Portwell

OCP NIC 3.0 Network Adapter Series Product Guide

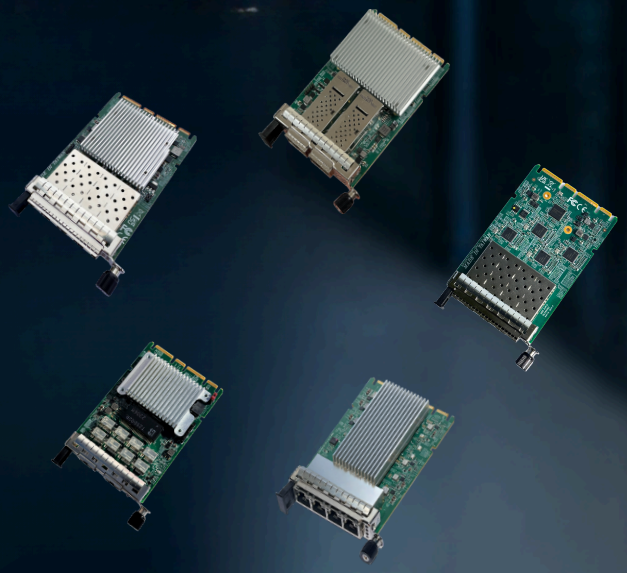


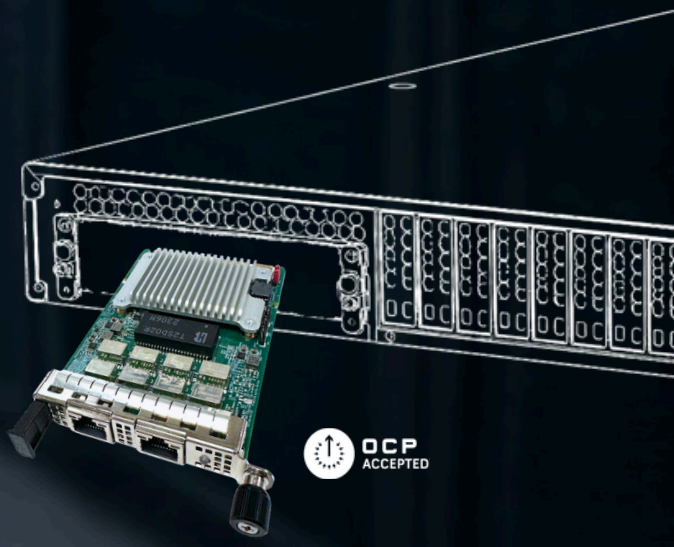
Ver. 226OCP-2

Portwell

OPEN Compute Project SOLUTION PROVIDER

FASTER SCALABILITY, MADE SIMPLE





About Portwell's OCP NIC 3.0 Network Adapters

MODULARITY

Open, standardized design for seamless integration across platforms

SERVICEABILITY

Tool-less installation and quick replacement

FLEXIBILITY

Configurable I/O options to support diverse networking requirements

Designed for Edge, Enterprise, and Security Infrastructure

The Portwell PNC Series OCP NIC 3.0 network adapters include multiple OCP Accepted™ models, supporting speeds from **1GbE to 200GbE** with SFP, SFP+, SFP28, QSFP28, and RJ45 interfaces.

Portwell also offers expansion options, such as **OCP NIC 3.0 M.2 adapters**, to provide added system configuration flexibility.

Select models feature network bypass for enhanced reliability in critical applications.

OCP NIC 3.0 Network Adapter & Expansion Module

Quick Reference Guide

	Form Factor	Configuration	Host Interface	Bypass	Page
 **PNC-ON2Q-G100**	OCP NIC 3.0 SFF 76 x 115 x 11.5 mm (WxDxH)	2x 100GbE QSFP28	PCIe Gen5 x8 or PCIe Gen4 x16	N/A	04
 **PNC-ON4S-G25**	OCP NIC 3.0 SFF 76 x 115 x 11.5 mm (WxDxH)	4x 25GbE SFP28	PCIe Gen4 x16	N/A	05
 **PNC-ON4S-G10**	OCP NIC 3.0 SFF 76 x 115 x 11.5 mm (WxDxH)	4x 10GbE SFP+	PCIe Gen3 x8	N/A	06
 **PNC-ON4S-G1**	OCP NIC 3.0 SFF 76 x 115 x 11.5 mm (WxDxH)	4x 1GbE SFP	PCIe Gen2 x2	N/A	09
 **PNC-ON4R-G10**	OCP NIC 3.0 SFF 76 x 115 x 11.5 mm (WxDxH)	4x 10GbE RJ45	PCIe Gen4 x8	N/A	07
 **PNC-OB2R-G10**	OCP NIC 3.0 SFF 76 x 115 x 11.5 mm (WxDxH)	2x 10GbE RJ45	PCIe Gen3 x8	1 pair	08
 **PNC-OS2M**	OCP NIC 3.0 based 76 x 115 mm (WxD)	2x M.2 Key M 2280/2260/2242	PCIe Gen4 x8	N/A	10

About Portwell's OCP NIC 3.0 Network Adapters 01

OCP NIC 3.0 Network Adapter & Expansion Module Quick Guide 02

Network Adapter — OCP NIC 3.0

PNC-ON2Q-G100
2x 100GbE QSFP28 | OCP Accepted™ 04

PNC-ON4S-G25
4x 25GbE SFP28 | OCP Accepted™ 05

PNC-ON4S-G10
4x 10GbE SFP+ | OCP Accepted™ 06

PNC-ON4R-G10
4x 10GbE RJ45 | OCP Accepted™ 07

PNC-OB2R-G10
2x 10GbE RJ45 | 1x Bypass | OCP Accepted™ 08

PNC-ON4S-G1
4x 1GbE SFP | OCP Accepted™ 09

Expansion Module for OCP NIC 3.0

PNC-OS2M
2x M.2 Key M Adapter | OCP NIC 3.0 Compatible 10

Further Contact

11



KEY FEATURES

- Intel® E830-CCAM1 LAN controller
- 2x 100GbE QSFP28 ports or
  1x 200GbE QSFP56 port*
- OCP Accepted™

*via firmware configuration

SPECIFICATION

Form Factor	OCP NIC 3.0 SFF
LAN Controller	Intel® E830-CCAM1
Ethernet Port	2x 100GbE QSFP28 ports or 1x 200GbE QSFP56 port*
Connector Type	OCP NIC 3.0 4C+ Primary Connector
Host Interface	PCIe Gen5 x8 or PCIe Gen4 x16
Bypass	N/A
Dimension	SFF: 76 x 115 x 11.5 mm (WxDxH) 2.99" x 4.53" x 0.45" (WxDxH)

ENVIRONMENT

Operating Environment	Temperature: 0°C to 65°C Humidity: 5% to 90% non-condensing
Storage Environment	Temperature: -20°C to 70°C Humidity: 5% to 90% non-condensing

CERTIFICATION

Certification	CE/FCC Compliance

*via firmware configuration

ORDERING GUIDE

530-26-0005	PNC-ON2Q-G100. OCP NIC 3.0 kit. 2x 100GbE QSFP28 Ports. SFF bracket
530-26-0014	PNC-ON1Q-G200. OCP NIC 3.0 kit. 1x 200GbE QSFP56 Port. SFF bracket

BRACKET OPTIONS



SFF Bracket

OCP ACCEPTED



KEY FEATURES

- Intel® E810-CAM1 LAN controller
- 4x 25GbE SFP28 ports
- OCP Accepted™

SPECIFICATION

Form Factor	OCP NIC 3.0 SFF
LAN Controller	Intel® E810-CAM1
Ethernet Port	4x 25GbE SFP28 ports
Connector Type	OCP NIC 3.0 4C+ Primary Connector
Host Interface	PCIe Gen4 x16
Bypass	N/A
Dimension	SFF: 76 x 115 x 11.5 mm (WxDxH) 2.99" x 4.53" x 0.45" (WxDxH)

ENVIRONMENT

Operating Environment	Temperature: 0°C to 65°C Humidity: 5% to 95% non-condensing
Storage Environment	Temperature: -20°C to 70°C Humidity: 5% - 95% non-condensing

CERTIFICATION

Certification	CE/FCC Compliance

ORDERING GUIDE

530-24-0029	PNC-ON4S-G25. OCP NIC 3.0 kit. 4x 25G SFP28. SFF bracket

BRACKET OPTIONS



SFF Bracket

OCP ACCEPTED



KEY FEATURES

- Intel® XL710-BM1 LAN controller
- 4x 10GbE SFP+ ports
- OCP Accepted™

SPECIFICATION

Form Factor	OCP NIC 3.0 SFF
LAN Controller	Intel® XL710-BM1
Ethernet Port	4x 10GbE SFP+ ports
Connector Type	OCP NIC 3.0 4C+ Primary Connector
Host Interface	PCIe Gen3 x8
Bypass	N/A
Dimension	SFF: 76 x 115 x 11.5 mm (WxDxH) 2.99" x 4.53" x 0.45" (WxDxH)

ORDERING GUIDE

530-24-0031	PNC-ON4S-G10. OCP NIC 3.0 kit. 4x 10G SFP+. SFF bracket
In Progress	PNC-ON4S-G10. OCP NIC 3.0 kit. 4x 10G SFP+. SFF internal lock bracket

BRACKET OPTIONS



SFF Bracket

ENVIRONMENT

Operating Environment	Temperature: 0°C to 55°C Humidity: 5% to 95% non-condensing
Storage Environment	Temperature: -20°C to 70°C Humidity: 5% - 95% non-condensing

CERTIFICATION

Certification	CE/FCC Compliance



KEY FEATURES

- 2x Intel® E610-XAT2 LAN controller
- 4x 10GbE RJ45 ports
- OCP Accepted™

SPECIFICATION

Form Factor	OCP NIC 3.0 SFF
LAN Controller	2x Intel® E610-XAT2
Ethernet Port	4x 10GbE RJ45 ports
Connector Type	OCP NIC 3.0 4C+ Primary Connector
Host Interface	PCIe Gen4 x8 (bifurcated to 2x PCIe Gen4 x4)
Bypass	N/A
Dimension	SFF: 76 x 115 x 11.5 mm (WxDxH) 2.99" x 4.53" x 0.45" (WxDxH)

ENVIRONMENT

Operating Environment	Temperature: 0°C to 65°C Humidity: 5% to 90% non-condensing
Storage Environment	Temperature: -20°C to 70°C Humidity: 5% - 90% non-condensing

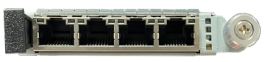
CERTIFICATION

Certification	CE/FCC Compliance

ORDERING GUIDE

530-26-0001	PNC-ON4R-G10. OCP NIC 3.0 kit. 4x 10GbE RJ45 Ports. SFF bracket

BRACKET OPTIONS



SFF Bracket



KEY FEATURES

- Intel® X710-AT2 LAN controller
- 2x 10GbE RJ45 ports
- 1 pair of bypass segments
- OCP Accepted™

SPECIFICATION

Form Factor	OCP NIC 3.0 SFF
LAN Controller	Intel® X710-AT2
Ethernet Port	2x 10GbE RJ45 ports
Connector Type	OCP NIC 3.0 4C+ Primary Connector
Host Interface	PCIe Gen3 x8
Bypass	1 pair
Dimension	SFF: 76 x 115 x 11.5 mm (WxDxH) 2.99" x 4.53" x 0.45" (WxDxH)

ORDERING GUIDE

530-24-0034	PNC-OB2R-G10. OCP NIC 3.0 kit. 2x 10G RJ45. Bypass. SFF bracket

BRACKET OPTIONS



SFF Bracket

ENVIRONMENT

Operating Environment	Temperature: 0°C to 50°C Humidity: 5% to 95% non-condensing
Storage Environment	Temperature: -20°C to 70°C Humidity: 5% - 95% non-condensing

CERTIFICATION

Certification	CE/FCC Compliance



KEY FEATURES

- Intel® I210-IS LAN controller
- 4x 1GbE SFP ports
- OCP Accepted™

SPECIFICATION

Form Factor	OCP NIC 3.0 SFF
LAN Controller	4x Intel® I210-IS
Ethernet Port	4x 1GbE SFP ports
Connector Type	OCP NIC 3.0 4C+ Primary Connector
Host Interface	PCIe Gen2 x2
Bypass	N/A
Dimension	SFF: 76 x 115 x 11.5 mm (WxDxH) 2.99" x 4.53" x 0.45" (WxDxH)

ORDERING GUIDE

530-24-0033	PNC-ON4S-G1. OCP NIC 3.0 kit. 4x 1G SFP. SFF bracket

ENVIRONMENT

Operating Environment	Temperature: 0°C to 65°C Humidity: 5% to 95% non-condensing
Storage Environment	Temperature: -20°C to 70°C Humidity: 5% - 95% non-condensing

BRACKET OPTIONS



SFF Bracket

CERTIFICATION

Certification	CE/FCC Compliance



KEY FEATURES

- Dual M.2 Key M sockets supporting PCIe Gen4
- OCP NIC 3.0 Small Form Factor (SFF) compliant
- Tool-less M.2 latch with adjustable mounting for 2280/2260/2242 modules
- Adapter for NVMe SSD and Hailo-8™ M.2 AI accelerator

SPECIFICATION

Form Factor	OCP NIC 3.0 SFF
Expansion	2x M.2 Key M 2280/2260/2242 sockets (PCIe Gen4 x4)
Connector Type	OCP NIC 3.0 4C+ Primary Connector
Host Interface	PCIe Gen4 x8
Dimension	SFF: 76 x 115 x 11.5 mm (WxDxH) 2.99" x 4.53" x 0.45" (WxDxH)

ENVIRONMENT

Operating Environment	Temperature: 0°C to 60°C Humidity: 5% to 90% non-condensing
Storage Environment	Temperature: -40°C to 70°C Humidity: 5% - 90% non-condensing

CERTIFICATION

Certification	CE/FCC Compliance

ORDERING GUIDE

530-25-0010	PNC-OS2M. OCP 3.0 adapter kit for Two M.2 Expansion. SFF bracket
In Progress	PNC-OS2M. OCP 3.0 adapter kit for Two M.2 Expansion. SFF internal lock bracket

BRACKET OPTIONS



SFF Bracket

Further Contact

Completed Technical Service

At Portwell, we pride ourselves on being at the forefront of industrial and embedded computing solutions. We offer a comprehensive range of design and manufacturing services that cater to the diverse needs of our customers, enabling them to accelerate the realization of their design concepts. We bring more than three decades of trusted experience and specialized expertise providing one-stop resource for both off-the-shelf products and custom-built solutions. Our dedication to innovation and customer satisfaction has established us as a trusted partner across industries. From engineering, product development, and production planning to quality assurance and global logistics management, we are committed to expediting your time-to-market.



Consulting Service

Our engineering experts offer a complimentary consultation to discuss your specific projects needs promptly. We are devoted to transforming your ideas into tangible products, ensuring functionality, reliability, and innovation.



Product Service

Using our specialized product service, we strive to help you in selecting the right products from our extensive portfolio and provide relevant information to complete your solution.



Design Service

If our current product offerings do not align with your requirements, we can initiate a customized design service to create the precise products you need.



Manufacturing Service

Our manufacturing services encompass everything from PCBA (Printed Circuit Board Assembly) to system integration. We ensure streamlined processes optimized for efficiency and precision to deliver high-quality products.



Logistics Service

Our global operations and logistics management service leads to cost savings, enhanced customer service, risk mitigation, and market growth for both our organization and our customers'.



Portwell

OCP SOLUTION PROVIDER

www.portwell.com
info@portwell.com
1-877-278-8899
1-510-403-3399

View Our OCP NIC 3.0
Network Adapters Online

American Portwell Technology, Inc.
ISO 9001/13458/14001 Certified QMS

OCP2261021
All product specifications are subject to change without notice.
Unauthorized reproduction of any part of this publication, in any form or by any means, without the publisher's prior written permission, is prohibited.
All brand or product names are trademarks or registered trademarks of their respective owners.
Copyright ©2026 American Portwell Technology, Inc.