

About

System Plan: Alliance S824
Description: Alliance Shippers Power8 S824 3 LPAR's
Application: IBM System Planning Tool
Version: 6.14.229.0
Date: Wednesday, October 15, 2014 3:03:39 PM EDT

Systems

System: System 01

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Description:
Memory: 32768 MB
Active Processors: 1.0
Processor Feature: EPXE
Auto Start: no
Hypervisor memory mirroring: false

```

Quantity:	1
Memory Region Size:	128
Total Processors:	6
* Estimated Energy:	696 Watts 2,375 BTU/hr

Shared Processor Pools

<u>ID</u>	<u>Name</u>	<u>Reserved</u>	<u>Maximum</u>
0	DefaultPool	*	*

*The calculated energy estimate is to be used for planning the heating/cooling requirements of the system. It should **not** be used in the planning of the electrical supply capacity.

Partitions

Partition: PROD

```
ID: 1
Description: PROD partition
Availability Priority: 191
```

Type: IBM i family

Partition Profile: LPAR1

Memory	
Minimum:	256 MB
Desired:	256 MB
Maximum:	256 MB

Processors	
Shared Processor ID: 0	
Minimum:	0.34
Desired:	0.34
Maximum:	0.34
Dedicated:	no
Uncapped:	no

Virtual Processors	
Minimum:	1
Desired:	1
Maximum:	1

IBM i Family Profile Properties	
Desired 5250:	0.0

Additional Properties
Operating Environment: IBM i V7R1M0

Virtual Ethernet

<u>Slot</u>	<u>Required</u>	<u>PVID</u>	<u>IEEE 802.1 Compatible</u>	<u>Additional VLANs</u>	<u>QoS Priority</u>
2	yes	1	no		None

Virtual Fibre Channel

<u>Name</u>	<u>Type</u>	<u>Slot</u>	<u>Required</u>	<u>Remote Partition / Profile</u>	<u>Remote Slot</u>	<u>WWPN</u>
<i>This table contains no data.</i>						

Virtual SCSI

Name	Type	Slot	Required	Remote Partition / Profile	Remote Slot
SCSI-001	Server	3	yes	DVLP / LPAR2	3
SCSI-002	Server	4	yes	LPAR3 / LPAR3	3

Virtual Serial

Type	Slot	Required	Remote Partition / Profile	Remote Slot
Server	0	yes		
Server	1	yes		

Hardware

Unit	Backplane	Slot	Bus	Required	Device Feature or CCIN	Device Description
8286_42A-0	P1	C6		no	5901	PCIe Dual - x4 SAS Adapter
8286_42A-0	P1	C15		yes	ESAS	Embedded Disk Controller

Tagged I/O

Tagged I/O Device	Unit	Backplane	Slot	Bus	Device Feature or CCIN	Device Description
Alternate Console						
Operations Console						
Alternate Restart Device	8286_42A-0	P1	C6		5901	PCIe Dual - x4 SAS Adapter
Load Source	8286_42A-0	P1	C15		ESAS	Embedded Disk Controller
Console	HMC					

Partition: DVLP

ID:	2
Description:	DVLP partition
Availability Priority:	127

Type: IBM i family

Partition Profile: LPAR2

Memory
Minimum: 256 MB
Desired: 256 MB
Maximum: 256 MB

Processors
Shared Processor ID: 0
Minimum: 0.33
Desired: 0.33
Maximum: 0.33
Dedicated: no
Uncapped: no

Virtual Processors
Minimum: 1
Desired: 1
Maximum: 1

IBM i Family Profile Properties
Desired 5250: 0.0

Additional Properties
Operating Environment: IBM i V7R1M0

Virtual Ethernet

Slot	Required	PVID	IEEE 802.1 Compatible	Additional VLANs	QoS Priority
2	yes	1	no		None

Virtual Fibre Channel

Name	Type	Slot	Required	Remote Partition / Profile	Remote Slot	WWPN
This table contains no data.						

Virtual SCSI

Name	Type	Slot	Required	Remote Partition / Profile	Remote Slot
SCSI-001	Client	3	yes	PROD / LPAR1	3

Virtual Serial

Type	Slot	Required	Remote Partition / Profile	Remote Slot
Server	0	yes		
Server	1	yes		

Hardware

Unit	Backplane	Slot	Bus	Required	Device Feature or CCIN	Device Description
8286_42A-0	P1	C7		no	5901	PCIe Dual - x4 SAS Adapter

Tagged I/O

Tagged I/O Device	Unit	Backplane	Slot	Bus	Device Feature or CCIN	Device Description
Alternate Console						
Operations Console						
Load Source			3			Virtual SCSI Client
Alternate Restart Device	8286_42A-0	P1	C7		5901	PCIe Dual - x4 SAS Adapter
Console	HMC					

Partition: LPAR3

ID:	3
Description:	LPAR3 partition
Availability Priority:	127

Type: IBM i family

Partition Profile: LPAR3

Memory
Minimum: 256 MB
Desired: 256 MB
Maximum: 256 MB

Processors
Shared Processor ID: 0
Minimum: 0.33
Desired: 0.33
Maximum: 0.33
Dedicated: no
Uncapped: no

Virtual Processors
Minimum: 1
Desired: 1
Maximum: 1

IBM i Family Profile Properties
Desired 5250: 0.0

Additional Properties
Operating Environment: IBM i V7R1M0

Virtual Ethernet

Slot	Required	PVID	IEEE 802.1 Compatible	Additional VLANs	QoS Priority
2	yes	1	no		None

Virtual Fibre Channel

Name	Type	Slot	Required	Remote Partition / Profile	Remote Slot	WWPN
This table contains no data.						

Virtual SCSI

Name	Type	Slot	Required	Remote Partition / Profile	Remote Slot
SCSI-002	Client	3	yes	PROD / LPAR1	4

Virtual Serial

Type	Slot	Required	Remote Partition / Profile	Remote Slot
Server	0	yes		
Server	1	yes		

Hardware

Unit	Backplane	Slot	Bus	Required	Device Feature or CCIN	Device Description
8286_42A-0	P1	C7		no	5901	PCIe Dual - x4 SAS Adapter

Tagged I/O

Tagged I/O Device	Unit	Backplane	Slot	Bus	Device Feature or CCIN	Device Description
Alternate Console						
Operations Console						
Load Source			3			Virtual SCSI Client
Alternate Restart Device	8286_42A-0	P1	C7		5901	PCIe Dual - x4 SAS Adapter
Console	HMC					

Hardware

System Unit: 8286_42A-0

Name: 8286_42A-0
Order Status: IBM
Processor Feature: EPXE_1

Ethernet Port

Backplane	Slot	Port Number	Logical Location Code	MAC Address	Connection Speed	Duplex	Maximum Receiving Packet Size	Flow Control	HEA Enabled	HEA Physical Port	Used by Partition / Profile
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This table contains no data.

Fibre Channel Port

Backplane	Slot	Port Number	Worldwide Node Name	Worldwide Port Name
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This table contains no data.

Cards

Backplane	Slot	Bus	Device Feature or CCIN	Device Description	Device Serial #	Order Status	Used by Partition / Profile
P1	C6		5901	PCIe Dual - x4 SAS Adapter		IBM	PROD / LPAR1
P1	C7		5901	PCIe Dual - x4 SAS Adapter		IBM	DVLP / LPAR2 LPAR3 / LPAR3
P1	C8		5899 (576F)	PCIe2 4-port 1GbE Adapter		IBM	
P1	C9						
P1	C10		5899 (576F)	PCIe2 4-port 1GbE Adapter		IBM	
P1	C11						
P1	C12						
P1	C14		ESAS	Embedded Disk Controller		IBM	
P1	C15		ESAS	Embedded Disk Controller		IBM	PROD / LPAR1

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Drives

Backplane	Slot	Bus	Device Feature or CCIN	Device Description	Device Serial #	Disk Controller	Order Status	Used by Partition / Profile
P2	D1		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D2		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D3		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D4		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D5		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D6		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D7		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D8		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D9		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D10							
P2	D11							
P2	D12							
P2	D13							
P2	D14							
P2	D15							
P2	D16							
P2	D17							
P2	D18		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D19		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D20		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D21		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D22		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D23		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D24		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D25		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D26		ESDA (59E0)	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)		8286_42A-0 P1-C15	IBM	PROD / LPAR1
P2	D27		5771 (6331)	SATA Slimline DVD-RAM Drive		8286_42A-0 P1-C15	IBM	PROD / LPAR1

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Summary

System 01

Product: 8286-42A

Partitions / Feature Code

Feature Code	DVLP	LPAR3	PROD
0267	1	1	1
5771	0	0	1
5901	1	1	1
ESAS	0	0	1
ESDA	0	0	18

Feature Summary

Feature Code	Description	Orderable	Exists	Unassigned / Switchable
0567	IBM i Version V7R1M0	1	0	0
2145	Primary OS - IBM i	1	0	0
5771	SATA Slimline DVD-RAM Drive	1	0	0
5899	PCIe2 4-port 1GbE Adapter	2	0	2
5901	PCIe Dual - x4 SAS Adapter	2	0	2
EJ0P	Storage Backplane 18 SFF-3 Bays/1.8-inch SSD Attach/DVD Bay/Dual IOA with Write Cache	1	0	0
EPXE	Processor feature code	1	0	0
ESAS	Embedded Disk Controller	0	0	1
ESDA	283GB 15K RPM SAS SFF-3 Disk Drive (IBM i)	18	0	0

Partitions Summary

Processors

Partition	OS Version	Shared	Processor Minimum	Processor Desired	Processor Maximum	Virtual Processor Minimum	Virtual Processor Desired	Virtual Processor Maximum	Uncapped	Weight
DVLP	V7R1M0	Y	0.33	0.33	0.33	1	1	1	N	128
LPAR3	V7R1M0	Y	0.33	0.33	0.33	1	1	1	N	128
PROD	V7R1M0	Y	0.34	0.34	0.34	1	1	1	N	128

Memory

Partition	OS Version	Virtual Memory Minimum	Virtual Memory Desired	Virtual Memory Maximum	Virtual Serial	Virtual LAN	Client SCSI	Client Server	Total
DVLP	V7R1M0	256	256	256	2	1	1	0	16
LPAR3	V7R1M0	256	256	256	2	1	1	0	16
PROD	V7R1M0	256	256	256	2	1	0	2	16

OS Details

Partition	OS Version	Interactive Percent	Primary Console	Alternate Console	Load Source	Data Protection
DVLP	V7R1M0	0.0	5550			
LPAR3	V7R1M0	0.0	5550			
PROD	V7R1M0	0.0	5550		8286_42A-0/C15	

Messages



Disclaimers / Warnings

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The output of this tool displays the parts placement required for the partitions you have defined. As you configure your order using the IBM Sales Configurator, you will have the opportunity to ask that IBM manufacturing place these parts as specified in the SPT system plan, using the Customer Specified Placement (CSP) feature for most new systems. Access the following website for more details: <http://www-1.ibm.com/servers/eserver/power/csp> . If this CSP feature is not selected IBM manufacturing will place all the parts assuming they are in a single partition system. It is the customer's responsibility to get the parts moved to meet their requirements. IBM services are available for a fee to perform this placement if requested. Please be advised that verification of disk placement with respect to data protection restrictions has NOT been completed for this system. If this system will be utilizing the customer specified placement program it is your responsibility to ensure that data protection restrictions are met as verification of these requirements will NOT be completed during the manufacturing process. Please ensure that placement of all internal disks is in compliance with the restrictions of the data protection defined for the system. For additional information with respect to data protection restrictions please consult the IBM product documentation. Additionally, drive bay to disk IOA port cabling specifications as printed by the SPT cabling instructions do not follow through to IBM manufacturing. This means that you may need to re-cable the internal drive bay cables to the disk IOA ports as instructed by the SPT once the system is delivered.

It is strongly recommended that you do capacity planning for the workload planned in each partition and then determine the LPAR configuration required to achieve the desired performance and room for growth in that partition.

Warning - The 5705 can drive internal disk and an external tape or DVD. However, in a LPAR system, when the 5705 is used in a secondary partition for the partition load source disk, an external tape or DVD that is also attached cannot be used as an ALT IPL device for that partition.

Warning - The Hypervisor Memory that is calculated assumes the maximum number of I/O connections to the system unit, which may result in an over-estimate of the amount of Hypervisor Memory required, particularly if the system has a fairly small number of I/O connections. Additionally, the Hypervisor Memory calculation for Power 6 systems does not take into account memory used by any Infiniband adapters that may be shared among partitions, so the Hypervisor Memory that is calculated may be under-estimated due to these shared adapters.

System 01

Information

Type	Description
System	The energy requirements for featureCode ESAS qty(2) could not be determined.
System	The energy requirements for featureCode ESDA qty(18) could not be determined.

Additional Warnings

- WARNING -- switching SCSI tape cards that can potentially control disk (for example 5712) may not be switched between dissimilar operating systems.
- WARNING -- partition hardware may be installed in migration towers and cannot be accounted for by the IBM System Planning Tool
- WARNING -- when a 2749 attaches a 3995 Optical Library DataServer, the 2749 must not be placed under the same IOP which drives the Load Source DASD

IT IS THE USER'S RESPONSIBILITY TO ENSURE THAT ALL PARTITION REQUIREMENTS ARE MET.

New order messages

This system can be ordered with an IBM i CBU specify feature (for enabling IBM i processor entitlements). If desired, this feature must be added when this order is submitted to the Sales Configurator.