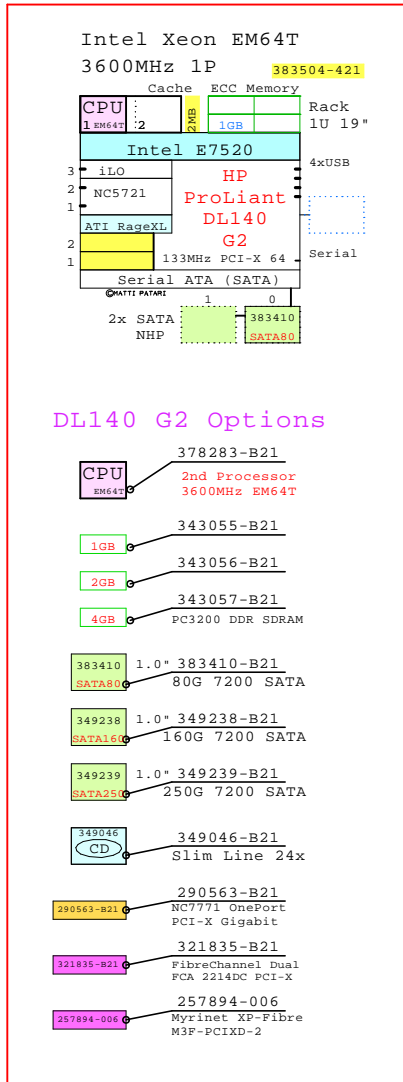
# Compute Nodes

# Control Node

## DL140 G2

## DL360 G4p

## DL380 G4



Best value.

Best performance.

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Date: 18-Jun-2005

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