BCM957608

400G Ethernet Adapters

Data Sheet

Table of Contents

Chapter 1: Features

This section provides information on the features of the Ethernet adapters.

1.1 General Description

Based on Broadcom's scalable BCM957608 400G Ethernet controller, the BCM957608 NIC adapters are designed to build large scale, feature-rich networking solutions in servers for AI/ML, cloud, high-performance computing, and storage applications.

The BCM957608 PCIe or OCP NIC builds upon the success of the widely deployed Broadcom architecture by combining a high-bandwidth Ethernet controller with a unique set of highly optimized hardware acceleration engines to enhance network performance and improve server efficiency.

The adapter supports fourth-generation, standards-based RDMA over Converged Ethernet (RoCE) with hardware- based congestion control. Broadcom's RoCE congestion control delivers the lowest latency in real-life scenarios and dramatically reduces the complexity of RoCE deployment at scale.

The BCM957608 adapter addresses the performance requirements of mega-scale data center networks with high throughput and advanced flow processing offloads. Features such as TruFlow™ increase virtual machine density by freeing up CPU cycles. The adapter supports technology-leading security enabling the industry's most secure server platform with secure boot and attestation anchored in Broadcom's silicon root of trust (RoT).

Table 1 describes the BCM957608 family of adapters.

Table 1: BCM957608 Family of Adapters

Part Number	Description	Form Factor	Ports	Host Interface
BCM957608-P2200GQF00	2 x 200GbE PCIe NIC	PCIe Low Profile	2	Gen 5, x16
BCM957608-P2100GQF00	2 x 100GbE PCIe NIC	PCIe Low Profile	2	Gen 5, x16
BCM957608-P2200GF10	2 x 200GbE PCIe PTP NIC	PCIe Low Profile	2	Gen 5, x16
BCM957608-P1400GDF00	1 x 400GbE PCIe NIC	PCIe Low Profile	1	Gen 5, x16
BCM957608-P1400GDF30	1 x 400GbE PCIe DLC NIC	PCIe Low Profile	1	Gen 5, x16
BCM957608-N2200GQ00	2 x 200GbE OCP 3.0 NIC	OCP 3.0 SFF	2	Gen 5, x16
BCM957608-N1400GDP00	1 x 400GbE OCP 3.0 NIC	OCP 3.0 SFF	1	Gen 5, x16
BCM957608-N1400GDP30	1 x 400GbE OCP 3.0 DLC NIC	OCP 3.0 SFF	1	Gen 5, x16

1.2 Network Interface

The following network interfaces are supported:

- 8 SerDes capable of 100/50G PAM4 and 25G NRZ
- 1x 400GbE
- 2x 200/100/50/25GbE
- 400Gb/s total bandwidth
- Auto-negotiation with auto-detect
- IEEE-1588v2

1.3 Host Interface

The following host interfaces are supported:

- 16 lanes of PCI Express 5.0
- Link rates: 32, 16, 8, 5, 2.5 GT/s
- Lane configuration: x16, x8, x4, x2, and x1
- MSI-X support

1.4 Platform Security

The following platform security options are available:

- HW Secure Boot (RoT)
- Attestation (SPDM)
- OCP Secure Recovery
- Secure Wipe and Restore

1.5 RoCEv2

The following RoCE standards are supported:

- Standards-based
- DCQCN
- Peer Memory Direct
- Smart Congestion Control and Advanced Telemetry
- Automated Configuration

1.6 Networking/Virtualizations and Accelerations

The following networking/virtualization and acceleration options are available:

- RoCEv2
- Multi-Queue, NetQueue, and VMQ
- Single Root I/O Virtualization
- VF isolation and protection
- VXLAN, GRE, NVGRE, Geneve, and IP-in-IP
- Tunnel-aware stateless off-loads
- Edge Virtual Bridging (EVB)
- Stateless TCP offloads: IP/TCP/UDP checksum, LSO, LRO, GRO, TSS, RSS, aRFS, interrupt coalescing
- kTLS hardware offload encryption/decryption support
- QUIC hardware offload encryption/decryption support

1.7 TruFlow Flow Processing

The following TruFlow options are available:

- Flexible matching key
- NAT and NAPT
- Tunnel encap/decap
- Custom tunnel processing
- Connection tracking
- Flow aging
- Sampling and mirroring
- Rate-limiting and metering
- Flow-based statistics
- Network Traffic Hairpin

1.8 Manageability

The following manageability options are available:

- Network Controller Sideband Interface (NC-SI)
- Management Component Transport Protocol (MCTP)
- MCTP over SMBus/I^2C
- MCTP over PCIe VDM
- NC-SI over MCTP
- Platform Level Data Model (PLDM): Base, Monitoring/Control & FW update
- PLDM over MCTP
- I^2C support for device control and configuration

1.9 Network Boot

The following network boot options are available:

- UEFI PXE boot
- UEFI L2 iSCSI boot
- UEFI support for x86

1.10 Applications

This devices can be used in any of the following network applications:

- GPU server networking (scale-out and front-end)
- Artificial Intelligence (AI) and Machine Learning (ML)
- High-performance computing (HPC) Cloud and enterprise data center servers
- Network Function Virtualization
- NVMe storage disaggregation
- Storage servers

1.11 Direct Liquid Cooling Version

The BCM957608-P1400GDF30 and BCM957608-N1400GDP30 are distributed without a heatsink allowing for the application of a custom cold plate to be applied directly to the NIC ASIC. Broadcom provides all the necessary collateral to assist server vendors with the sizing and mechanical design of the cold plate for optimum thermal performance. In addition, the heatsink of the connector cage is removable for applications involving high power active transceivers that require liquid cooling.

In Direct Liquid Cooling (DLC) environments, customers are responsible for designing the entire cooling solution and must ensure the board's component temperatures remain within specified operational limits. Broadcom provides the following collateral to assist customers in sizing and mechanically designing the cold plate for optimal thermal performance:

- Mechanical files showing component size and placement information
- Thermal model with information about critical components (regulators, oscillators, etc.)

Contact your Broadcom sales or marketing representative for available collateral.

1.12 High Precision Timing Version

The BCM957608-P2200GF10 adapter is designed to meet the needs of telecommunications applications such as 5G RAN that require high-precision timing. In addition, the BCM957608 inherits all the features of the standard Broadcom 400G NIC product line, making it ideal for other applications that benefit from precision timing support, such as database applications and AI/ML deployments.

The BCM957608-P2200G-PTP (Precision Timing Protocol) adapter introduces support for the following precision timing features:

- IEEE1588 PTP: Precision Time Protocol (PTP) for synchronization of systems through the transfer of timing data across networks.
- Synchronous Ethernet (SyncE): Frequency synchronization over Ethernet.
- Global Navigation Satellite System (GNSS): GNSS (GPS, Galileo, and so on) support for frequency, phase, and time-of-day synchronization through an external GNSS receiver.
- Precision Time Measurement (PTM): Timing synchronization within the PCIe bus.
- Class D Timing: Class D is the highest performance clock class designed for ultra-precise timing and phase transfer.
- Micro-Miniature Coaxial Connectors (MMCX): Used for 1-PPS and 10-MHz clock input and output. Required for external GNSS connection.
- High-precision Oven-Controlled Crystal Oscillator (OCXO): Provides greater timing accuracy and maintains accuracy when the synchronization source is not available with 4-hour rated holdover time.

These features enable the BCM957608 adapter to meet the stringent requirements of timing-sensitive applications and improve the overall performance of the network and applications. Additionally, the BCM957608 can support 400G of bandwidth in a variety of configurations—ranging from a single port of 400G up to 4 ports at 100G.

The BCM957608 adapter builds upon the success of the widely deployed Broadcom architecture by combining a high-bandwidth Ethernet controller with a unique set of highly optimized hardware acceleration engines to enhance network performance and improve server efficiency.

Chapter 2: BCM957608 Ethernet Network Adapters

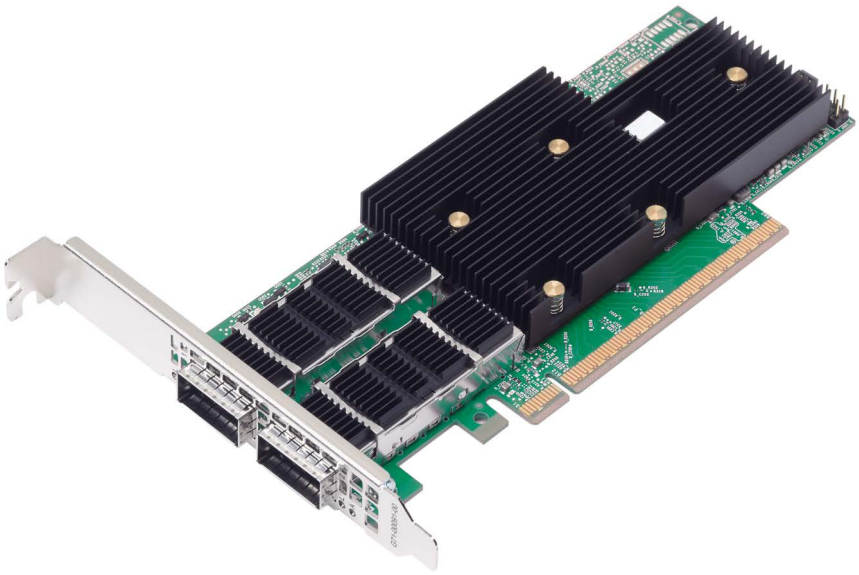
NOTE: The surface markings of the component may not reflect the product received. Broadcom reserves the right to change any component on the printed circuit board with the same functionality.

2.1 BCM957608-P2200GQF00

Figure 1: BCM957608-P2200GQF00 Network Interface Controller

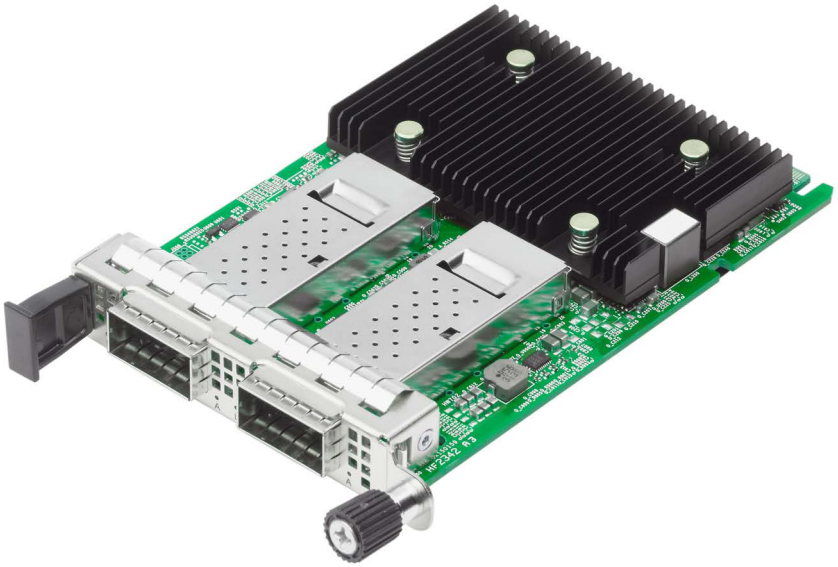
2.2 BCM957608-P2100GQF00

Figure 2: BCM957608-P2100GQF00 Network Interface Controller



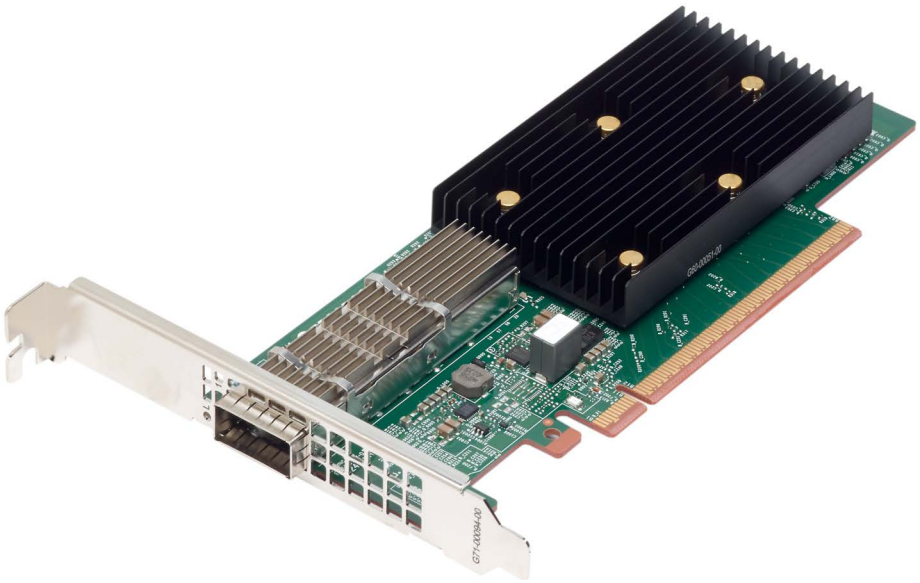
2.3 BCM957608-N2200GQ00

Figure 3: BCM957608-N2200GQ00 Network Interface Controller



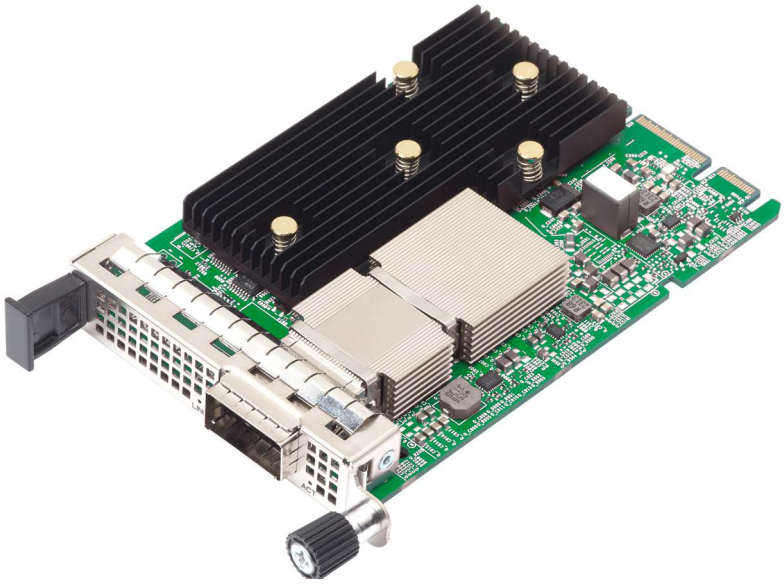
2.4 BCM957608-P1400GDF00

Figure 4: BCM957608-P1400GDF00 Network Interface Controller



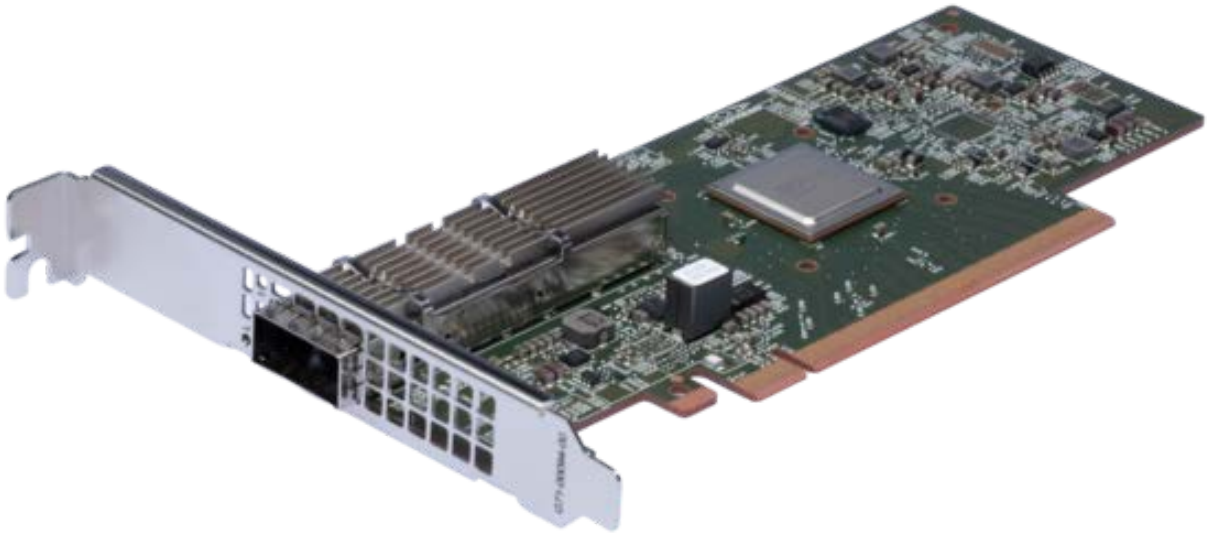
2.5 BCM957608-N1400GDP00

Figure 5: BCM957608-N1400GDP00 Network Interface Controller



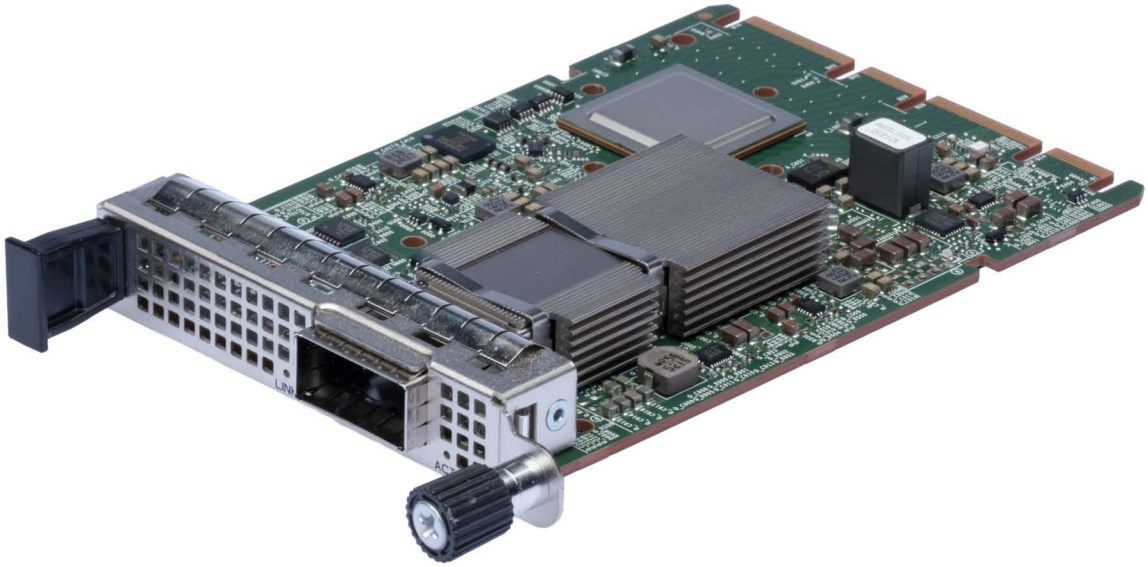
2.6 BCM957608-P1400GDF30

Figure 6: BCM957608-P1400GDF30 Network Interface Controller



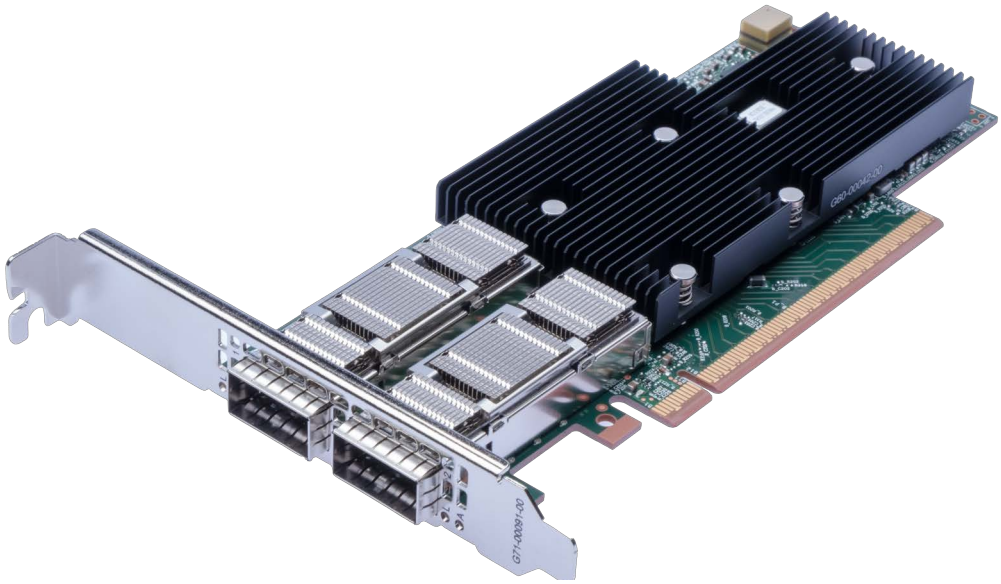
2.7 BCM957608-N1400GDP30

Figure 7: BCM957608-N1400GDP30 Network Interface Controller



2.8 BCM957608-P2200G-PTP

Figure 8: BCM957608-P2200G-PTP Network Interface Controller



Chapter 3: Power and Environmental Specifications

This section provides the power and environmental specifications for the Ethernet adapters.

3.1 PCIe Ethernet Adapters

This section details the power consumption and environmental specifications for PCIe Ethernet adapters.

3.1.1 BCM957608-P2200GQF00 and BCM957608-P2200G-PTP Ethernet Adapters

The BCM957608 thermal solution is optimized for GPU scale out in Artificial Intelligence (AI) clusters. In each node, one or more BCM957608's are placed in front of the GPUs receiving airflow at 25°C to 35°C ambient.

Table 2 and Table 3 provide the adapter power consumption and airflow requirements for typical AI cluster use models.

Table 2: Adapter Power Consumption

Typical Power[a]	Passive DAC Cable	Optical Transceiver[b]
50% Ethernet traffic	12.7W	23.6W
100% Ethernet traffic	12.9W	23.8W

a. Power consumption of adapter at 35°C ambient temperature; T_j=40°C; Nominal silicon process.

b. Power consumption using two typical QSFP56 5W optical transceivers.

Table 3: Adapter Airflow Requirements

Ambient	Passive DAC Cable	Optical Transceivers[a]
25°C	200 LFM	200 LFM
35°C	250 LFM	250 LFM

a. Airflow requirements using two typical commercial QSFP56 5W optical transceivers.

The adapter can support up to a 12W optic per connector. Using higher power optics than used in data collected for Table 2 and Table 3 will require additional airflow and slot power considerations. Evaluate these requirements and adjust system parameters accordingly.

For uses in other system architectures, please contact your Broadcom sales representative for additional information.

3.1.2 BCM957608-P2100GQF00 Ethernet Adapters

The BCM957608 thermal solution is optimized for GPU scale out in Artificial Intelligence (AI) clusters. In each node, one or more BCM957608's are placed in front of the GPUs receiving airflow at 25°C to 35°C ambient.

Table 4 and Table 5 provide the adapter power consumption and airflow requirements for typical AI cluster use models.

Table 4: Adapter Power Consumption

Typical Power[a]	Passive DAC Cable	Optical Transceiver[b]
50% Ethernet traffic	10.8W	16.2W
100% Ethernet traffic	11.0W	16.3W

a. Power consumption of adapter at 35°C ambient temperature; T_j=40°C; Nominal silicon process.

b. Power consumption using two typical QSFP56 5W optical transceivers.

Table 5: Adapter Airflow Requirements

Ambient	Passive DAC Cable	Optical Transceivers[a]
25°C	200 LFM	200 LFM
35°C	250 LFM	250 LFM

a. Airflow requirements using two typical commercial QSFP56 5W optical transceivers.

The adapter can support up to a 12W optic per connector. Using higher power optics than used in data collected for Table 2 and Table 3 will require additional airflow and slot power considerations. Evaluate these requirements and adjust system parameters accordingly.

For uses in other system architectures, please contact your Broadcom sales representative for additional information.

3.1.3 BCM957608-P1400GDF00 Ethernet Adapters

Table 6 and Table 7 provide the adapter power consumption and airflow requirements for typical AI cluster use models.

Table 6: Adapter Power Consumption

Typical Power[a]	Passive DAC Cable	Linear-Drive Pluggable Optics (LPO)[b]	Active Optical Cable (AOC)[b]
50% Ethernet traffic	13.3W	16.0W	22.0W
100% Ethernet traffic	13.5W	16.2W	22.3W

a. Power consumption of adapter at 35°C ambient temperature; T_j=40°C; Nominal silicon process.

b. Power consumption using a typical 3W LPO QSFP 112 and an 8W QSFP-DD 56 transceiver.

Table 7: Adapter Airflow Requirements

Ambient	Passive DAC Cable	Linear-Drive Pluggable Optics (LPO)[a]	Active Optical Cable (AOC)[a]
25°C	200 LFM	200 LFM	200 LFM
35°C	200 LFM	200 LFM	250 LFM

a. Power consumption using a typical 3W LPO QSFP 112 and an 8W QSFP-DD 56 transceiver.

The adapter can support up to a 12W optic per connector. Using higher power optics than used in data collected for Table 6 and Table 7 will require additional airflow and slot power considerations. Evaluate these requirements and adjust system parameters accordingly.

For uses in other system architectures, please contact your Broadcom sales representative for additional information.

3.1.4 BCM957608-P1400GDF30 Ethernet Adapters

Table 8 provides the adapter power consumption for typical AI cluster use models. The power provided is based on using the passive heatsink available on the standard adapter. The actual power may vary depending on the design of the cooling solution and resulting junction temperatures of the board components. See Direct Liquid Cooling Version for more information on design of the cooling solution.

Table 8: Adapter Power Consumption

Typical Power[a]	Passive DAC Cable	Linear-Drive Pluggable Optics (LPO)[b]	Active Optical Cable (AOC)[b]
50% Ethernet traffic	13.3W	16.0W	22.0W
100% Ethernet traffic	13.5W	16.2W	22.3W

a. Power consumption of adapter at 35°C ambient temperature; T_j=40°C; Nominal silicon process.

b. Power consumption using a typical 3W LPO QSFP 112 and an 8W QSFP-DD 56 transceiver.

The adapter can support up to a 12W optic per connector. Using higher power optics than used in data collected for Table 8. Evaluate these requirements and adjust system parameters accordingly.

For uses in other system architectures, please contact your Broadcom sales representative for additional information.

3.1.5 Operating and Storage Conditions

Table 9 provides the operating and storage conditions for all PCIe Ethernet adapters.

Table 9: Operating and Storage Conditions

Condition	Specification
Storage Humidity	10-90% RH Non-condensing
Storage Temperature	–40 to 70°C
Operating Temperature	0 – 55°C

3.2 OCP Ethernet Adapters

This section provides information on board power and environmental specifications for OCP Ethernet Adapters.

3.2.1 BCM957608-N2200GQ00 Ethernet Adapters

The BCM957608 thermal solution is optimized for GPU scale out in Artificial Intelligence (AI) clusters. In each node, one or more BCM957608's are placed in front of the GPUs receiving airflow at 25°C to 35°C ambient.

Table 10 and Table 11 provide the adapter power consumption and airflow requirements for typical AI cluster use models.

Table 10: Adapter Power Consumption

Typical Power[a]	Passive DAC Cable	Optical Transceiver[b]
50% Ethernet traffic	12.7W	23.6W
100% Ethernet traffic	12.9W	23.8W

a. Power consumption of adapter at 35°C ambient temperature; T_j=40°C; Nominal silicon process.

b. Power consumption using two typical QSFP56 5W optical transceivers.

Table 11: Adapter Environmental Specifications

Configuration	Passive DAC Cable	Active Optical Transceiver
Cold Aisle	Tier 6	Tier 7
Hot Aisle[a]	Tier 8	Tier 11

a. Airflow requirements using two typical QSFP56 5W optical transceivers.

The adapter is can support up to a 12W optic per connector. Using higher power optics than those used in data collected for Table 2 and Table 11 will require additional airflow and slot power considerations. Evaluate these requirements and adjust system parameters accordingly.

3.2.2 BCM957608-N1400GDP00 Ethernet Adapters

The following tables provide power and thermal information for the BCM957608 adapter.

Table 12: Adapter Power Consumption

Typical Power[a]	Passive DAC Cable	Linear Drive Pluggable Optics (LPO)[b]	Active Optical Cable (AOC)
50% Ethernet traffic	13.3W	16.6W	22.0W
100% Ethernet traffic	13.5W	16.8W	22.3W

a. Power consumption of adapter at 35°C ambient temperature; Tj=40°C; Nominal silicon process.

b. Power consumption using a typical 3W LPO and an 8W QSFP-DD 112 transceiver.

Table 13: Minimum Equipment Arrangement

Configuration	Passive DAC Cable	Linear Drive Pluggable Optics (LPO)[a]	Active Optical Cable (AOC)
Cold Aisle	Tier 7	Tier 9	Tier 10
Hot Aisle	Tier 8	Tier 9	Tier 12

a. Airflow requirements using a typical 3W LPO QSFP-112 and an 8W QSFP-DD 56 transceiver.

The adapter can support up to a 12W optic per connector. Using higher power optics than those used in data collected for Table 12 and Table 13 will require additional airflow and slot power considerations. Evaluate these requirements and adjust system parameters accordingly.

3.2.3 BCM957608-N1400GDP30 Ethernet Adapters

Table 14 provides the adapter power consumption for typical AI cluster use models. The power provided is based on using the passive heatsink available on the standard adapter. The actual power may vary depending on the design of the cooling solution and resulting junction temperatures of the board components. See Direct Liquid Cooling Version for more information on design of the cooling solution.

Table 14: Adapter Power Consumption

Typical Power[a]	Passive DAC Cable	Linear Drive Pluggable Optics (LPO)[b]	Active Optical Cable (AOC)
50% Ethernet traffic	13.3W	16.0W	22.0W
100% Ethernet traffic	13.5W	16.2W	22.3W

a. Power consumption of adapter at 35°C ambient temperature; Tj=40°C; Nominal silicon process.

b. Power consumption using a typical 3W LPO QSFP 112 and an 8W QSFP-DD 56 transceiver.

The adapter can support up to a 12W optic per connector. Using higher power optics than used in data collected for Table 2 requires additional airflow and slot power considerations. Evaluate these requirements and adjust system parameters accordingly.

For uses in other system architectures, please contact your Broadcom sales representative for additional information.

3.2.4 Operating and Storage Conditions

Table 15 provides the operating and storage conditions for all OCP Ethernet Adapters.

Table 15: Operating and Storage Conditions

Condition	Specification
Storage Humidity	10-90% RH Non-condensing
Storage Temperature	–40 to 70°C
Operating Temperature	0 – 65°C

Chapter 4: Ethernet Adapter Characteristics

This section outlines the characteristics of the Ethernet adapters.

4.1 LED Functions and Locations

The QSFP112 port supports two LEDs to indicate traffic activities and link speed. The LEDs are visible through the cutout on the bracket as shown in the following figures.

4.1.1 PCIe Ethernet Adapters

This section provides the activity and link LED locations on PCIe Ethernet adapters.

Figure 9: Activity and Link LED Locations (PCIe Dual Port)

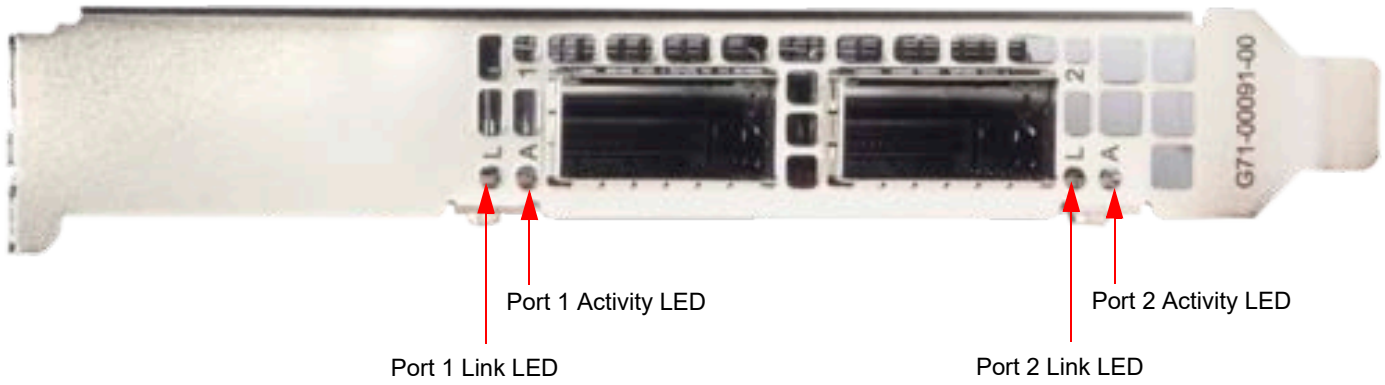
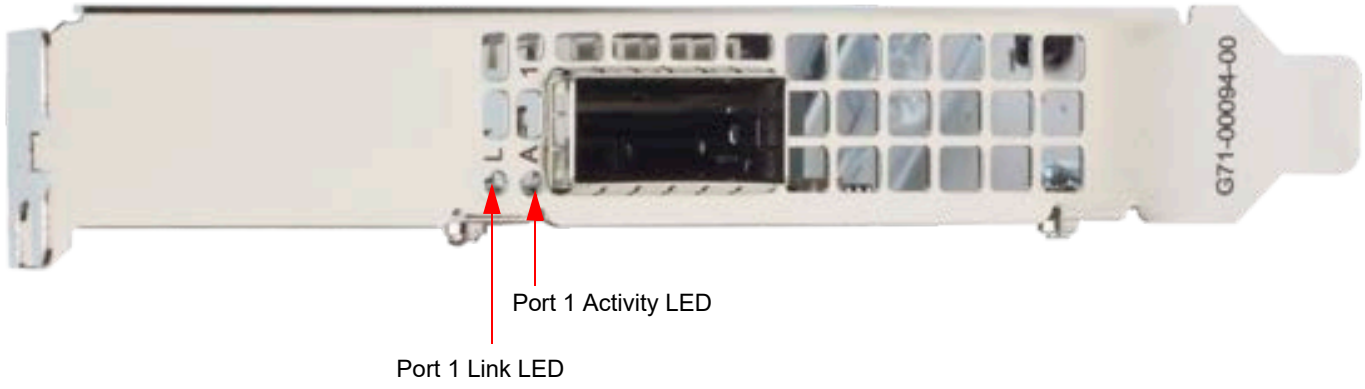


Figure 10: Activity and Link LED Locations (PCIe Single Port)



4.1.2 OCP Ethernet Adapters

This section provides the activity and link LED locations on OCP Ethernet adapters.

Figure 11: Activity and Link LED Locations (OCP Dual Port)

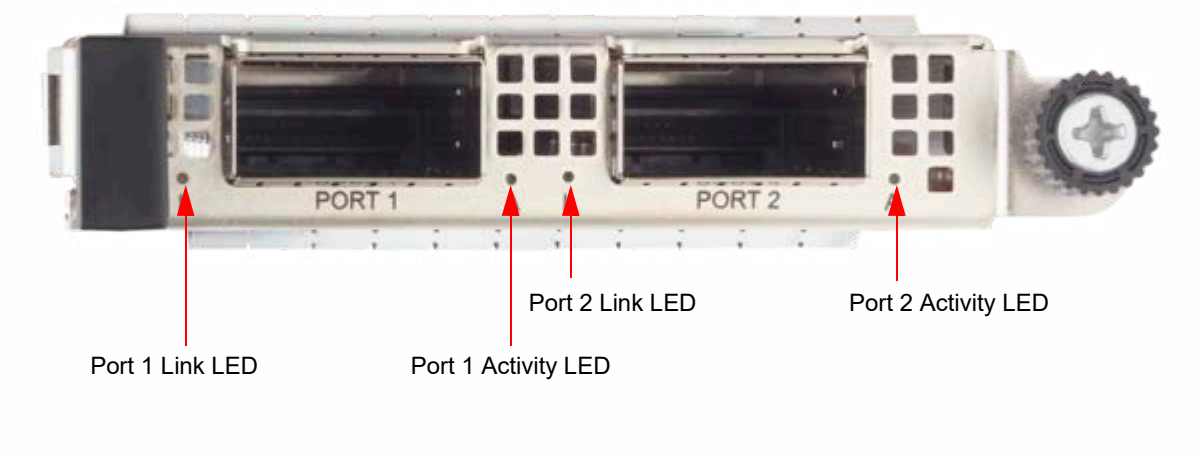
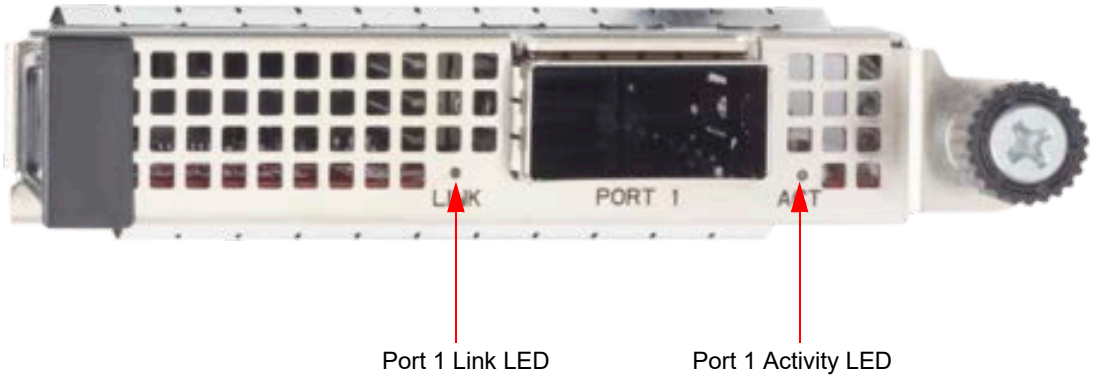


Figure 12: Activity and Link LED Locations (OCP Single Port)



4.1.3 LED Functions

Table 16 provides the LED functions.

Table 16: LED Functions

LED Type	Color/Behavior	Note
Activity	Off	No Activity
	Green (blinking)	Link up (traffic flowing)
Link	Off	No Link
	Green	Linked at 200 Gb/s or 400 Gb/s
	Amber	Linked at lower speed

4.2 PCIe Plug-N-Play Identification

Table 17 provides the PCIe PNP IDs for each adapters:

Table 17: PCIe Plug-N-Play Identification

Device	Vendor ID	Device ID	Sub-Vendor ID	Sub-Device ID
BCM957608-P2200GQF00	0x14E4	0x1760	0x14E4	0x9120
BCM957608-P2100GQF00	0x14E4	0x1760	0x14E4	0x9121
BCM957608-P2200GF10	0x14E4	0x1760	0x14E4	0x9123
BCM957608-P1400GDF00	0x14E4	0x1760	0x14E4	0x9140
BCM957608-P1400GDF30	0x14E4	0x1760	0x14E4	0x9141
BCM957608-N2200GQ00	0x14E4	0x1760	0x14E4	0x9320
BCM957608-N1400GDP00	0x14E4	0x1760	0x14E4	0x9311
BCM957608-N1400GDP30	0x14E4	0x1760	0x14E4	0x9314

4.3 Package Weights

Table 18 shows the package weights for all BCM957608 devices.

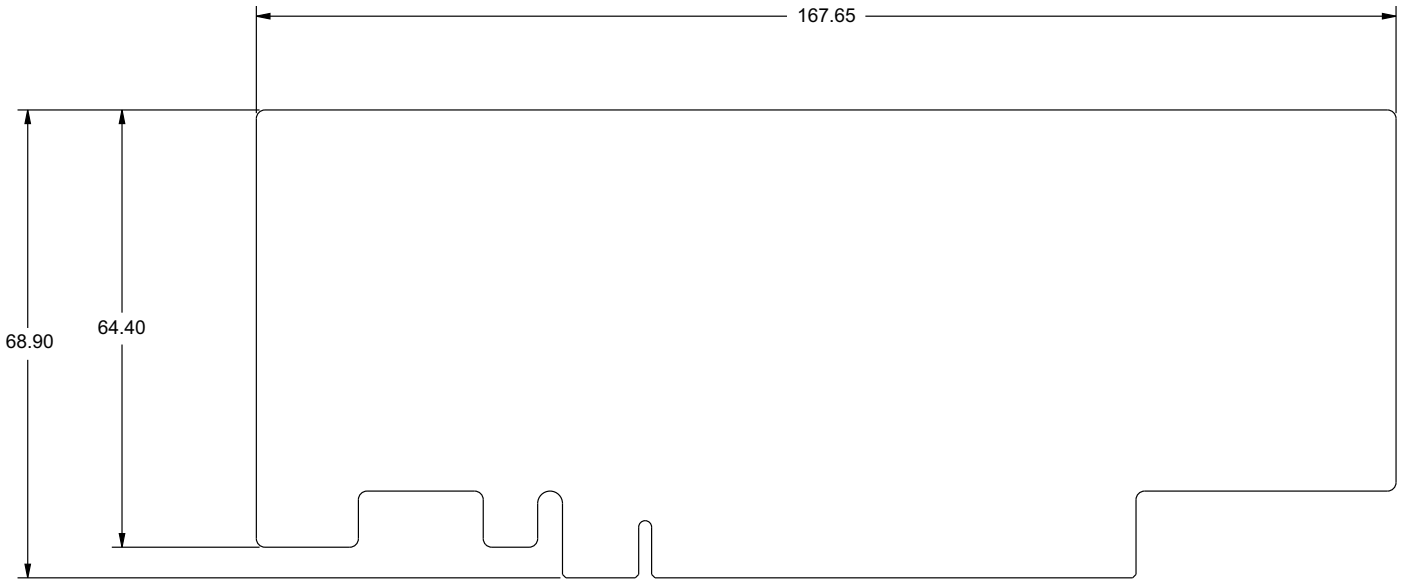
Table 18: Package Weight

Parameter	Value	Unit
BCM957608-P2200GQF00	150.5	gram
BCM957608-P2100GQF00	150.5	gram
BCM957608-P2200GF10	150.5	gram
BCM957608-P1400GDF00	138.0	gram
BCM957608-P1400GDF30	138.0	gram
BCM957608-N2200GQ00	114.3	gram
BCM957608-N1400GDP00	114.3	gram
BCM957608-N1400GDP30	114.3	gram

4.4 PCIe Board Physical Dimensions

The PCIe board physical dimensions are shown in Figure 13. The dimensions are in millimeters with a tolerance of ±0.13 mm.

Figure 13: Board Physical Dimensions



4.5 PCIe Bracket Outlines and Dimensions

This section provides the PCIe adapter bracket outlines and dimensions.

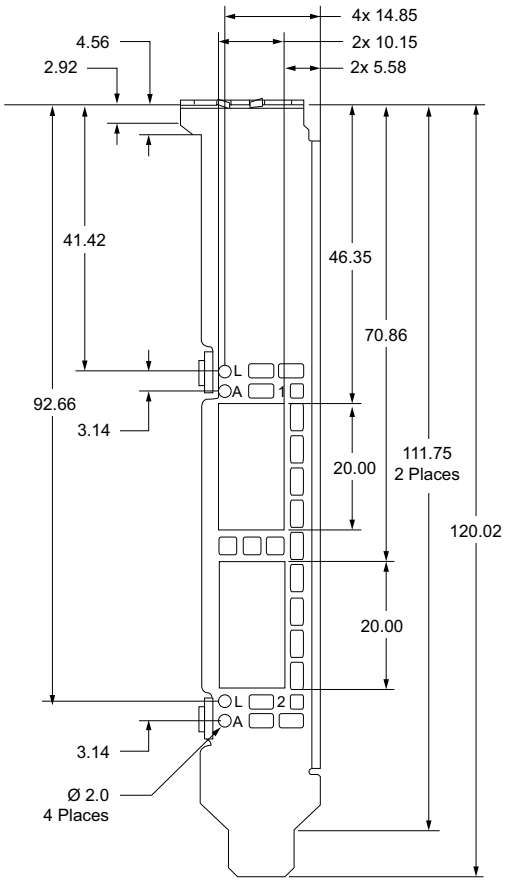
4.5.1 Dual-Port PCIe Adapters

The BCM957608-P2200GF10, BCM957608-P2200GQF00, BCM957608-P2200G-PTP, and BCM957608-P2100GQF00 support both standard and low-profile brackets.

4.5.1.1 Standard-Profile Bracket Outline and Dimensions

Standard-profile bracket outline and physical dimensions are shown in Figure 14.

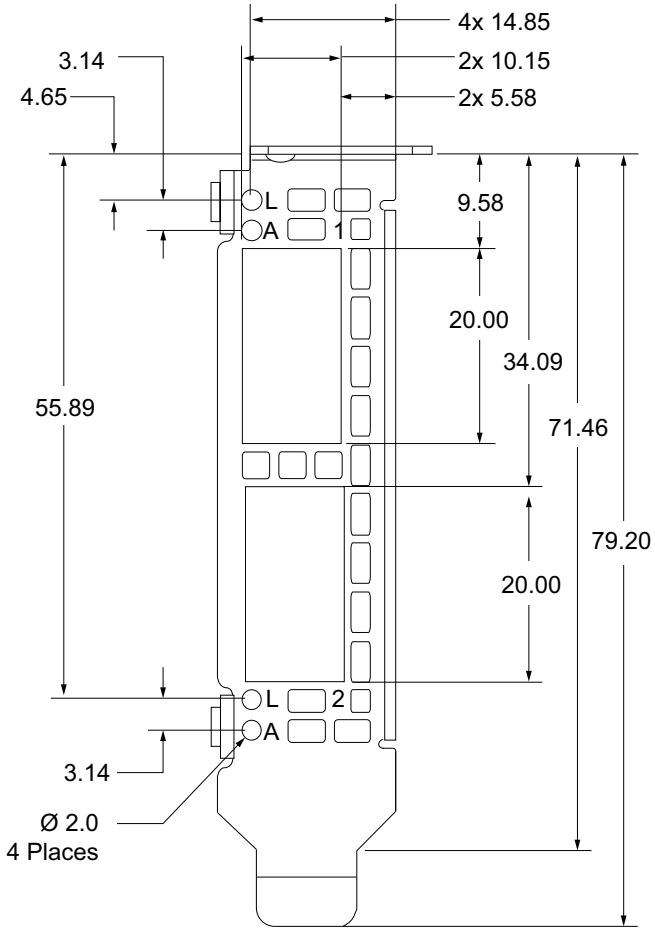
Figure 14: Standard-Profile Bracket Outline and Dimensions (in millimeters)



4.5.1.2 Low-Profile Bracket Outline and Dimensions

The low-profile bracket outline and physical dimensions are shown in Figure 15.

Figure 15: Low-Profile Bracket Outline and Dimensions (in millimeters)



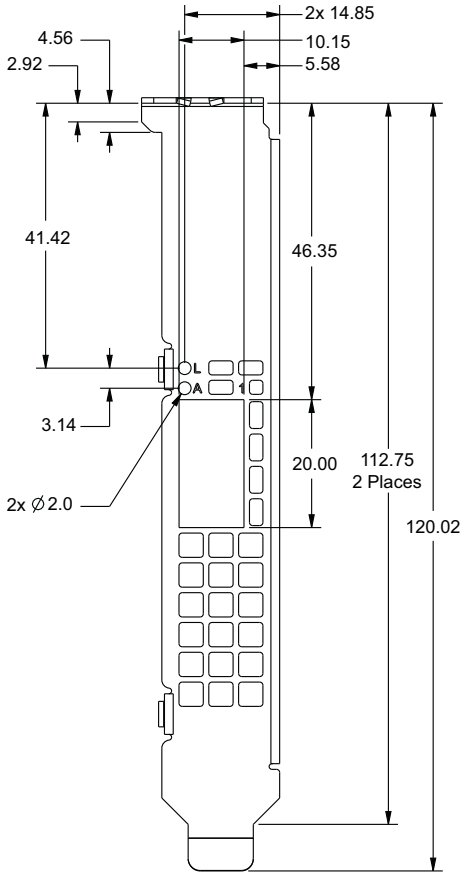
4.5.2 Single-Port PCIe Adapter

The BCM957608-P1400GDF30, BCM957608-P1400GDF00, and BCM957608-P1400GDF30 support both standard and low-profile brackets.

4.5.2.1 Standard-Profile Bracket Outline and Dimensions

Standard-profile bracket outline and physical dimensions are shown in Figure 14.

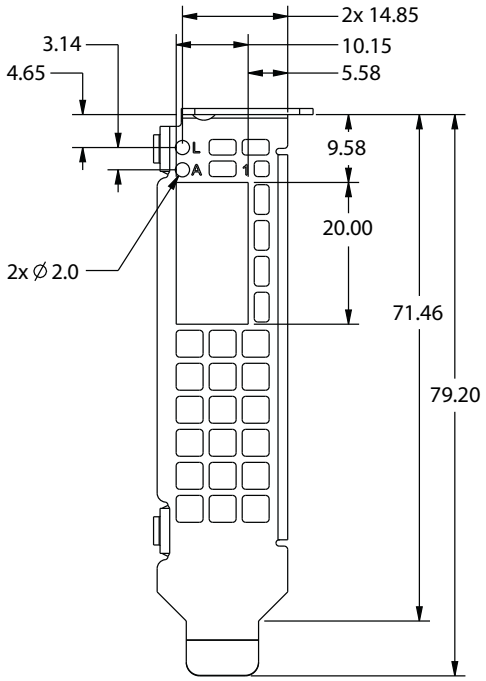
Figure 16: Standard-Profile Bracket Outline and Dimensions (in millimeters)



4.5.2.2 Low-Profile Bracket Outline and Dimensions

The low-profile bracket outline and physical dimensions are shown in Figure 15.

Figure 17: Low-Profile Bracket Outline and Dimensions (in millimeters)



4.6 OCP Board Physical Dimensions

The OCP board physical dimensions are shown in Figure 18. The dimensions are in millimeters with a tolerance of ±0.127 mm.

Figure 18: Physical Dimensions (in millimeters)

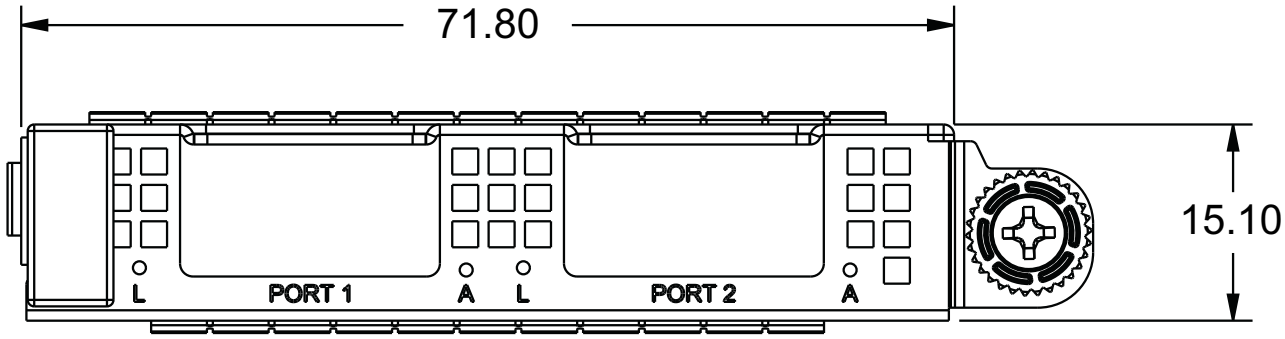
4.7 OCP Bracket Outlines and Dimensions

The physical board and faceplate are compliant with the OCP 3.0 small form factor (SFF) dimensions. See the mechanical dimensions in the *OCP 3.0 Design Specification* for additional information.

4.7.1 Dual-Port OCP Adapter Bracket Outlines and Dimensions

Figure 19 shows the dimensions of the dual port adapter's pull tab bracket.

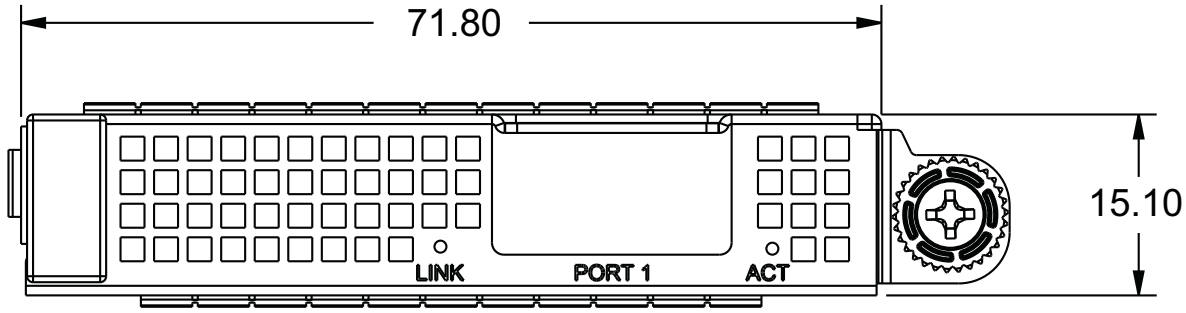
Figure 19: Dual-Port OCP Adapter Physical Dimensions (in millimeters)



4.7.2 Single-Port OCP Adapter Bracket Outlines and Dimensions

Figure 19 shows the dimensions of the single port adapter's pull tab bracket.

Figure 20: Dual-Port OCP Adapter Physical Dimensions (in millimeters)



Chapter 5: Marks, Certifications, Compliance, and Safety Characteristics

The following sections detail the Regulatory, Safety, Electromagnetic Compatibility (EMC), and Electrostatic Discharge (ESD) standard compliance for the BCM957608 network interface card.

5.1 Regulatory

Table 19: Regulatory Approvals

Item	Applicable Standard	Approval (A)/Certificate (C)
CE/European Union	EN 62368-1:2014/AC:2015	CB report and certificate
UL/USA	IEC IEC 62368-1:2018	CB report and certificate

5.2 Safety

Table 20: Safety Approvals

Country	Certification Type/Standard	Compliance
International	CB Scheme ICES 003 – Digital Device UL 1977 (connector safety) UL 796 (PCB wiring safety) UL 94 (flammability of parts)	Yes

5.3 Electromagnetic Compatibility (EMC)

Table 21: Electromagnetic Compatibility

Standard/Country	Certification Type	Compliance
CE/EU	EN 55032:2015/A11:2020 Class A EN 55035:2017/A11:2020 EN 61000-3-2:2014 EN 61000-3-3:2013	CE report and CE DoC
FCC/USA	CFR47 Part 15 Subpart B Class A	FCC/IC DoC and EMC report referencing FCC and IC standards
IC/Canada	ICES-003 Class A	FCC/IC DoC and report referencing FCC and IC standards
ACA/Australia, New Zealand	AS/NZS CISPR 32:2015+AMD1:2020	ACA certificate
BSM/Taiwan	CNS 15936:2016 Class A	BSMI certificate
BSMI/Taiwan	CNS 15663	BSMI certificate/RoHS table
MSIP/S. Korea	KN32 Class A KN35	Korea certificate MSIP mark
VCCI/Japan	VCCI-CISPR 32:2016	Copy of VCCI online certificate

5.4 Electrostatic Discharge (ESD) Compliance

Table 22: ESD Compliance Summary

Standard	Certification Type	Compliance
EN 55024:2010 (EN 61000-4-2)	Air/Direct discharge	Yes

5.5 FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

5.5.1 Information to User

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

Chapter 6: Ordering Information

Table 23 provides the ordering information for each device.

Table 23: Ordering Information

Part Number	Description
BCM957608-P2200GQF00	Dual-Port 2x200G QSFP112 PCIe 5.0 x16 Ethernet Network Interface Card
BCM957608-P2100GQF00	Dual-Port 2x100G QSFP112 PCIe 5.0 x16 Ethernet Network Interface Card
BCM957608-P2200GF10	Dual-Port 2x200G QSFP112 PCIe 5.0 x16 Ethernet Network Interface Card (PTP)
BCM957608-P1400GDF00	Single-Port 1x400G QSFP-DD PCIe 5.0 x16 Ethernet Network Interface Card
BCM957608-P1400GDF30	Single-Port 1x400G QSFP-DD PCIe 5.0 x16 Ethernet Network Interface Card (DLC)
BCM957608-N2200GQ00	Dual-Port 2x200G QSFP112 PCIe5.0 x16 OCP 3.0 Ethernet Network Interface Card
BCM957608-N1400GDP00	Single-Port 1x400G QSFP-DD PCIe 5.0 x16 OCP 3.0 Ethernet Network Interface Card
BCM957608-N1400GDP30	Single-Port 1x400G QSFP-DD PCIe 5.0 x16 OCP 3.0 Ethernet Network Interface Card (DLC)

Revision History

957608-DS100; February 17, 2026

Initial release.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