Lenovo 40GBASE-iSR4 QSFP+ Optical Transceiver for Lenovo Systems optimizes virtualization application performance, increases use of network resources, and supports more applications per server

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At a glance

The Lenovo® 40GBASE-iSR4 QSFP+ Transceiver module (00D9865) is a 40 Gigabit Ethernet Quad Small-Form-Factor Plus (QSFP+), hot-pluggable (iSR4) transceiver that plugs into a SERDES data port.

Features and functions of the Lenovo QSFP-iSR4 Transceiver:

- 40 GbE Quad Small-Form-factor
- 4 x 10 Gigabit Ethernet connectivity
- IEEE 802.3ba -2010 compliant

Overview

The Lenovo 40GBASE-iSR4 QSFP+ Transceiver module (00D9865) is a QSFP+ 40 Gigabit Ethernet Quad Small Form-Factor-Plus (QSFP), hot-pluggable transceiver that plugs into a QSFP+ high-speed data port. It provides 40 Gbps optical Ethernet connectivity for up to 100 meters using OM3 multimode fiber (MMF) cable and up to 150 meters using OM4 multimode fiber (MMF) cable. This 40 Gigabit Ethernet transceiver module provides excellent performance in port-dense networks with challenging thermal environments. It also has the capability to breakout into four multimode fiber (MMF) cable with LC duplex connectors (00FM412, 00FM413, 00FM414). The 40GBASE-iSR4 is compliant with 40 GbE IEEE 802.3ba-2010 specifications and per channel basis to the IEEE 802.3ae optical specification.

The Lenovo MTP-4xLC OM3 MMF Breakout Cables provide the capability to connect the Lenovo iSR4 Optical Transceiver to four 10Base-SR transceivers in the link partner.

Key prerequisites

None
Planned availability date

April 15, 2015: Lenovo 40GBASE-iSR4 QSFP+ Transceiver (00D9865)

Description

**Lenovo 40GBASE-iSR4 QSFP+ Transceiver (00D9865)**

This high-performance transceiver module provides excellent performance in port-dense networks with challenging thermal environments.

Features:
- Investment protection, ease-of-use, and compatibility

Product positioning

None

Product number

**Options Offerings (SEOs)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Machine Type</th>
<th>Model</th>
<th>Feature</th>
<th>SEO</th>
<th>Part number</th>
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<tbody>
<tr>
<td>Lenovo 40GBASE-iSR4 QSFP+ Transceiver</td>
<td>3331</td>
<td>HC1</td>
<td>ASTM</td>
<td>00D9865</td>
<td>00D9865</td>
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</table>

The following are feature already announced for the 3331 machine type:

<table>
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<tr>
<th>Description</th>
<th>MT</th>
<th>Model</th>
<th>Feature</th>
</tr>
</thead>
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</tr>
</tbody>
</table>

Model conversions

None

Feature conversions

None

Publications

Publications are shipped with the announced product.

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
<th>Part number</th>
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<tbody>
<tr>
<td>Quick Install Guide and Pubs ship with the product</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>
Services

**Global Technology Services®**

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

These services help you learn about, plan, install, manage, or optimize your IT infrastructure to be an on-demand business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for Lenovo and many non-Lenovo offerings. Lenovo is your one-stop shop for IT support needs.

For details on available services, contact your Lenovo representative.

For details on available Lenovo Business Continuity and Recovery Services, contact your Lenovo representative.

Technical information

**Specified operating environment**

**Physical specifications**

*Lenovo 40GBASE-iSR4 QSFP+ Transceiver*

- Approximate length: 13.2 cm (5.2 in.)
- Approximate width: 1.84 cm (0.72 in.)
- Approximate height: 1.29 cm (0.51 in.)
- Approximate weight: 44 g (1.42 oz)

Shipping dimensions of the 40GBASE-iSR4 QSFP+

- Approximate length: 18.3 cm (7.18 in.)
- Approximate height: 5.08 cm (2.0 in.)
- Approximate width: 7.78 cm (3.06 in.)
- Approximate weight: 92 g (3.3 oz)

**Operating environment**

*Lenovo 40GBASE-iSR4 QSFP+ Transceiver*

- Operating temperature: 0°C to 55°C (32°F to 131°F)
- Storage temperature: -20°C to 70°C (-4°F to 158°F)
- Relative humidity: 5% to 90% (noncondensing)
- Storage humidity: 5% to 95%

**Homologation**

This product is not certified for direct connection by any means whatsoever to interfaces of public telecommunications networks. Certification may be required by law prior to making any such connection. Contact a Lenovo representative or reseller for any questions.
**Hardware requirements**
This transceiver must be installed in a selected Lenovo System server. (Refer to section for list of systems).

**Software requirements**
The Lenovo 40GBASE-iSR4 QSFP+ Transceiver supports the following major operating systems:

- Microsoft® Windows® 2008 R2
- Microsoft Windows 2012
- Red Hat Enterprise Linux® 5
- Red Hat Enterprise Linux 6
- SUSE Linux Enterprise Server 11
- VMware vSphere 5.0
- VMware vSphere 5.1

**Compatibility**
- Support for popular network operating systems
- ServerProven testing, which verifies servers and the Ethernet adapters will function properly

For latest compatibility information, visit http://www.lenovo.com/

**Note:** Some configurations may not be compatible.

**User group requirements**
This announcement satisfies or partially satisfies the requirements from one or more of the worldwide user group communities. Groups include COMMON, COMMON Europe, Guide Share Europe (GSE), InterAction (Australia/New Zealand), Japan Guide Share (JGS), and SHARE Inc.

**Planning information**

**Customer responsibilities**
The Lenovo 40GBASE-iSR4 QSFP+ Transceiver product is designated as customer setup.

**Installability**
The Lenovo 40GBASE-iSR4 QSFP+ Transceiver requires about 20 minutes for installation.

Installation includes unpacking, setting up, and powering on.

**Packaging**
Lenovo 40GBASE-iSR4 QSFP+ Transceiver

<table>
<thead>
<tr>
<th>Product</th>
<th>Package description</th>
<th>Boxes</th>
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</thead>
<tbody>
<tr>
<td>Lenovo 40GBASE-iSR4 QSFP+ Transceiver</td>
<td>Option Unit Box</td>
<td>1</td>
</tr>
</tbody>
</table>
The iSR4 QSFP+ transceiver is shipped as a single carton. Other items are in zipped bags.

**Retail only**

**Packaging dimensions/weight (QSFP-iSR4)**

- Single box (LxWxH):
  - 18.4 cm (7.25 in.)
  - 7.6 cm (3.0 in.)
  - 5.1 cm (2.0 in.)
- Package weight: 92 g (3.3 oz)

**Note:** All measurements are approximate.

**Security, auditability, and control**

It is a customer’s responsibility to ensure that the server is secure to prevent sensitive data from being removed.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

**Global Technology Services**

Contact your Lenovo representative for the list of selected services available in your country, either as standard or customized offerings, for the efficient installation, implementation, and/or integration of this product.

**Lenovo Electronic Services**

Electronic Service Agent™ and the Lenovo Electronic Support web portal are dedicated to providing fast, exceptional support to Lenovo Systems customers. The Lenovo 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 Lenovo 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 Lenovo, 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 Lenovo 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
The Lenovo Electronic Support portal is a single Internet entry point that replaces the multiple entry points traditionally used to access Lenovo Internet services and support. This portal enables you to gain easier access to Lenovo 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 Lenovo Support. This can translate to less wasted time monitoring the "symptoms," diagnosing the error, and manually calling Lenovo 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 Lenovo. The Electronic Service Agent tool is designed to securely transmit either via the Internet (HTTPS or VPN) or modem to provide customers a single point of exit from their site. Communication is one way. Activating Electronic Service Agent does not enable Lenovo to call into a customer's system.

**More accurate reporting:** Since system information and error logs are automatically uploaded to the Lenovo 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 Lenovo, problem error data is run through a data knowledge management system and knowledge articles are appended to the problem record.

**Customized support:** Using the Lenovo ID entered during activation, customers can view system and support information in the "My Systems" and "Premium Search" sections of the Electronic Support website at [http://www.lenovo.com/](http://www.lenovo.com/)

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 Lenovo 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 about how to utilize the power of Lenovo Electronic Services, contact your Lenovo Systems Services Representative.

**Terms and conditions**

**Field installable feature**

Yes

**Warranty period**

One year: Lenovo 40GBASE-iSR4 QSFP+ Transceiver (00D9865)

- Warranty period': 1 year
- Service type (IOR/IOE/CCE/CCR): CRU
• Maintenance agreement: No
• Optional upgrade: No

A Lenovo part or feature installed during the initial installation of a Lenovo machine is subject to a full warranty effective on the date of installation of the machine. A Lenovo part or feature that replaces a previously installed part or feature assumes the remainder of the warranty period for the replaced part or feature. A Lenovo part or feature added to a machine without replacing a previously installed part of feature is subject to a full warranty effective on its date of installation. Unless specified otherwise, the warranty period, type of warranty service, and service level of a part or feature are the same as those for the machine in which it is installed.

For information about Lenovo's Statement of Limited Warranty, contact your local Lenovo representative. Copies are available upon request.

**Customer setup**

Yes

**Machine code**

No license terms apply.

### Prices

For all local charges, contact your Lenovo representative or Business Partner.

### Announcement countries

All European, Middle Eastern, and African countries.

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