IBM® PureFlex System オファリングが計算、ストレージ、およびネットワーキングの要件をサポートするために 2 種類の統合システムを提供

レターの一部は、英語で記載されています。

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製品の概要

PureFlex System では、以下の機能拡張が行われています。

• 初日から確実に完全なシステムを使用できるように発注プロセスを簡素化
• 次のような時間のかかる作業の多くを IBM の製造施設で済ませ、設置を簡素化
  - すべての電源ケーブルの事前配線
  - ラック内のすべてのデータ・ケーブルの取り付けとテスト
  - 冗長性を確保するための PureFlex 内のすべてのスイッチの事前構成
  - POWER® のデュアル VIOS の導入
• イーサネット、ファイバー・チャネル、FCoE、ラック内またはシャーシ内の共有ストレージなど、ネットワークおよびストレージの多様なアーキテクチャーをお客様が選択できる、高度な統合システムを提供
• PureFlex 内のすべてのコンポーネントを管理するために Flex System Manager を提供
• 設置時間をさらに迅速化するために多様な TSS およびラボ・サービスを発注可能

IBM® PureFlex System では、以下の機能拡張が行われています。

• PureFlex Express®: Express 構成は、中堅規模ビジネスのお客様向けの設計で、PureFlex System の最も手ごろな価格のエントリー・ポイントです。企業は、卓越した機能を備えていて、ビジネス、ソーシャル、モバイル、分析、重要な情報の流れを支えるインフラストラクチャーによって将来に即、対応できるシステムを求めております。 PureFlex Express は、ビジネス上の優位性とお客様の満足度の向上を実現できるカスタマイズ・インフラストラクチャーを構築するためのスタートアップ・ポイントを手ごろな価格で提供します。
• PureFlex Enterprise: Enterprise 構成は、スケーラブルなクラウド環境の導入に対応し、最適化され、信頼性と回復力に富む適用のために冗長性を組み込んでおり、重要なアプリケーションとクラウド・サービスをサポートします。最も要求の厳しいワークロードに適した PureFlex Enterprise は、お客様が必要とする柔軟性と汎用性を備え、必要に応じて拡張でき、ビジネス上不可欠なワークロードに対応して設計されています。また、業界の中でも独自の方法でパフォーマンス、可用性、効率性、および仮想化を実現します。
IBM PureFlex Solution for IBM i

IBM PureFlex Solution for IBM i は、IBM i および IBM PureFlex System と、POWER および x86 プロセッサー・ベースのコンピュート・ノードを組み合わせた完全な統合ビジネス・システムです。このソリューションは、IBM i および Windows 的アプリケーションを単一プラットフォームに統合することにより、IT コストと複雑さの軽減を求める中堅規模ビジネスのお客様にとって魅力的な選択肢となっています。

IBM PureFlex Solution for SmarterCloud Desktop Infrastructure

IBM PureFlex Solution for SmarterCloud Desktop Infrastructure は、既存のデスクトップ環境のコストと複雑さを軽減しながら、増加するモバイル・ワーカーを安全に管理します。デスクトップ仮想化に固有のビジネス・ニーズを持つお客様のための統合インフラストラクチャーは、VDI 環境でパフォーマンス、迅速な価値実現、およびセキュリティーを提供するように最適化されています。IBM の幅広いハードウェア・オファリング、ソフトウェア、およびサービスを活用して、良好なVDI実装を完成させます。

IBM Technical Support Services

IBM Technical Support Services は、長年にわたる専門知識とお客様によって実証されたベスト・プラクティスにより、お客様の PureFlex System への投資を保護してパフォーマンスを高速化します。IBM の幅広い段階的なサポート・オファリングは、多様なお客様のニーズに対応した選択肢と柔軟性を提供します。PureFlex System については、IBM は、お客様に合わせてカスタマイズされたプレミアム・サービスに至るまでの重要なサポート・オプションを組み込むことを義務づけています。IBM Technical Support Services は、PureFlex System の価値を高め、投資収益の迅速な実現をサポートします。

IBM Systems Lab Services and Training

IBM Systems Lab Services and Training は、すべての IBM Flex System® 製品に統合されています。 IBM システム製品開発研究所をベースとする IBM Systems Lab Services and Training は、世界中で新しいテクノロジーとソリューションの採用を支援してきた数千件の業務提携を通じて、深いスキルと幅広い経験を持っています。Lab Services and Training は、お客様固有のニーズに合わせたトレーニングや会議も実施できます。

主要前提条件

IBM PureFlex System の構成は、お客様のITニーズに応じてタイプと数量が異なります。Express またはEnterprise のオファリングとして定義され、計算、ネットワーク、およびストレージの幅広い要素を選択可能です。

Planned availability date

- November 15, 2013
- December 6, 2013, for 7893-92X features (#EB37, #EB38, #EB3A, #EB3B, #EB3C, #EB3D, #ESWB, #ESWC, #ESWD, #ESWE, and #ESWF)

Description

IBM PureFlex System

IBM introduced the first expert integrated systems, IBM PureSystems®, in 2012 to fundamentally change the economics and experience of IT. Over 10,000 clients rely on IBM technology to optimize their social, mobile, and big data workloads on cloud infrastructure. PureSystems solutions build on this cloud experience, integrating it into the system to improve efficiency and simplify deployment.

- Built-in expertise: Capturing and automating what experts do. IBM expert integrated systems represent the collective knowledge gained in thousands of deployments, established methods of work, innovative thinking, IT industry leadership, and the distilled expertise of IBM and solution providers. All of this
is built into the system in a deployable form from the base system infrastructure through the application.

- Integration by design: Integrating and tuning hardware and software. All the hardware and software components are deeply integrated, tuned in the lab and packaged in the factory into a single ready-to-go system that is optimized for the workloads you need to run. All of the integration is done for you, by experts.
- Simplified experience: Making every part of the IT lifecycle easier. With expert integrated systems, the entire experience is much simpler, from solution design to purchase, system setup to operation, maintenance to upgrades. Management of the entire system of physical and virtual resources is integrated and all this is done in an open manner to enable participation by a broad ecosystem of partners to bring their industry-optimized solutions to bear.

The simplicity of a PureFlex System begins with acquisition. You can choose one of two predefined and fully integrated, optimized configurations as your starting point. Your solution will ship to you as a complete, fully-tested and configured package of compute, storage and networking resources on which you and IBM Business Partners can customize a solution. With built-in expertise for deployment, management, and optimization (including cloud capabilities) to simplify key tasks across all of your IT resources, your system is designed to deploy quickly and be easy to manage. You can select the capabilities you need based on your target workload and environment. Each configuration is available with your choice of IBM POWER7™ based or Intel™ processor-based compute nodes and an array of networking and storage options.

The following PureFlex System offerings are available:
- PureFlex System Express (계에스다) for smaller, single chassis installations
- PureFlex System Enterprise (계에스디씨) for scalable cloud deployments, which includes redundancy for resilient operation

A PureFlex System consists of:
- Flex System Compute Node, chosen from:
  - Flex System p260 Compute Node (7895-23X)
  - Flex System p260 Compute Node (7895-23A)
  - Flex System p460 Compute Node (7895-43X)
  - Flex System p270 Compute Node (7954-24X)
  - Flex System x240 Compute Node (8737-15X)
  - Flex System x220 Compute Node (7906-25X)
  - Flex System x4400 Compute Node (7917-45X)
  - Flex System x222 Compute Node (7916-27X)
  - Flex System Enterprise Chassis (7893-92X).
  - Flex System Manager (7955-01M).
- Storwize® V7000 Disk System (2076-124) or Flex System Storage® Node (4939-A49).
- Up to two IBM RackSwitch™ G8264 (1455-64C).
- Up to two IBM RackSwitch G8052 (1455-48E)
- PureFlex System 42U Rack (7953-94X) for PureFlex Enterprise or PureFlex Express. PureFlex Express includes the additional choice of Flex System 25U Rack (7014-S25) or no rack.
- IBM 7226-1U3 Multimedia Storage Enclosure.
- IBM 7316-TF3 Flat Panel Console Kit.

Optional Flex System compute nodes, Flex System chassis, PureFlex System 42U racks, Flex System 25U racks with PureFlex Express, and Flex System Managers can be ordered after the basic requirements for the PureFlex System are met. These additional orders are indicated by feature #EFDF (Express Expansion Option), feature # EFDH (Enterprise Expansion), or #EFDE (Custom Expansion). The Flex System Manager is not
available with EFDF. Storwize V7000 Disk Systems can be ordered separately without meeting the requirements for the PureFlex System.

The following defines Express and Enterprise Expansion components:

Express Expansion and components - single chassis only without rack mounted switches or top-of-rack (Ethernet or Fibre Channel):

Mandatory

- One or more Flex System Compute Nodes with network interfaces that match switch selection:
  - Flex System p260 (7895-23X)
  - Flex System p260 (7895-23A)
  - Flex System p460 (7895-43X)
  - Flex System p270 (7954-24X)
  - Flex System x240 (8737-15X)
  - Flex System x220 (7906-25X)
  - Flex System x440 (7917-45X)
  - Flex System x222 (7916-27X)
- Flex System Enterprise Chassis (7893-92X)
  - Includes 2x Chassis Management Modules
  - Includes chassis power supplies and fans for all compute, networks, and storage nodes
  - A choice of Ethernet/Fibre Channel or Converged Ethernet Switching
    - Ethernet 1Gb and 16Gb Fibre Channel for: 2 x #3598 (EN2092 Ethernet) and 2 x #ESW5 (Fibre Channel)
    - Ethernet 10Gb and 16Gb Fibre Channel for: 2 x #ESW7 (EN4093R Ethernet) and 2 x #ESW5 (Fibre Channel)
    - CN4093 Converged Ethernet for 2 x #ESW2 (Note: 1x ESW2 option is allowed only on express)
  - A Flex System Manager (7955-01M)
  - A Storwize V7000 Disk System (2076-124) or a IBM Flex System V7000 Storage Node (4939-A49)

Refer to the HDD and SSD options for the first controller.

Optional MTMs:

- An IBM PureFlex System 42U Rack (7953-94X) with various PDUs and line-cords preconfigured to support all PureFlex components
- Depending on the number of expansion units ordered an IBM PureFlex System 42U Rack (7953-94X) and IBM PureFlex System S25 Rack (7014-S25) with various PDUs and line-cords
- A Storwize V7000 Disk System (2076-124) or a second or third IBM Flex System V7000 Storage Node (4939-A49)

Refer to the HDD and SSD options for the first controller

- Storewize V7000 Expansion Units (2076-224) 
- Flex V7000 Expansion Units (4939-A29)
- An IBM Media Tray (7226-1U3)
- An IBM Video Tray (7316-TF3)
- Various SSD/HDD options for the (2076-124 or 4939-A49) Storage controllers

Enterprise Expansion and components for Single Chassis:

Mandatory
- One or more Flex System Compute Nodes with network interfaces that match switch selection:
  - Flex System p260 (7895-23X)
  - Flex System p260 (7895-23A)
  - Flex System p460 (7895-43X)
  - Flex System p270 (7954-24X)
  - Flex System x240 (8737-15X)
  - Flex System x220 (7906-25X)
  - Flex System x440 (7917-45X)
  - Flex System x222 (7916-27X)
- A Flex System Enterprise Chassis (7893-92X)
  - Includes 2x Chassis Management Modules
  - Includes Chassis Power® Supplies and Fans for all compute, networks and storage nodes
  - A choice of Ethernet/Fibre Channel or Converged Ethernet Switching
    - Ethernet 10Gb and 16Gb Fibre Channel for 2 x #ESW7 (EN4093R Ethernet) and 2 x #ESW5 (Fibre Channel)
    - CN4093 Converged Ethernet for 2 x #ESW2
- A Flex System Manager (7955-01M)
- A Storwize V7000 Disk System (2076-124) or a IBM Flex System V7000 Storage Node (4939-A49)
  Refer to the HDD and SSD options for the first controller.
- An IBM PureFlex System 42U Rack (7953-94X) with various PDUs and line-cords preconfigured to support all PureFlex components

Optional MTMs

- Depending on the number of expansion units ordered an IBM PureFlex System 42U Rack (7953-94X) and IBM PureFlex System S25 Rack (7014-S25) with various PDUs and line-cords
- Storwize V7000 Expansion Units (2076-224)
- Flex V7000 Expansion Units (4939-A29)
- An IBM Media Tray (7226-1U3)
- An IBM Video Tray (7316-TF3)
- Various SSD/HDD options for the (2076-124 or 4939-A49) Storage controllers
- Top-of-rack switches:
  - 2 x G8264 Ethernet Switch (1455-64C)
  - 2 x G8052 Ethernet Switch (1455-48E)
  - 2 x SAN24B SAN Switch (2498-B24)

Enterprise MTMs and components for Multiple Chassis:

Mandatory

- One or more Flex System Compute Nodes with network interfaces that match switch selection:
  - Flex System p260 (7895-23X)
  - Flex System p260 (7895-23A)
  - Flex System p460 (7895-43X)
  - Flex System p270 (7954-24X)
  - Flex System x240 (8737-15X)
  - Flex System x220 (7906-25X)
- Flex System x440 (7917-45X)
- Flex System x222 (7916-27X)

- Two or three Flex System Enterprise Chassis (7893-92X)
  - Includes 2x Chassis Management Modules per chassis
  - Includes Chassis Power Supplies and Fans for all compute, networks and storage
    nodes
  - A choice of Ethernet/Fibre Channel or Converged Ethernet Chassis Switching
    -- Ethernet 10Gb and 16Gb Fibre Channel for 2 x #ESW7 (EN4093R Ethernet) and 2 x
    #ESW5 (Fibre Channel)
    -- CN4093 Converged Ethernet for 2 x #ESW2

- Top-of-rack switches:
  - 2 x G8264 Ethernet Switch (1455-64C)
  - 2 x G8052 Ethernet Switch (1455-48E)
  - 2 x SAN24B SAN Switch (2498-B24)

- A Flex System Manager (7955-01M)

- One or two Storwize V7000 Disk System (2076-124) or one, two, or three IBM Flex
  System V7000 Storage Node (4939-A49) per 7893-92X ordered

Refer to the HDD and SSD options for the first controller.

- An IBM PureFlex System 42U Rack (7953-94X) with various PDUs and line-cords
  preconfigured to support all PureFlex components

Optional MTMs

- Depending on the number of expansion units ordered an IBM PureFlex System 42U Rack
  (7953-94X) with various PDUs and line-cords
- Storwize V7000 Expansion Units (2076-224) ¹ ²
- Flex V7000 Expansion Units (4939-A29)
- An IBM Media Tray (7226-1U3) ¹
- An IBM Video Tray (7316-TF3) ¹
- Various SSD/HDD options for the (2076-124 or 4939-A49) Storage controllers

¹ Options that drive rack and PDU support
² May drive a second 42U rack when expansion units cannot be contained in the first rack

When ordering those products, you can find information on minimum configurations and
options in their online Sales Manuals at

http://www.ibm.com/common/ssi

For more information on PureFlex Systems, visit

http://www.ibm.com/pureflex

IBM PureFlex Solution for IBM i

PureFlex Solution for IBM i can be the perfect alternative to complex distributed
environments reaping the benefits of centralized management and resource sharing.
Instead of maintaining multiple rack or tower systems, you can run your business in
a single footprint consisting of a mix of server technologies and workloads including
both POWER and x86 based compute nodes. By consolidating their IBM i and Windows
applications onto a single integrated business platform, small and midsized clients
are offered an attractive alternative to reduce IT costs and complexity.

IBM i integrates a trusted combination of relational database, security, Web
services, networking and storage management capabilities. The system provides
a broad and highly stable database and middleware foundation for efficiently
deploying business processing applications. With support for over 5,000 solutions
from over 2,500 ISVs, i solutions are offered through an extensive, highly skilled
worldwide network of IBM Business Partners backed by trusted services and support infrastructure from IBM. The PureFlex System is a fully integrated platform with unified management of compute, storage, networking and virtualization resources that utilize built-in Patterns of Expertise based on IBM's decades of experience and thousands of client deployments. With the inclusion of a 3-year warranty, the lease price of the new IBM PureFlex Solution for IBM i will often be less than what many i clients pay today for a stand-alone rack or tower system.

IBM PureFlex Solution for SmartCloud Desktop Infrastructure

The IBM PureFlex Solution for SmartCloud Desktop Infrastructure offering is optimized to deliver superior performance and flexibility to meet clients' unique desktop virtualization business needs:

- The integrated infrastructure is optimized to deliver performance, fast time to value and security for VDI environments
- Leverage IBM's breadth of hardware offerings, software, and services to complete successful VDI deployments
- Lower costs and complexity of existing desktop environments, while securely managing a growing mobile workforce
- IBM PureFlex Solution for SmartCloud Desktop Infrastructure fits easily within a client's existing and future networking environments
- Offers flexibility and choice with support for multiple hypervisors, and both Citrix XenDesktop and VMware View. Citrix XenDesktop offers clients a robust desktop virtualization solution that features multiple delivery models optimized for flexibility and cost efficiency. VMware View simplifies desktop and application management while enhancing security and control.

The IBM PureFlex Solution for SmartCloud Desktop Infrastructure configuration is based on the IBM PureFlex Enterprise configuration and is available with both the Intel processor-based IBM Flex System x222 and Flex System x240 compute nodes. The configuration also includes two management nodes and two storage nodes along with integrated storage. The Flex System compute nodes combined with the IBM Flex System V7000 Storage node offer clients both block and file storage for nonpersistent and persistent deployments. In addition to two Virtual Desktop Management nodes, the offering includes systems management capabilities with IBM Flex System Manager™ to easily and efficiently manage virtual desktops within the integrated infrastructure.

IBM Technical support services

Support to be included as the minimum essential element of each PureFlex System offering:

- Express: Annual Microcode Analysis included to ensure your Microcode levels are at the optimal level for your environment and with Electronic Service Agent™ activated for call-home support. In addition, options for same-day warranty service and software support and installation of Microcode updates are available to give you support coverage across your PureFlex System environment.
- Enterprise: Twice-yearly Microcode Analysis included to ensure your Microcode levels are at the optimal level for your environment and with Electronic Service Agent activated for call-home support. Hardware maintenance service and software support (24x7) with an enhanced technical support advocate (24x7 where available) to act as the support focal point for your environment. In addition, options for installing Microcode updates are available to increase the support coverage across your PureFlex System environment.

For further information, contact your IBM seller and ask for details of the support available for your environment or visit


The following includes the foundation components and other features, but not all features of a given product. For the complete product definition, refer to the sales manual of the product.
The PureFlex requirements when ordering the Flex System p260 Compute Node (7895-23X) are:

1 x Flex System p260 Compute Node (7895-23X), with the following features:
- 1 x #8491processed activations per core (Minimum of 4)
- 8 x #8196, #EEMD, #EEEM, #EEMF
- 1 x #1762 Flex System EN4054 4-port 10Gb Ethernet Adapter (requires #ESW7)
- 1 x #1763 Flex System EN2024 4-port 1Gb Ethernet Adapter (requires #ESW2)
- 1 x #EC24
  - Flex System EN4054 4-port 10Gb Ethernet Adapter
- 0 or 2 x #8207 8207GB, 1.8", SATA S/S DRIVE
- 0 or 2 x #8274 300GB 10K RPM SFF SAS HDD
- 0 or 2 x #8276 600GB 10K RPM SFF SAS HDD
- 0 or 2 x #8211 900GB 10K RPM SFF SAS HDD
- 0 or 2 x #8274 8274 300GB 10K RPM SFF SAS HDD
- 0 or 2 x #8276 600GB 10K RPM SFF SAS HDD
- 0 or 2 x #8211 900GB 10K RPM SFF SAS HDD
- 1 x #5005 Software Preinstall
- 1 x #2145 or #2146 or #2147 Operating system indicator
- 1 x #0265 or #0266 or #0277 Partition Specify
- 1 x #4651 Rack Indicator, Rack #1
- 1 x #4681 Chassis Specify, Chassis #1
- 1 x #7067 or #7068 or #7069 Top Cover
- 1 x #ED21—#ED2E Installation/User Guide
- 1 x #ESC0 Shipping and Handling (No charge)
- 1 x #EFDA PureFlex Express Order Indicator
- 1 x #EFDF PureFlex Express Expansion Order Indicator
- 1 x #EFDC PureFlex Enterprise Order Indicator
- 1 x #EFDH PureFlex Enterprise Expansion Order Indicator
- 1 x #EFDE PureFlex Custom Order Indicator

- Memory options: #8196 - 8 GB (2 x 4 GB), 1066 MHz, DDR3, VLP, #EEMD - 16 GB (2 x 8 GB), 1066 MHz, 4 Gb DDR3 DRAM, #EEEM - 32 GB (2 x 16 GB), 1066 MHz, 4 Gb DDR3 DRAM, #EEMF - 64 GB (2 x 32 GB), 1066 MHz, 4 Gb DDR3 DRAM
- At least one Ethernet adapter #1762, #1763, or #EC24 is required to be on the initial order.
- The maximum number of #1762/#1763/#EC24 is 2.
- The maximum number of #1764/#EC23/#EC26/#EC2E is 1.
- Any DASD may be installed on the 7895-23X regardless of the combination of PCI-E expansion cards installed. Reduces maximum memory.
- PCI expansion cards (Mezz) installed require a switch module in the chassis of the same connectivity type. They are a function of the Chassis switches selected.
- Either none or two HDD/SSD required, #8207, #8274, #8276, or #8311.
- One Express or Enterprise Indicator #EFDA, #EFDF, #EFDC, #EFDH, or #EFDE per order.

The PureFlex requirements when ordering the Flex System p260 Compute Node (7895-23A) are:

1 x Flex System p260 Compute Node (7895-23A), with the following features:
- 1 x #8491 processor activations per core (Minimum of 4)
- 8 x #8196, #EEMD, #EEEM, #EEMF
- 1 x #1762 Flex System EN4054 4-port 10Gb Ethernet Adapter (requires #ESW7)
- 1 x #1763 Flex System EN2024 4-port 1Gb Ethernet Adapter
The PureFlex requirements when ordering the Flex System p460 Compute Node (7895-43X) are:

1 x Flex System p460 Compute Node (7895-43X), with the following features:
  1 x #EPRJ, #EPRH, or #EPK  Processor Module
  1 x #8491  Processor Activations per core
  1 x #8491  Processor Activations per core
  16 x #8196, #EEMD, #EEME, #EEMF  Memory options (Minimum memory is 2GB per available core)
  2 x #1762  Flex System EN4054 4-port 10Gb Ethernet Adapter (requires #ESW7)
  2 x #1763  Flex System EN2024 4-port 1Gb Ethernet Adapter (requires #3598)
  2 x #EC24  Flex System CN4058 8-port 10Gb Converged Adapter (requires #ESW2)
  2 x #EC2E  Flex System FC5054 4-port 16Gb FC Adapter
  0 or 2 x #8207  177GB, 1.8", SATA S/S DRIVE
  0 or 2 x #8274  300GB 10K RPM SFF SAS HDD
  0 or 2 x #8276  600GB 10K RPM SFF SAS HDD
  0 or 2 x #8311  900GB 10K RPM SFF SAS HDD
  1 x #5005  Software Preinstall

Memory options: #8196 - 8GB (2 x 4 GB), 1066 MHz, DDR3, VLP, #EEMD - 16 GB (2 x 8 GB), 1066 MHz, 4 Gb DDR3 DRAM, #EEME - 32 GB (2 x 16 GB), 1066 MHz, 4 Gb DDR3 DRAM, #EEMF - 64 GB (2 x 32 GB), 1066 MHz, 4 Gb DDR3 DRAM

The maximum number of #1762/#1763/#EC24 is 2.
The maximum number of #1764/#EC23/#EC26/#EC2E is 1.
Any DASD may be installed on the 7895-23A regardless of the combination of PCI-E expansion cards installed. Reduces maximum memory.
PCI expansion cards (Mezz) installed require a switch module in the chassis of the same connectivity type. They are a function of the Chassis switches selected.
Either none or two HDD/SSD required, #8207, #8274, #8276, or #8311.
One Express or Enterprise Indicator #EFDA, #EFDF, #EFDC, #EFDH, #EFDE, or EBM1 per order.
<table>
<thead>
<tr>
<th>Reference</th>
<th>Description</th>
</tr>
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<tr>
<td>#8196 - 8GB (2 x 4 GB), 1066 MHz, DDR3, VLP, #EEMD - 16 GB (2 x 8 GB), 1066 MHz, 4 GB DDR3 DRAM, #EEME - 32 GB (2 x 16 GB), 1066 MHz, 4 GB DDR3 DRAM, #EEMF - 64 GB (2 x 32 GB), 1066 MHz, 4 GB DDR3 DRAM</td>
<td></td>
</tr>
<tr>
<td>At least one Ethernet adapter #1762, #1763, or #EC24 is required to be on the initial order.</td>
<td></td>
</tr>
<tr>
<td>The maximum number of #1762/#1763/#EC24 is 4.</td>
<td></td>
</tr>
<tr>
<td>The maximum number of #1764/#EC23/#EC26/#EC2E is 2.</td>
<td></td>
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<tr>
<td>The maximum number of #EC26 is 3.</td>
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<tr>
<td>Any DASD may be installed on the 7895-43A regardless of the combination of PCI-E expansion cards installed. Reduces maximum memory.</td>
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<tr>
<td>PCI expansion cards (Mezz) installed require a switch module in the chassis of the same connectivity type. They are a function of the Chassis switches selected.</td>
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<tr>
<td>Either none or two HDD/SSD required, #8207, #8274, #8276, or #8311.</td>
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<tr>
<td>One Express or Enterprise Indicator #EFDA, #EFDF, #EFDC, #EFDH, or #EFDE per order.</td>
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</tbody>
</table>

The PureFlex requirements when ordering the Flex System p270 (7954-24X) are:

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<tr>
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<tr>
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</tr>
<tr>
<td>1 x #EPRE</td>
<td>Processor Module Power7+ 3.416GHZ 12 Core</td>
</tr>
<tr>
<td>1 x #EPRF</td>
<td>Processor Module Power7+ 3.136GHZ 12 Core</td>
</tr>
<tr>
<td>1 to 24 x #EPM1</td>
<td>Processor Activations per core for #EPRE</td>
</tr>
<tr>
<td>1 to 24 x #EPM2</td>
<td>Processor Activations per core for #EPRF</td>
</tr>
<tr>
<td>8 x #8196, #EEMD, #EEME, #EEMF</td>
<td>Memory options</td>
</tr>
<tr>
<td>1 x #EC2F</td>
<td>Flex System Dual VIOS Adapter</td>
</tr>
<tr>
<td>1 x #EC2E</td>
<td>Flex System FC5054 4-port 16Gb FC Adapter</td>
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<tr>
<td>1 x #1763</td>
<td>Flex System CN4058 8-port 10Gb Converged Adapter</td>
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<tr>
<td>1 x #1765</td>
<td>Flex System EN2024 4-port 1Gb Ethernet Adapter</td>
</tr>
<tr>
<td>1 x #1764</td>
<td>Flex System EN4054 4-port 10Gb Ethernet Adapter</td>
</tr>
<tr>
<td>1 x #1766</td>
<td>Flex System EN4054 4-port 10Gb Ethernet Adapter</td>
</tr>
<tr>
<td>0 or 2 x #8207</td>
<td>177GB, 1.8&quot;, SATA S/S DRIVE</td>
</tr>
<tr>
<td>0 or 2 x #8274</td>
<td>3006GB 10K RPM SFF SAS HDD</td>
</tr>
<tr>
<td>0 or 2 x #8276</td>
<td>6006GB 10K RPM SFF SAS HDD</td>
</tr>
<tr>
<td>0 or 2 x #8311</td>
<td>9006GB 10K RPM SFF SAS HDD</td>
</tr>
<tr>
<td>1 x #5005</td>
<td>Software Preinstall</td>
</tr>
<tr>
<td>1 x #2145 or #2146 or #2147</td>
<td>Operating system indicator</td>
</tr>
<tr>
<td>1 x #20265 or #20266 or #20277</td>
<td>Partition Specify</td>
</tr>
<tr>
<td>1 x #4646</td>
<td>Integrate ITE in Chassis</td>
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<tr>
<td>1 x #4651</td>
<td>Rack Indicator, Rack #1</td>
</tr>
<tr>
<td>1 x #4681</td>
<td>Chassis Specify, Chassis #1</td>
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<tr>
<td>1 x #ECV4 or #ECV5 or #ECV6</td>
<td>Top Cover</td>
</tr>
<tr>
<td>1 x #ED21-ED2E</td>
<td>Installation/User Guide</td>
</tr>
<tr>
<td>1 x #ESC0</td>
<td>Shipping and Handling (No charge)</td>
</tr>
<tr>
<td>1 x #EFDA</td>
<td>PureFlex Express Order Indicator</td>
</tr>
<tr>
<td>1 x #EFDF</td>
<td>PureFlex Express Expansion Order Indicator</td>
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<tr>
<td>1 x #EFDC</td>
<td>PureFlex Enterprise Order Indicator</td>
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<tr>
<td>1 x #EFDH</td>
<td>PureFlex Enterprise Expansion Order Indicator</td>
</tr>
<tr>
<td>1 x #EFDE</td>
<td>PureFlex Custom Order Indicator</td>
</tr>
</tbody>
</table>
1 x #EFDH
PureFlex Enterprise Expansion Order

1 x #EFDE
PureFlex Custom Order Indicator

The PureFlex requirements when ordering the Flex System x240 Compute Node (8737-15X) are:

1 x Flex System x240 Compute Node (8737-15X), with the following features:

1 x #A1BC
Compute Node with 10 Gb Virtual Fabric

or

1 x #A1BD
Processor options, reference note

1/24
Memory options, reference note

1 x #A1R1
IBM Flex System CN4054 10 Gb Virtual
(Required for #A1BD)

1 x #A1R0
Flex System CN4054(R) Virtual Fabric Adapter (SW Upgrade) (Required for #ESW2 and #A1R1)

1 x #A2TD
Virtual Fabric Advanced Software Upgrade (10G) (Required for #ESW2 and #A1BD)

1 x #A1BP
IBM Flex System FC5022 2-Port 16Gb FC Adapter

or with #ESW5
1 x #A2N5
FC3052 Emulex 8Gb FC Mezz SysX 2 port

1 x #A3EB
Integrate ITE in Chassis

1 x #4651
Rack Indicator, Rack #1

1 x #4681
Chassis Specify, Chassis #1

1 x #EMS4
MS Windows 08’ R2 Ent 10 Cal OS, Multi-Lingual

1 x #A1C2 - A1CF
System publications and media

1 x #ESC0
Shipping and Handling (No charge)

1 x #EFDF or EFDH
PureFlex System Order Indicator

1 x #ESCE
Smart Cloud Entry on x86 Compute Node Indicator

1 x #A3A3
Flex System x240 USB Enablement Kit

1 x #EBK3
2GB USB Hypervisor Key (latest VMware level for PureFlex) (Quantity is 0, if #ESCE ordered)

1 x #EFDA
PureFlex Express Order Indicator

1 x #EFDC
PureFlex Enterprise Order Indicator

1 x #EFDE
PureFlex Custom Order Indicator

1 x #EVD1
PureFlex SmartCloud Desktop

Infrastructure Indicator

If #ESW2 is ordered in the 7893-92X in a PureFlex order and #A1BD is selected in the 8737-15X, then 1 x #A1R1 and 1 x #A1R0 is required in the 8737-15X.

If #ESW7 or #3598 is ordered in the 7893-92X in a PureFlex order and #A1BD is selected in the 8737-15X, then 1 x #A1R1 is required in the 8737-15X.

#A3A3, #EBK3 and #ESCE are required only if Smart Cloud entry software is ordered.
• One Express or Enterprise Indicator #EFDA, #EFDC, EFDF, EFD1, or #EFDE per order.

**Processor options:**
- #A1BB and #A1D9: Intel Xeon™ Processor E5-2680 8C 2.7GHz 20MB Cache 1600MHz 130W
- #A1CQ and #A1DI: Intel Xeon Processor E5-2603 4C 1.8GHz 10MB Cache 1066MHz 80W
- #A1CS and #A1DS: Intel Xeon Processor E5-2609 4C 2.4GHz 10MB Cache 1066MHz 80W
- #A1CT and #A1D4: Intel Xeon Processor E5-2620 6C 2.0GHz 15MB Cache 1333MHz 95W
- #A1CU and #A1D5: Intel Xeon Processor E5-2630 6C 2.3GHz 15MB Cache 1333MHz 95W
- #A1CV and #A1D6: Intel Xeon Processor E5-2640 6C 2.5GHz 15MB Cache 1333MHz 95W
- #A1CW and #A1D7: Intel Xeon Processor E5-2650 8C 2.0GHz 20MB Cache 1600MHz 95W
- #A1CX and #A1D8: Intel Xeon Processor E5-2660 8C 2.2GHz 20MB Cache 1600MHz 95W
- #A1CY and #A1DA: Intel Xeon Processor E5-2667 6C 2.9GHz 15MB Cache 1600MHz 130W
- #A1CZ and #A1DB: Intel Xeon Processor E5-2667 6C 2.9GHz 15MB Cache 1600MHz 130W
- #A1ER and #A1DD: Intel Xeon Processor E5-2630L 6C 2.0GHz 15MB Cache 1333MHz 60W
- #A1ES and #A1DE: Intel Xeon Processor E5-2650L 8C 1.8GHz 20MB Cache 1600MHz 70W
- #A1SX and #A1SY: Intel Xeon Processor E5-2660L 8C 2.5GHz 20MB Cache 1333MHz 60W

**Memory options:**
- #8648 - 4GB (1x4GB, 2Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP UDIMM
- #8923 - 8GB (1x8GB, 2Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #8939 - 16GB (1x16GB, 4Rx4, 1.35V) PC3L-8500 CL7 ECC DDR3 1066MHz LP RDIMM
- #8940 - 2GB (1x2GB, 1Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #8941 - 4GB (1x4GB, 1Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #8942 - 4GB (1x4GB, 2Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #A0QS - 2GB (1x2GB, 1Rx8, 1.35V) PC3L-10600 ECC DDR3 1333MHz LP UDIMM
- #A1CP - 32GB (1x32GB, 4Rx4, 1.35V) PC3L-8500 CL7 ECC DDR3 1066MHz LP RDIMM
- #A1QT - 16GB (1x16GB, 2Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #A24L - 4GB (1x4GB, 2Rx8, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- #A28Z - 4GB (1x4GB, 1Rx4, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- #A29O - 16GB (1x16GB, 4Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #A29I - 32GB (1x32GB, 4Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #A292 - 8GB (1x8GB, 2Rx4, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- #A2U5 - 16GB (1x16GB, 2Rx4, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- #A2QW - 8GB (1x8GB, 2Rx8, 1.35V) PC3L-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- #A2QY - 8GB (1x8GB, 1Rx4, 1.35V) PC3L-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- #A3QL - 16GB (1x16GB, 2Rx4, 1.5V) PC3-14900 CL13 ECC DDR3 1866MHz LP RDIMM
- #A3QM - 16GB (1x16GB, 2Rx4, 1.35V) PC3L-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- #A47K - 32GB (1x32GB, 4Rx4, 1.5V) PC3-14900 CL13 ECC DDR3 1866MHz LP RDIMM
- #A1J4 - ServeRAID M5100 Series 512MB Flash/RAID 5 Upgrade for IBM System x®
- #A1WY - ServeRAID M5100 Series 1GB Flash/RAID 5 Upgrade for IBM System x
The PureFlex ordering options for the IBM Flex System x220 Compute Node (7906-25X) are:

1 x Flex System x220 Compute Node (7906-25X), with the following features:

1 x #A1VQ, #A1VS, #A1VT, #A1VU, #A1VW, #A1VX, #A1VY, #A1VZ, #A1W0, #A1W1, #A1W2
1 x #A1W4, #A1W6, #A1W7, #A1W8, #A1WA, #A1WB, #A1WC, #A1WD, #A1WE
1 x #8648, #8923, #8939, Memory options (8GB memory required)
1 x #8941, #8942, #A0QS, #A292
1 x #A1BP IBM Flex System FC5022 2-port 16Gb FC Adapter (If #A1VM or #A1VN ordered, order switch)
or
1 x #A2N5 IBM Flex System FC3052 2-port 8Gb FC Adapter
1 x #A1R0 IBM Flex System CN4054 Virtual Fabric Adapter (SW Upgrade) (If #A1VN ordered, order switch)
1 x #A26R Flex System Compute Node Fabric Connector
1 x #A2TJ Flex System x220 Compute Node Air Baffle - Left
1 x #A33Q ServeRAID C105 for IBM Flex System
0, 1 or 2 x #5409, #5420, #5428, #5433, #5536, #5599, #A1AV, #A1NX, #A1NZ, #A1P3, #A282, #A283, #A2FN
1 x #A1VM Flex System Compute Node with embedded 1 GB Ethernet (LOM)
or
1 x #A1VN Flex System Compute Node (LOM less) (Requires #A1R1)
1 x #A1BL Flex System Compute Node 2.5’ SAS 2.0 Backplane
1 x #EBK3 2GB USB Hypervisor Key (latest VMware level for PureFlex) (Quantity is 0, if #ESCE ordered)
1 x #ESCE Smart Cloud Entry on x86 Compute Node Indicator
1 x #EFDA PureFlex Express Order Indicator
1 x #EFDF PureFlex Express Expansion Order Indicator
1 x #EFDC GM Enterprise Foundation Indicator
1 x #EFDH PureFlex Enterprise Expansion Order Indicator
1 x #EFDE PureFlex Custom Order Indicator
1 x #A3CL System Routing Indicator
1 x #A3EB Integrate Blade Server in Chassis
1 x #4651 Rack #1 Indicator
1 x #4681 Chassis #1 Specify

- Other configuration and manufacturing specify features are required.
- Intel Xeon processors:
  - #A1VQ Intel Xeon Processor E5-2470 8C 2.3GHz 20MB Cache 1600MHz 95W
  - #A1VS Intel Xeon Processor E5-2450 8C 2.1GHz 20MB Cache 1600MHz 95W
  - #A1VT Intel Xeon Processor E5-2440 6C 2.4GHz 15MB Cache 1333MHz 95W
  - #A1VU Intel Xeon Processor E5-2430 6C 2.2GHz 15MB Cache 1333MHz 95W
  - #A1VW Intel Xeon Processor E5-2420 6C 1.9GHz 15MB Cache 1333MHz 95W
  - #A1VX Intel Xeon Processor E5-2407 4C 2.2GHz 10MB Cache 1066MHz 80W
- #A1VY Intel Xeon Processor E5-2403 4C 1.8GHz 10MB Cache 1066MHz 80W
- #A1VZ Intel Pentium® Processor 1403 2C 2.6GHz 5MB Cache 1066MHz 80W
- #A1WO Intel Pentium® Processor 1407 2C 2.8GHz 5MB Cache 1066MHz 80W
- #A1WI Intel Xeon Processor E5-2450 8C 1.8GHz 20MB Cache 1600MHz 70W
- #A1W2 Intel Xeon Processor E5-2430L 6C 2.0GHz 15MB Cache 1333MHz 60W

Additional Intel Xeon processors:
- #A1W4 Addl Intel Xeon Processor E5-2470 8C 2.3GHz 20MB Cache 1600MHz 95W
- #A1W6 Addl Intel Xeon Processor E5-2450 8C 2.1GHz 20MB Cache 1600MHz 95W
- #A1W7 Addl Intel Xeon Processor E5-2440 6C 2.4GHz 15MB Cache 1333MHz 95W
- #A1W8 Addl Intel Xeon Processor E5-2430 6C 2.2GHz 15MB Cache 1333MHz 95W
- #A1WA Addl Intel Xeon Processor E5-2420 6C 1.9GHz 15MB Cache 1333MHz 95W

Memory options:
- #8648 4GB (1x4GB, 2Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP UDIMM
- #8923 8GB (1x8GB, 2Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #8939 16GB (1x16GB, 4Rx4, 1.35V) PC3L-8500 CL7 ECC DDR3 1066MHz LP RDIMM
- #8941 4GB (1x4GB, 1Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #8942 4GB (1x4GB, 2Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- #A0QS 2GB (1x2GB, 1Rx8, 1.35V) PC3L-10600 ECC DDR3 1333MHz LP UDIMM
- #A292 8GB (1x8GB, 2Rx4, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM

SSD/HDD DASD options:
- #5409 IBM 500GB 7200 6Gbps NL SAS 2.5" SFF Slim-HS HDD
- #5420 IBM 200GB SATA 1.8" MLC SSD
- #5428 IBM 50GB SATA 1.8" MLC SSD
- #5433 IBM 600GB 10K 6Gbps SAS 2.5" SFF Slim-HS HDD
- #5536 IBM 146GB 15K 6Gbps SAS 2.5" SFF Slim-HS HDD
- #5599 IBM 300GB 10K 6Gbps SAS 2.5" SFF Slim-HS HDD
- #A1AV IBM 1TB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD
- #A1NX IBM 250GB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD
- #A1NZ IBM 500GB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD
- #A1P3 IBM 1TB 7.2K 6Gbps NL SAS 2.5" SFF HS HDD
- #A282 IBM 900GB 10K 6Gbps SAS 2.5" SFF HS HDD
- #A283 IBM 300GB 15K 6Gbps SAS 2.5" SFF HS HDD
- #A2FN IBM 200GB SATA 2.5" MLC HS SSD

The PureFlex ordering options for the IBM Flex System x222 Compute Node (7916-27X) are:

1 x Flex System x222 Compute Node (7916-27X), with the following features:
- 1 x #A35R, #A35S, #A35T, Intel Xeon Processors
- #A35U, #A35V, #A35W, #A35X, #A35Y, #A35Z,
- #A350, #A351, #A352, #A36U, #A36V, #A36W,
- #A36X, #A36Y, #A36Z, #A370, #A371, #A372,
- #A373, #A374, #A375
1 x #8923, #8941, #8942, Memory options (2GB memory per core required)
#A1QT, #A24L, #A28Z,
#A291, #A292, #A2U5
1 x #A3HU Flex System FC5024D 4-port 16Gb FC Adapter

0, 1, or 2 x #A369, #A36A, #A36B, #A36C, #A36D, #A3AN, #A3HQ
1 x #A26R Flex System Compute Node Fabric Connector
1 x #A365 Flex System x222 Lower Compute Node with
10Gb Virtual Fabric
1 x #A36E Flex System x222 Upper Compute Node with
10Gb Virtual Fabric
2 x #A2TD Virtual Fabric Advanced Software Upgrade
(LOM)
1 x #EBK3 2GB USB Hypervisor Key (latest VMware level for PureFlex)
1 x #A3EB Integrate Blade Server in Chassis
1 x #4651 Rack #1 Indicator
1 x #4681 Chassis #1 Specify
1 x #A3EB Integrate ITE in Chassis
1 x #EFDA PureFlex Express Order Indicator
1 x #EFDF PureFlex Express Expansion Order Indicator
1 x #EFDC GM4 Enterprise Foundation Indicator
1 x #EFDH PureFlex Enterprise Expansion Order Indicator
1 x #EFDE PureFlex Custom Order Indicator

- Other configuration and manufacturing specify features are required.
- Intel Xeon processors:
  - #A35R Intel Xeon Processor E5-2470 8C 2.3GHz 20MB Cache 1600MHz 95W
  - #A35S Intel Xeon Processor E5-2450 8C 2.1GHz 20MB Cache 1600MHz 95W
  - #A35T Intel Xeon Processor E5-2440 6C 2.4GHz 15MB Cache 1333MHz 95W
  - #A35U Intel Xeon Processor E5-2430 6C 2.2GHz 15MB Cache 1333MHz 95W
  - #A35V Intel Xeon Processor E5-2420 6C 1.9GHz 15MB Cache 1333MHz 95W
  - #A35W Intel Xeon Processor E5-2407 4C 2.2GHz 10MB Cache 1066MHz 80W
  - #A35X Intel Xeon Processor E5-2403 4C 1.8GHz 10MB Cache 1066MHz 80W
  - #A35Y Intel Xeon Processor E5-2450L 8C 1.8GHz 20MB Cache 1600MHz 70W
  - #A35Z Intel Xeon Processor E5-2430L 6C 2.0GHz 15MB Cache 1333MHz 60W
  - #A360 Intel Xeon Processor E5-2418L 4C 2.0GHz 10MB Cache 1333MHz 50W
  - #A361 Intel Xeon Processor E5-2448L 8C 1.8GHz 20MB Cache 1333MHz 70W
  - #A362 Intel Xeon Processor E5-2428L 6C 1.8GHz 15MB Cache 1333MHz 60W
- Additional Intel Xeon processors:
  - #A36U Addl Intel Xeon Processor E5-2470 8C 2.3GHz 20MB Cache 1600MHz 95W
  - #A36V Addl Intel Xeon Processor E5-2450 8C 2.1GHz 20MB Cache 1600MHz 95W
  - #A36W Addl Intel Xeon Processor E5-2440 6C 2.4GHz 15MB Cache 1333MHz 95W
  - #A36X Addl Intel Xeon Processor E5-2430 6C 2.2GHz 15MB Cache 1333MHz 95W
  - #A36Y Addl Intel Xeon Processor E5-2420 6C 1.9GHz 15MB Cache 1333MHz 95W
  - #A36Z Addl Intel Xeon Processor E5-2407 4C 2.2GHz 10MB Cache 1066MHz 80W
  - #A370 Addl Intel Xeon Processor E5-2403 4C 1.8GHz 10MB Cache 1066MHz 80W
  - #A371 Addl Intel Xeon Processor E5-2450L 8C 1.8GHz 20MB Cache 1600MHz 70W
  - #A372 Addl Intel Xeon Processor E5-2430L 6C 2.0GHz 15MB Cache 1333MHz 60W
  - #A373 Addl Intel Xeon Processor E5-2418L 4C 2.0GHz 10MB Cache 1333MHz 50W
  - #A374 Addl Intel Xeon Processor E5-2448L 8C 1.8GHz 20MB Cache 1333MHz 70W
- #A375 Addl Intel Xeon Processor E5-2428L 6C 1.8GHz 15MB Cache 1333MHz 60W
  - Memory options:
    - #8923 8GB PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM (1x8GB, 2Rx4, 1.35V)
    - #8941 4GB PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM (1x4GB, 1Rx4, 1.35V)
    - #8942 4GB PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM (1x4GB, 2Rx8, 1.35V)
    - #A1QT 16GB PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM (1x16GB, 2Rx4, 1.35V)
    - #A24L 4GB PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM (1x4GB, 2Rx8, 1.5V)
    - #A28Z 4GB PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM (1x4GB, 1Rx4, 1.5V)
    - #A291 32GB PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM (1x32GB, 2Rx4, 1.35V)
    - #A292 8GB PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM (1x8GB, 2Rx4, 1.5V)
  - SSD/HDD DASD options:
    - #A369 IBM 500GB 7.2K 6Gbps SATA 2.5" G2SS HDD
    - #A36A IBM 1TB 7.2K 6Gbps SATA 2.5" G2SS HDD
    - #A36B IBM 128GB SATA 2.5" MLC Enterprise Value SSD for Flex System x222
    - #A36C IBM 256GB SATA 2.5" MLC Enterprise Value SSD for Flex System x222
    - #A36D IBM 100GB SATA 2.5" MLC Enterprise SSD for Flex System x222
    - #A3AN IBM 200GB SATA 1.8" MLC Enterprise SSD
    - #A3HQ IBM 100GB SATA 1.8" MLC Enterprise SSD

The PureFlex ordering options for the IBM Flex System x440 Compute Node (7917-45X) are:

1 x Flex System x440 Compute Node (7917-45X), with the following features:

1 x #A2C0, #A2C3, #A2C6, Intel Xeon Processors
#A2C9, #A2CC, #A2CF,
#A2CJ
1 x #A2C1, #A2C2, Addl Intel Xeon Processors
#A2C4, #A2C7, #A2CH,
#A2CA, #A2CB, #A2CD,
#A2CE, #A2CG, #A2CH,
#A2CK, #A2CL, #A2QV,
#A2QW
1 x #A28Z, #A291, Memory options (8GB memory required)
#A2U5, #A282, #A283,
#A2XB, #A2XC, #A2XD,
#A2XE, #A291, #A290, #A292
2 x #A1BF
Flex System FC5022 2-port 16Gb FC Adapter
or
2 x #A2N5
Flex System FC3052 2-port 8Gb FC Adapter
2 x #A1R0
Flex System CN4054 Virtual Fabric Adapter (SW Upgrade) (Order switch)
2 x #A1R1
Flex System CN4054 10Gb Virtual Fabric Adapter
2 x #A26R
Flex System Compute Node Fabric Connector (Not ordered with #A2BD)
1 x #A2BC
Flex System x440 Compute Node with embedded 10 Gb Virtual Fabric (LOM)
(Order switch)
or
1 x #A2BD
Flex System x440 Compute Node (LOM less) (Order switch)
2 x #A2TD
Virtual Fabric Advanced Software Upgrade (LOM) (Order switch)
1 x #A3EB
Integrate ITE in Chassis
1 x #8513, #5420, #5428,
#A262, #A263, #A26L,
#A2XC, #A2XO, #A2XE,
#A1AV, #A1NX, #A1NZ,
<table>
<thead>
<tr>
<th>#A2P3, #A2FN, #A2U3, #A2U4</th>
<th>Flex System Compute Node SAS HDD 1 x 2.5” Backplane</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x #A2BY</td>
<td>Flex System x440 Compute Node Air Baffle</td>
</tr>
<tr>
<td>1 x #A248</td>
<td>Flex System x440 Compute Node Cover</td>
</tr>
<tr>
<td>1 x #A2BF</td>
<td>Flex System x440 Compute Node Center Air Baffle</td>
</tr>
<tr>
<td>1 x #A2BG</td>
<td>Flex System x440 Compute Node with embedded 10Gb Virtual Fabric for PureFlex (Quantity is 0, if #ESCE ordered)</td>
</tr>
<tr>
<td>1 x #EBK3</td>
<td>2GB USB Hypervisor Key (latest VMware level)</td>
</tr>
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<td>1 x #EFDE</td>
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- Other configuration and manufacturing specify features are required.
- Intel Xeon and additional Intel Xeon processors:
  - #A2C0 Intel Xeon Processor E5-4603 4C 2.0GHz 10M Cache 1066MHz 95W
  - #A2C1 Addl Intel Xeon Processor E5-4603 4C 2.0GHz 10MB Cache 1066MHz 95W
  - #A2C2 Addl Intel Xeon Processor E5-4603 4C 2.0GHz 10MB Cache 1066MHz 95W
  - #A2C3 Intel Xeon Processor E5-4607 6C 2.2GHz 12M Cache 1066MHz 95W
  - #A2C4 Addl Intel Xeon Processor E5-4607 6C 2.2GHz 12MB Cache 1066MHz 95W
  - #A2C5 Addl Intel Xeon Processor E5-4607 6C 2.2GHz 12MB Cache 1066MHz 95W
  - #A2C6 Intel Xeon Processor E5-4610 6C 2.4GHz 15M Cache 1333MHz 95W
  - #A2C7 Addl Intel Xeon Processor E5-4610 6C 2.4GHz 15MB Cache 1333MHz 95W
  - #A2C8 Addl Intel Xeon Processor E5-4610 6C 2.4GHz 15MB Cache 1333MHz 95W
  - #A2C9 Intel Xeon Processor E5-4617 6C 2.9GHz 15M Cache 1600MHz 130W
  - #A2CA Addl Intel Xeon Processor E5-4617 6C 2.9GHz 15MB Cache 1600MHz 130W
  - #A2CB Addl Intel Xeon Processor E5-4617 6C 2.9GHz 15MB Cache 1600MHz 130W
  - #A2CC Intel Xeon Processor E5-4640 8C 2.4GHz 20M Cache 1600MHz 95W
  - #A2CD Addl Intel Xeon Processor E5-4640 8C 2.4GHz 20MB Cache 1600MHz 95W
  - #A2CE Addl Intel Xeon Processor E5-4640 8C 2.4GHz 20MB Cache 1600MHz 95W
  - #A2CF Intel Xeon Processor E5-4620 8C 2.2GHz 16M Cache 1333MHz 95W
  - #A2CG Addl Intel Xeon Processor E5-4620 8C 2.2GHz 16MB Cache 1333MHz 95W
  - #A2CH Addl Intel Xeon Processor E5-4620 8C 2.2GHz 16MB Cache 1333MHz 95W
  - #A2CJ Intel Xeon Processor E5-4650 8C 2.7GHz 20M Cache 1600MHz 130W
  - #A2CK Addl Intel Xeon Processor E5-4650 8C 2.7GHz 20MB Cache 1600MHz 130W
  - #A2CL Addl Intel Xeon Processor E5-4650 8C 2.7GHz 20MB Cache 1600MHz 130W
  - #A2QV Addl Intel Xeon Processor E5-4650L 8C 2.6GHz 20MB Cache 1600MHz 115W
- #A2QW Addl Intel Xeon Processor E5-4650L 8C 2.6GHz 20MB Cache 1600MHz 115W

- Memory options:
  - #A28Z 4GB PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM (1x4GB, 1Rx4, 1.5V)
  - #A291 32GB PC3L-10600 CL9 ECC DDR3 1333MHz LP RDRAM (1x32GB, 4Rx4, 1.35V)
  - #A2U5 16GB PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM (1x16GB, 2Rx4, 1.5V)
  - #8923 8GB PC3L-10600 CL9 ECC DDR3 1333MHz LP RDRAM (1x8GB, 2Rx4, 1.35V)
  - #A1QT 16GB PC3L-10600 CL9 ECC DDR3 1333MHz LP RDRAM (1x16GB, 4Rx4, 1.5V)
  - #A292 8GB PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM (1x8GB, 2Rx4, 1.5V)

- SSD/HDD DASD options:
  - #5413 IBM 300GB 10K 6Gbps SAS 2.5" SFF Slim HS SED
  - #5420 IBM 200GB SATA 1.8" MLC SSD
  - #5428 IBM 50GB SATA 1.8" MLC SSD
  - #A282 IBM 900GB 10K 6Gbps SAS 2.5" SFF HS HDD
  - #A283 IBM 300GB 15K 6Gbps SAS 2.5" SFF HS HDD
  - #A2XD IBM 600GB 10K 6Gbps SAS 2.5" SFF HS HDD
  - #A2XE IBM 500GB 7.2K 6Gbps NL SAS 2.5" SFF G2HS HDD
  - #A1AV IBM 1TB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD
  - #A1NX IBM 250GB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD
  - #A1NZ IBM 500GB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD
  - #A1P3 IBM 1TB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD
  - #A2FN IBM 200GB SATA 2.5" MLC HS SSD
  - #A2U3 IBM 256GB SATA 2.5" MLC HS Enterprise Value SSD
  - #A2U4 IBM 128GB SATA 2.5" MLC HS Enterprise Value SSD

The PureFlex requirements when ordering the Flex System Enterprise Chassis (7893-92X) are:

1 x Flex System Enterprise Chassis (7893-92X), with the following features:
1 x #9039 Base CME
1 x #3592 Redundant CME
2 x #9059 Base Power Module (2X)
2 x #4558 Power Cord (2.5M) to PDU/UPS
or
2 x #4560 Power Cord (4.3M) to wall (208V/16A)
1 x #9038 Base Fans (4X)
1 x #4649 Rack Integration Services
1 x #4650 Not Factory Integrated Indicator
1 x #4651 Rack Indicator, Rack #1
2 x #4681 Chassis Specify, Chassis #1
1 x #4682 Chassis Specify, Chassis #2
(Enterprise only)
1 x #4683 Chassis Specify, Chassis #3
(Enterprise only)
4 x #1111 Cat5e Ethernet Cable, 3M Blue
1 x #0457 Integrate 8737-15X in Chassis
1 x #ECSD Integrate 7895-23A in Chassis
1 x #ECS3 Integrate 7895-23X in Chassis
1 x #ECS4 Integrate 7954-24X in Chassis
1 x #ECS7 Integrate 7906-25X in Chassis
1 x #ECS8 Integrate 7917-45X in Chassis
1 x #ECSB  Integrate 7916-27X in Chassis
1 x #0466  Enterprise Chassis Content
Specify - 7955-01M
1 x #ECS9  Enterprise Chassis Content
Specify - 7895-43X
1 x #ECS2  Enterprise Chassis Content
Specify - 4939-49A
1 x #EPU1-#EPU4  System documentation and software
1 x #ESCO  Shipping and Handling (No charge)
1 x #92XR  IBM Flex System Management Serial Access
Cable 1 x #ECE2, 1.5 Meter Ethernet cable
1 x #EFDA  PureFlex Express Order Indicator
1 x #EFDF  PureFlex Express Expansion Order Indicator
1 x #EFDC  PureFlex Enterprise Order Indicator
1 x #EFDD  PureFlex Custom Order Indicator
1 x #EBM1  PureFlex IBM i Edition Order Indicator
1 x #EVD1  PureFlex VDI Edition Order Indicator
1 x #ETS1  Transparent Mode Switch Indicator
1 x #ETS2  non-Transparent Mode Switch Indicator

#EFDA minimum requirements to support, for example, a second IBM Flex System Chassis (7893-92X).
#EFDF does not require the following features: #0466, #3282, or #EB29. #EFDF requires #0492.
If #EFDA or #EFDC = 1, you must select at least one of #0457, #ECSD, #ECS3, #ECS9, #ECS4, #ECS7, #ECS8, or #ECSB
If #EBM1 = 1, you must select at least one of #ECSD.
If #EVD1 = 1 then must select at least 4 x of #0457.
Must select one and only one of #EFDA, #EFDF, #EFDC, #EFDD, #EBM1 or #EVD1.
Each order must have either 1 x #ETS1 or 1 x #ETS2 depending on existence of #ESW2, #ESW7 or #3598.
Each order must have either 1 x #ETS1 or 1 x #ETS2 depending on existence of #ESW2, #ESW7 or #3598.

The IBM Flex System Enterprise Chassis (7893-92X) requirements for transceivers and cables required depend on the switch selection:
- If #EFDA or #EFDC = 1 with 2 x #ESW2 with 4939-A49 as controller or #EFDA = 1 with 1 x #ESW2 with 4939-A49 as controller
- If #EFDA = 1 and 2 x #ESW2 with 2076-124 as controller
- If #EFDA = 1 with 4939-A49 as storage controller and 2 x #3598 plus 2 X #ESW5
- If #EFDA = 1 with 2076-124 as storage controller and 2 x #3598 plus 2 X #ESW5
- If #EFDA = 1 with 4939-A49 as storage controller and 2 x #ESW7 plus 2 X #ESW5
- If #EFDA = 1 with 2076-124 as storage controller and 2 x #ESW7 plus 2 X #ESW5
- #EFDA or #EFDC = 1 with 2 x #ESW2 with 4939-A49 as controller or #EFDA = 1 with 1 x #ESW2 with 4939-A49 as controller:
  - With Single Switch for Express Foundation with Flex System V7000 Control Enclosure (4939-A49)

1 x #ESW2  SND 10Gb FCoE OMNI PORT BASE SWITCH FOR 92X
(14/42 INT, 8/22 EXT 2010Gb + 6 OMNI PORTS)
1 x #EB28  IBM SFP+ SR Transceiver
2 x #EB29  IBM SFP RJ45 Transceiver
1 x #3286  8Gb SFP+ SHORT WAVE OPTIC TRANSCEIVER
          With Redundant Switch
1 x #ESW2  CN4093 10Gb Converged Scalable Switch
          (FCoE) (14/42 INT, 2 SFP+ and 6 OMNI ports)
2 x #ESU1  CN4093 PORT UPGRADE FOR ESW2 (Additional 14 int.
          and two ext. QSFP+ 40Gb ports)
4 x #EB28  IBM SFP+ SR Transceiver
4 x #EB29  IBM SFP RJ45 Transceiver
4 x #3286  8Gb SFP+ SHORT WAVE OPTIC TRANSCEIVER
1 x #EB2B  1M IBM PASSIVE QSFP+ TO QSFP+ CABLE
1 x #EFPT  Fibre Channel Pass-Thru Indicator
Additional 1 x 3286 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 1.
Additional 2 x 3286 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 2.

- **#EFDA = 1 and 2 x #ESW2 with 2076-124 as controller:**

  - 2 x #ESW2: SND 10Gb FCoE OMNI PORT BASE SWITCH FOR 92X (14/42 INT, 8/22 EXT 2010Gb + 6 OMNI PORTS)
  - 2 x #ESU1: ScSE PORT UPGRADE FOR FC ESW2 (14/42 INT, 8/22 EXTERNAL WITH 2010Gb)
  - 4 x #E2B8: IBM SFP+ SR Transceiver
  - 4 x #E2B9: IBM SFP RJ45 Transceiver
  - 4 x #3286: 8Gb SFP+ SHORT WAVE OPTIC TRANSCEIVER
  - 1 x #E2BB: 1M IBM PASSIVE QSFP+ TO QSFP+ CABLE

In single chassis configuration, Media drawer (7226-1U3) and 2nd VT000 (2076-124) are mutually exclusive.
Additional 1 x 3286 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 1.
Additional 2 x 3286 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 2.
Additional 4 x 3286 are required, if 2nd VT000 controller (2076-124) is ordered.

- **#EFDA = 1 with 4939-A49 as storage controller and 2 x #3598 plus 2 x #ESW5:**

  - 2 x #3598: EN2092 (14/28 INT, 10/20 EXT) 1Gb PORTS ETHERNET ScSE
  - 2 x #ESW5: BROCADE 16Gb FIBER CHANNEL w/oESB- ScSE (includes 2x16Gb SFP) (24/48 PORTS)
  - 4 x #3773: ScSE PORT UPGRADE #2 (ADDS 24 PORTS) FOR FC 3770/3771/ESW5

Additional 1 x #5370 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 1.
Additional 2 x #5370 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 2.
If quantity of #ESW5 ports greater than 24, then add 2 x #3773.
Quantity of #ESW5 port equal (Quantity 4939-A49) x 8 + (Quantity #EC2E) x 4 + (Quantity #1764) x 2 + (Quantity #A1BP) x 2 + (Quantity #A2N5) x 2 + 4.

- **#EFDA = 1 with 2076-124 as storage controller and 2 x #3598 plus 2 X #ESW5:**

  - 2 x #3598: EN2092 (14/28 INT, 10/20 EXT) 1Gb PORTS ETHERNET ScSE
  - 2 x #3594: EN2092 ScSE PORT UPGRADE SFP PORTS FOR FC 3598 (28/28 INT, 20/20 EXT)
  - 2 x #ESW5: BROCADE 16Gb FIBER CHANNEL w/oESB- ScSE (includes 2x16Gb SFP) (24/48 PORTS)
  - 4 x #3773: ScSE PORT UPGRADE #2 (ADDS 24 PORTS) FOR FC 3770/3771/ESW5
  - 4 x #5370: BROCADE 8Gb SFP+ SHORT-WAVE OPTICAL TRANSCEIVER

Additional 1 x #5370 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 1.
Additional 2 x #5370 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 2.
If quantity of #ESW5 ports greater than 24, then add 2 x #3773.
Quantity of #ESW5 port equal (Quantity 4939-A49) x 8 + (Quantity #EC2E) x 4 + (Quantity #1764) x 2 + (Quantity #A1BP) x 2 + (Quantity #A2N5) x 2 + 4.
2 x #ESW7
EM4093R 10GB Ethernet Scalable Switch
(14/42 int and 10 ext SFP+ ports)
0/2 x #3596
EM4093 Upgrade 28/42 int, 10 SFP+ & 2 QSFP+ ext ports)
4 x #EB28
IBM SFP+ SR Transceiver
4 x #EB29
IBM SFP RJ45 Transceiver
2 x #ESW5
BROCADE 16Gb FIBER CHANNEL w/o ESB- ScSE
(includes 2x16Gb SFP) (24/48 PORTS)
1/2 x #3773
ScSE PORT UPGRADE #2 FOR FC 3770/3771/ESW5
(ADDs 24 PORTS)
1 x #EB2B
1M IBM PASSIVE QSFP+ TO QSFP+ CABLE
4 x #5370
BROCADE 8Gb SFP+ SHORT-WAVE OPTICAL TRANSCIEVER

Additional 1 x #5370 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 1.
Additional 2 x #5370 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 2.
Quantity of #3596 is 0, if only System x ITE without #1759/#A1R1 is installed in chassis.
Quantity of #3596 is 2, if Power ITE greater than 0 or Caracara greater than 0 or #1759/#A1R1 greater than 0.
If quantity of #ESW5 ports 24, then add 2 x 3773.
Quantity of #ESW5 port equal (Quantity 4939-A49) x 8 + (Quantity #EC2E) x 4 + (Quantity #1764) x 2 + (Quantity #A1BP) x 2 + (Quantity #A2N5) x 2 + 4.

The PureFlex requirements when ordering the Flex System Manager (7955-01M) are:

1 x #EFDA
EM4093R 10GB Ethernet Scalable Switch
(14/42 int and 10 ext SFP+ ports)
0/2 x #3596
EM4093 Upgrade 28/42 int, 10 SFP+ & 2 QSFP+ ext ports)
4 x #EB28
IBM SFP+ SR Transceiver
4 x #EB29
IBM SFP RJ45 Transceiver
2 x #ESW5
BROCADE 16Gb FIBER CHANNEL w/o ESB- ScSE
(includes 2x16Gb SFP) (24/48 PORTS)
1/2 x #3773
ScSE PORT UPGRADE #2 FOR FC 3770/3771/ESW5
(ADDs 24 PORTS)
1 x #EB2B
1M IBM PASSIVE QSFP+ TO QSFP+ CABLE
4 x #5370
BROCADE 8Gb SFP+ SHORT-WAVE OPTICAL TRANSCIEVER

Additional 1 x #5370 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 1.
Additional 2 x #5370 is required, if Media drawer (7226-1U3) with tape drive is selected in single chassis and tape drive is 2.
Quantity of #3596 is 0, if only System x ITE without #1759/#A1R1 is installed in chassis.
Quantity of #3596 is 2, if Power ITE greater than 0 or Caracara greater than 0 or #1759/#A1R1 greater than 0.
If quantity of #ESW5 ports greater than 24, then add 2 x 3773.
Quantity of #ESW5 port equal (Quantity 4939-A49) x 8 + (Quantity #EC2E) x 4 + (Quantity #1764) x 2 + (Quantity #A1BP) x 2 + (Quantity #A2N5) x 2 + 4.

The PureFlex requirements when ordering the Flex System Manager (7955-01M) are:

1 x Flex System Manager (7955-01M), with the following features:
1 x #EB31
Platform Manager S/W Bundle
4 x #MEM0
32 GB memory
2 x #1771
IBM 200 GB 1.8-inch SATA SSD
1 x #3767
1 TB, 7,200 RPM 2.5-inch SATA Disk Drive
1 x #4646
Integrate ITE in Chassis
1 x #4651
Rack Indicator, Rack #1
1 x #4681
Chassis Specify, Chassis #1
1 x #ED11-ED1E
System publications and media
1 x #ESC0
Shipping and handling (No charge)
1 x #EFDA
PureFlex Express Order Indicator
1 x #EFDC
PureFlex Enterprise Order Indicator
The PureFlex requirements when ordering the Storwize V7000 Disk System (2076-124) are:

1 x Storwize V7000 Disk System (2076-124), with the following features:
1 x #0010  Storage Engine Preload
4 x #3505  Fiber Optic Cable (Mfgr select length)
2 x #5008  Cache 8 GB
1 x #9730  Power cord - PDU Connection
2 x #9801  AC power supply
1 x #EFD0  V7000 routing indicator
1 x #4651  Rack Indicator, Rack #1
1 x #9170  Controller #1 Group
1 x #EFD1  PureFlex VDI Edition Order Indicator
1 x #EFD2  PureFlex Custom Order Indicator

#EFDF does not require the following features: #3206, #3512, #3514, or #9170.
#EFD1 requires #9170.
One Express or Enterprise Indicator #EFD1, #EFDF, #EFDC, #EFDH, or #EFDE per order.
The following storage requirements depend on the mixture of Power ITEs, System x ITEs, and Smart Cloud Entry.

#3512  200GB SAS Small Form Factor SSD
#3514  400GB SAS Small Form Factor SSD
#3542  1.2 TB 6Gb SAS 2.5-inch SFF HDD
#3543  300 GB 6Gb SAS 10K 2.5-inch SFF HDD
#3546  600 GB 6Gb SAS 10K 2.5-inch SFF HDD
#3549  900 GB 6Gb SAS 10K 2.5-inch SFF HDD
#3253  300GB 15K SAS Small Form Factor Disk Drive Module
#3271  1TB Nearline SAS Small Form Factor Disk Drive Module

The PureFlex requirements when ordering the Storwize V7000 Control Enclosure (4939-A49) are:

1 x Storwize V7000 Control Enclosure (4939-A49), with the following features:
1 x #AD00  IBM Flex System V7000 Control Enclosure
1 x #AD81  10Gb Converged Network Adapter 2 Port Daughter Card
1 x #AD82  8Gb FC 4 Port Daughter Card
1 x #4681  BladeCenter® Chassis Specify Chassis #1
1 x #4651  Rack Indicator, Rack #1
1 x #9170  Controller #1 Group
1 x #EFD1  PureFlex Express Foundations Indicator
1 x #EFD2  PureFlex Express Expansion Order Indicator
1 x #EFD4  PureFlex Enterprise Order Indicator
1 x #EFD5  PureFlex Enterprise Expansion Order Indicator
1 x #EFD6  PureFlex Custom Order Indicator
1 x #EBM1  PureFlex IBM i Edition Order Indicator
1 x #EVD1  PureFlex VDI Edition Order Indicator
- All configurations with Power ITEs 7895-23X/23A/43X and 7954-24X or Hybrid (Power and System x ITEs) and without Smart Cloud Entry

| 16 x #AD11 | 500 GB 7,200 RPM 6Gbs 2.5-inch NL SAS HDD |
| 8 x #AD12 | 1TB 7,200 RPM 6Gbs 2.5-inch NL SAS HDD |
| 16 x #AD21 | 300 GB 10,000 RPM 6Gbps 2.5-inch SAS HDD |
| 8 x #AD23 | 600 GB 10,000 RPM 6Gbps 2.5-inch SAS HDD |
| (Default) |
| 8 x #AD24 | 900 GB 10,000 RPM 6Gbps 2.5-inch SAS HDD |
| 8 x #AD25 | 1.2TB 10K 6Gbs 2.5 inch SAS SSD |
| 16 x #AD32 | 300 GB 15,000 RPM 6Gbps 2.5-inch SAS HDD |

- All configurations with System x ITEs 7863-10X, 7906-25X, 7916-27X, or 7917-45X and with Smart Cloud Entry

| 8 x #AD11 | 500 GB 7,200 RPM 6Gbs 2.5-inch NL SAS HDD |
| 8 x #AD12 | 1TB 7,200 RPM 6Gbs 2.5-inch NL SAS HDD |
| 8 x #AD21 | 300 GB 10,000 RPM 6Gbps 2.5-inch SAS HDD |
| 8 x #AD23 | 600 GB 10,000 RPM 6Gbps 2.5-inch SAS HDD |
| (Default) |
| 8 x #AD24 | 900 GB 10,000 RPM 6Gbps 2.5-inch SAS HDD |
| 8 x #AD25 | 1.2TB 10K 6Gbs 2.5 inch SAS SSD |
| 8 x #AD32 | 300 GB 15,000 RPM 6Gbps 2.5-inch SAS HDD |

- All configurations with Hybrid (Power and System x ITEs) and with Smart Cloud Entry

| 16 x #AD11 | 500 GB 7,200 RPM 6Gbs 2.5-inch NL SAS HDD |
| 16 x #AD12 | 1TB 7,200 RPM 6Gbs 2.5-inch NL SAS HDD |
| 16 x #AD21 | 300 GB 10,000 RPM 6Gbps 2.5-inch SAS HDD |
| 16 x #AD23 | 600 GB 10,000 RPM 6Gbps 2.5-inch SAS HDD |
| (Default) |
| 16 x #AD24 | 900 GB 10,000 RPM 6Gbps 2.5-inch SAS HDD |
| 16 x #AD25 | 1.2TB 10K 6Gbs 2.5 inch SAS SSD |
| 16 x #AD32 | 300 GB 15,000 RPM 6Gbps 2.5-inch SAS HDD |

- System x ITEs 7863-10X, 7906-25X, 7916-27X or 7917-45X and without Smart Cloud Entry does not have an HDD drive requirement.
- The maximum quantity of drives (SSD and HDD) per 4939-A49 is 24.
- All SSDs installed in the primary controller must be identical in size.

| #AD41 | 200 GB 6Gbps 2.5-inch SAS SSD |
| #AD43 | 400 GB 6Gbps 2.5-inch SAS SSD |
| #AD47 | 800 GB 2.5-inch SSD |

The PureFlex requirements when ordering the PureFlex System 42U Rack (7953-94X) are:

1 x IBM PureFlex System 42U Rack (7953-94X), with the following features:

4 x #4651 Rack Indicator, Rack #1
2 x #7189 or #7196 Optional PDUs
1 x #ER01 Integrate Chassis in Rack
1 x #EC02 or #EC05 Rack Rear Door or RDHX
1 x #EC03 Side Doors
1 x #EC01 or #EU21 Rack Front Door (Blue)
1 x #ER04 Rack Content Specify - 2076-124
1 x #ER1B Reserve 1U empty space - bottom
1 x #ER1T Reserve 1U empty space - top
1 x #ESC0 Shipping and handling (No charge)
1 x #EFDA PureFlex Express Order Indicator
1 x #EFDF PureFlex Express Expansion Order Indicator
1 x #EFDC PureFlex Enterprise Order Indicator

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Product number

The following are newly announced features on the specific models of the IBM Power Systems™ 1455, 7014, 7316, 7893, 7895, 7953, 7954, and 7955 machine types:

Planned availability date: November 15, 2013

New features

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The following are newly announced features on the specific models of the IBM Power Systems 1455, 7014, 7316, 7893, 7895, 7953, 7954, and 7955 machine types:

**Planned availability date: December 6, 2013**

### New features

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**Publications**

No publications are shipped with these features.
Services

Global Technology Services®

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

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http://www.ibm.com/services/

For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or visit

http://www.ibm.com/services/continuity

For details on education offerings related to specific products, visit


Select your country, and then select the product as the category.

Technical information

Specified operating environment

Physical specifications

Physical specifications are not applicable at the feature level. For the physical specifications of a specific Machine Type/Model, refer to the appropriate Sales Manual.

Hardware requirements

Refer to the appropriate sales manuals for details.

Software requirements

The IBM Flex System Compute Node servers supports the AIX, Linux™, and IBM i operating systems, offering the flexibility of using applications written for any one of the three. Refer to the appropriate sales manuals for details.

Planning information

Cable orders

No cables required.

Security, auditability, and control

This product uses the security and auditability features of host software and application software.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.
Electronic Service Agent and the IBM Electronic Support web portal are dedicated to providing fast, exceptional support to IBM Systems customers. The IBM Electronic Service Agent tool is a no-additional-charge tool that proactively monitors and reports hardware events, such as system errors, performance issues, and inventory. The Electronic Service Agent tool can help you stay focused on your company’s strategic business initiatives, save time, and spend less effort managing day-to-day IT maintenance issues. Servers enabled with this tool can be monitored remotely around the clock by IBM Support all at no additional cost to you.

Now integrated into the base operating system of AIX 5.3, AIX 6.1, and AIX 7.1, Electronic Service Agent is designed to automatically and electronically report system failures and utilization issues to IBM, which can result in faster problem resolution and increased availability. System configuration and inventory information collected by the Electronic Service Agent tool also can be viewed on the secure Electronic Support web portal, and used to improve problem determination and resolution by you and the IBM support team. To access the tool main menu, simply type "smitty esa_main", and select "Configure Electronic Service Agent." In addition, ESA now includes a powerful Web user interface, giving the administrator easy access to status, tool settings, problem information, and filters. For more information and documentation on how to configure and use Electronic Service Agent, refer to

http://www.ibm.com/support/electronic

The IBM Electronic Support portal is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. This portal enables you to gain easier access to IBM resources for assistance in resolving technical problems. The My Systems and Premium Search functions make it even easier for Electronic Service Agent tool-enabled customers to track system inventory and find pertinent fixes.

Benefits

Increased uptime: The Electronic Service Agent tool is designed to enhance the Warranty or Maintenance Agreement by providing faster hardware error reporting and uploading system information to IBM Support. This can translate to less wasted time monitoring the “symptoms,” diagnosing the error, and manually calling IBM Support to open a problem record. Its 24 x 7 monitoring and reporting mean no more dependence on human intervention or off-hours customer personnel when errors are encountered in the middle of the night.

Security: The Electronic Service Agent tool is designed to be secure in monitoring, reporting, and storing the data at IBM. The Electronic Service Agent tool securely transmits either via the Internet (HTTPS or VPN) or modem, and can be configured to communicate securely through gateways to provide customers a single point of exit from their site. Communication is one way. Activating Electronic Service Agent does not enable IBM to call into a customer’s system. System inventory information is stored in a secure database, which is protected behind IBM firewalls. It is viewable only by the customer and IBM. The customer’s business applications or business data is never transmitted to IBM.

More accurate reporting: Since system information and error logs are automatically uploaded to the IBM Support center in conjunction with the service request, customers are not required to find and send system information, decreasing the risk of misreported or misdiagnosed errors. Once inside IBM, problem error data is run through a data knowledge management system and knowledge articles are appended to the problem record.

Customized support: Using the IBM ID entered during activation, customers can view system and support information in the "My Systems" and "Premium Search" sections of the Electronic Support Web site at
My Systems provides valuable reports of installed hardware and software using information collected from the systems by Electronic Service Agent. Reports are available for any system associated with the customer’s IBM ID. Premium Search combines the function of search and the value of Electronic Service Agent information, providing advanced search of the technical support knowledgebase. Using Premium Search and the Electronic Service Agent information that has been collected from your system, customers are able to see search results that apply specifically to their systems.

For more information on how to utilize the power of IBM Electronic Services, contact your IBM Systems Services Representative, or visit

http://www.ibm.com/support/electronic
India/South Asia** Yes
Australia Yes
People’s Republic of China Yes
Hong Kong S.A.R of the PRC Yes
Macao S.A.R of the PRC Yes
Taiwan Yes
Korea Yes
New Zealand Yes
Japan IOT
Japan Yes

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Corrections

(2014 年 1 月 31 日修正)
「Description」セクションで、requirements のリストに変更があります。

(2013 年 12 月 9 日修正)
「Description」セクションで、1 x #EBK3 欄の Flex System x240 Compute Node、Flex System x220 Compute Node および Flex System x222 Compute Node に対する PureFlex™ 前提条件が修正されました。