



Intel[®] Ethernet Controller Products

28.1.1 Release Notes

NEX Cloud Networking Group (NCNG)

June 2023

Revision 1.0
779371-001



Revision History

Revision	Date	Comments
1.0	June 2023	Initial release.

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1.0 Overview

This document provides an overview of the 28.1.1 software release, which is a minor release. For a full list of features and issues associated with the 28.0 major release, see the [Intel® Ethernet Controller Products Release 28.0 Release Notes](#).

These release notes list the features supported in this software release.

1.1 New Features

1.1.1 Hardware Support

Release	New Hardware Support
28.1.1	None for this release.

1.1.2 Software Features

Release	New Software Support
28.1.1	- RHEL 8.8 support for 1/10/40/100 G devices. - RHEL 9.2 support for 1/10/40/100 G devices. - VMware ESXi 8.0u1 support for 1/10/100 G devices.

1.2 Operating Systems Supported

1.2.1 Linux

Operating Systems supported:

- Red Hat Enterprise Linux 9.2, 9.1, 8.8 & 8.7
- Red Hat Enterprise Linux 8.x (8.5 and previous)
- SUSE Linux Enterprise Server (SLES) 15 SP4
- SLES 15 SP3 and previous
- SLES 12 SP5, SP4 and previous
- Canonical* Ubuntu* 22.04 LTS
- Canonical Ubuntu 20.04 LTS
- Debian* 11

Table 1. Supported Operating Systems: Linux

Product	PF Driver	VF Driver	RDMA Driver
Intel® Ethernet 810/820 Series	1.11.17.1	4.8.3	1.11.62
Intel® Ethernet 700 Series	2.22.20	4.8.3	1.11.62
Intel® Ethernet 10 Gigabit Adapters	5.18.13	4.17.13	Not Supported
Intel® Ethernet Gigabit Adapters	5.13.20	Not Supported	Not Supported

1.2.2 Windows Server

The following table shows the versions of Microsoft Windows that are supported in this release and the accompanying driver names and versions.

Table 2. Supported Operating Systems: Windows Server

Driver	Windows Server 2022	Windows Server 2019	Windows Server 2016	Windows Server 2012 R2	Windows Server 2012
Intel® Ethernet 800 Series					
icea	1.12.164.0	1.12.164.0	1.12.164.0	Not Supported	Not Supported
scea	1.1.298.0	1.1.298.0	Not Supported	Not Supported	Not Supported
Intel® Ethernet 700 Series					
i40ea	1.17.88.0	1.16.202.10	1.16.202.10	1.16.202.0	1.16.62.0
i40eb	1.17.88.0	1.16.202.10	1.16.202.10	1.16.202.0	Not Supported
Intel® Ethernet Adaptive Virtual Function					
iavf	1.13.8.0	1.13.8.0	1.13.8.0	1.13.8.0	Not Supported
v40e	Not Supported	Not Supported	Not Supported	Not Supported	1.5.86.1

Table 2. Supported Operating Systems: Windows Server [continued]

Driver	Windows Server 2022	Windows Server 2019	Windows Server 2016	Windows Server 2012 R2	Windows Server 2012
Intel® Ethernet 10 Gigabit Adapters and Connections					
ixs	4.1.248.0	4.1.246.2	4.1.246.0	3.14.223.0	3.14.222.0
sxa	4.1.251.0	4.1.249.0	4.1.249.0	3.14.224.0	3.14.224.0
sxb	4.1.251.0	4.1.249.0	4.1.249.0	3.14.223.0	3.14.223.0
ixt	Not Supported	4.1.228.0	4.1.229.0	3.14.214.0	3.14.206.0
ixn	Not Supported	4.1.249.0	4.1.249.0	3.14.223.0	3.14.223.0
ixe	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported
vxS	2.1.246.0	2.1.230.0	2.1.232.0	1.2.254.0	1.2.254.0
vxn	Not Supported	2.1.249.0	2.1.249.0	1.2.317.0	1.2.317.0
Intel® Ethernet 2.5 Gigabit Adapters and Connections					
e2f	2.1.1.7	1.1.3.28	Not Supported	Not Supported	Not Supported
Intel® Ethernet Gigabit Adapters and Connections					
e1r	13.0.14.0	12.18.13.0	12.16.5.0	12.16.5.0	12.14.8.5
e1s	12.16.16.0	12.15.184.4	12.15.184.4	12.13.27.2	12.13.27.2
v1q	Not Supported	1.4.7.3	1.4.7.3	1.4.5.4	1.4.5.0

1.2.3 Windows Client

The following table shows the versions of Microsoft Windows that are supported in this release and the accompanying driver names and versions.

Table 3. Supported Operating Systems: Windows Client

Driver	Windows 11	Windows 10 21H2 & RS5	Windows 10 RS1
Intel® Ethernet 800 Series			
icea	1.12.164.0	1.12.164.0	Not Supported
Intel® Ethernet 700 Series			
i40ea	1.17.88.0	1.16.202.10	Not Supported
Intel® Ethernet Adaptive Virtual Function			
iavf	1.13.8.0	1.13.8.0	1.13.8.0
Intel® Ethernet 10 Gigabit Adapters and Connections			
ixs	4.1.248.0	4.1.246.2	4.1.246.0
ixt	Not Supported	4.1.228.0	4.1.229.0
ixn	Not Supported	4.1.249.0	4.1.249.0
vxv	2.1.246.0	2.1.230.0	2.1.232.0
vxm	Not Supported	2.1.249.0	2.1.249.0
Intel® Ethernet 2.5 Gigabit Adapters and Connections			
e2f	2.1.1.7	1.1.3.28	Not Support
Intel® Ethernet Gigabit Adapters and Connections			
e1r	13.0.14.0	12.18.13.0	12.16.5.0
e1s	Not Supported	12.15.184.4	12.15.184.4
e1d	12.19.2.45	12.19.2.45	12.18.9.10
e1c	Not Supported	Not Supported	12.15.31.4
v1q	Not Supported	1.4.7.3	1.4.7.3

1.2.4 FreeBSD

Operating Systems supported:

- FreeBSD 13
- FreeBSD 12.3
- FreeBSD 12.2 and previous

Table 4. Supported Operating Systems: FreeBSD

Driver	PF Driver	VF Driver	RDMA Driver
Intel® Ethernet 810/820 Series	1.37.11	3.0.31	1.1.11
Intel® Ethernet 700 Series	1.12.40	3.0.31	1.1.11
Intel® Ethernet 10 Gigabit Adapters	3.3.33	1.5.33	Not Supported
Intel® Ethernet Gigabit Adapters	2.5.24	Not Supported	Not Supported

1.2.5 ESXi Drivers

Note: Intel® ESXi drivers are available from VMware.

1.3 NVM Versions Supported

The following table shows the NVM versions supported in this release.

Table 5. Current NVM

Product	NVM Version
810 Series	
E810	4.20
820 Series	
E822	2.28
E823-C	2.28
E823-L	2.28
700 Series	
X710	9.20
X722	6.20
500 Series	
X550	3.60
X552NS	2.10
X552DE	2.10
X553	2.10
200 Series	
I210	2.0

2.0 NVM Upgrade/Downgrade 800 Series/700 Series and X550

Refer to the Feature Support Matrix (FSM) links listed in [Related Documents](#) for more detail. FSMs list the exact feature support provided by the NVM and software device drivers for a given release.

3.0 Languages Supported

Note: This only applies to Microsoft Windows and Windows Server Operating Systems.

This release supports the following languages:

Languages	
English French German Italian Japanese	Spanish Simplified Chinese Traditional Chinese Korean Portuguese

4.0 Related Documents

Contact your Intel representative for technical support about Intel® Ethernet Series devices/adapters.

4.1 Feature Support Matrix

These documents contain additional details of features supported, operating system support, cable/modules, etc.

Device Series	Support Link
Intel® Ethernet 800 Series: — E810 — E820 Intel® Ethernet Controller E810 and Intel® Ethernet Connection E82X Feature Comparison Matrix	https://cdrdv2.intel.com/v1/dl/getContent/630155 https://cdrdv2.intel.com/v1/dl/getContent/739764 https://cdrdv2.intel.com/v1/dl/getContent/751546
Intel® Ethernet 700 Series: — X710/XXV710/XL710 — X722 — X710-TM4/AT2 and V710-AT2	https://cdrdv2.intel.com/v1/dl/getContent/332191 https://cdrdv2.intel.com/v1/dl/getContent/336882 https://cdrdv2.intel.com/v1/dl/getContent/619407
Intel® Ethernet 500 Series	https://cdrdv2.intel.com/v1/dl/getContent/335253
Intel® Ethernet 300 Series	N/A
Intel® Ethernet 200 Series	N/A

4.2 Specification Updates

These documents provide the latest information on hardware errata as well as device marking information, SKU information, etc.

Device Series	Support Link
Intel® Ethernet 800 Series	https://cdrdv2.intel.com/v1/dl/getContent/616943
Intel® Ethernet 700 Series: — X710/XXV710/XL710 — X710-TM4/AT2 and V710-AT2	https://cdrdv2.intel.com/v1/dl/getContent/331430 https://cdrdv2.intel.com/v1/dl/getContent/615119
Intel® Ethernet 500 Series — X550 — X540	https://cdrdv2.intel.com/v1/dl/getContent/333717 https://cdrdv2.intel.com/v1/dl/getContent/334566
Intel® Ethernet 300 Series	https://cdrdv2.intel.com/v1/dl/getContent/333066
Intel® Ethernet 200 Series — I210 — I211	https://cdrdv2.intel.com/v1/dl/getContent/332763 https://cdrdv2.intel.com/v1/dl/getContent/333015

4.3 Software Download Package

The release software download package can be found [here](#).

4.4 SourceForge Ethernet Drivers and Utilities

For additional information regarding Linux kernel drivers, refer to the [Intel® Ethernet Drivers and Utilities](#) SourceForge project page.

4.5 Intel Product Security Center Advisories

Intel product security center advisories can be found at:

<https://www.intel.com/content/www/us/en/security-center/default.html>

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