



# **SSD7580C Storage Adapter User Guide**

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## Overview

The SSD7580C is the latest member of our PCIe Gen4 NVMe RAID AIC product family, and a superset of the 7580 series of high-density U.2/U.3 host controllers.

The SSD7580C's 8 independent device channels are backed by a dedicated PCIe 4.0 x16 host interface, industry leading PCIe switch technology, and our field-proven NVMe RAID stack, and are capable of supporting over 200TB of hot-swappable U.2/U.3 NVMe storage while delivering 28,000MB/s of sustained transfer throughput. The AIC's compact, half-height (low-profile) form factor can be easily installed into nearly any industry standard PC-based server, workstation and rackmount platform running a Linux or Windows based operating system.

The SSD7580C offers advanced Hot-Plug & Hot-Swap features, allowing for the addition, removal, or replacement of SSDs and RAID arrays without shutting down the host platform. This enhances efficiency in professional server and workstation environments. The device uses a "Synthetic Hierarchy" to maintain system stability during PCIe topology changes, employing virtual placeholders for NVMe device channels that remain active and can be replaced with physical disks as needed. Additionally, the SSD7580C ensures smooth operation through Downstream Port Containment and Read Tracking when drives are removed. The HighPoint RAID Management interface includes an "Unplug" command, facilitating safe removal of drives without data loss and reactivating virtual placeholders for future use.

This guide describes the SSD7580C key features, hardware description, hardware installation and cable and cabling configuration.

## Key Features

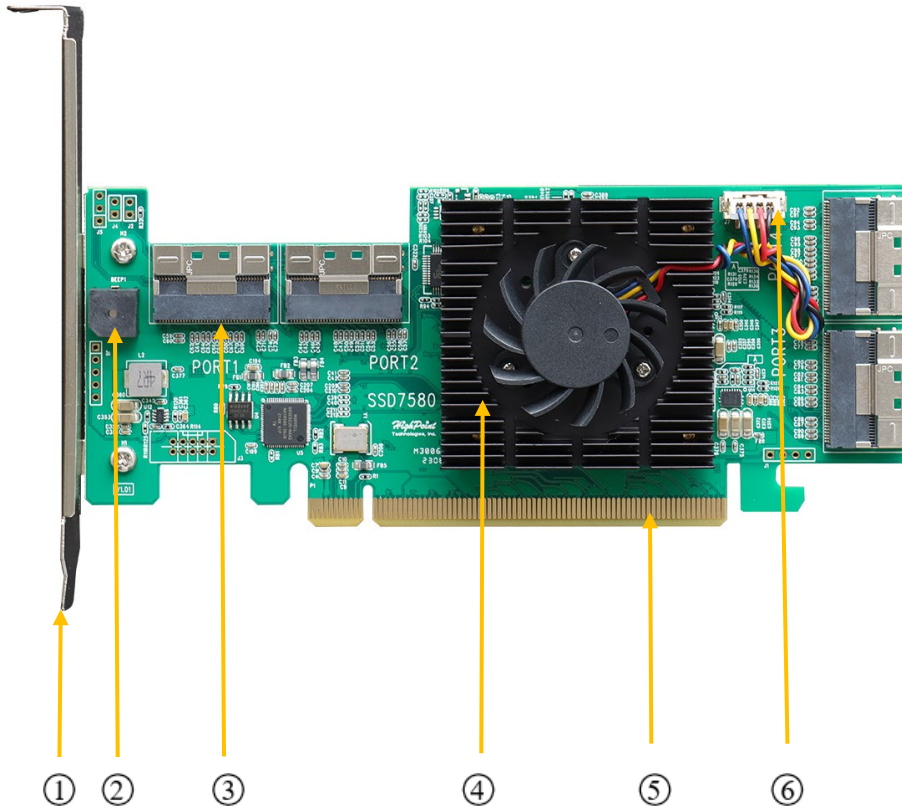
- Ultra-High Density NVMe RAID Solution
- Dedicated PCIe 4.0 x16 host interface
- Performance-Focused PCIe Switching Architecture
- 8x Dedicated U.2 NVMe Device Channels
- Supports U.2/U.3 NVMe SSDs of any capacity or performance level
- Supports RAID 0, 1, 10 and Single-Disk Configurations
- HighPoint SafeStorage Encryption Solution
- True NVMe Hot-Plug & Hot-Swap Capability
- Comprehensive Management Suite with Real-Time SSD TBW and temperature monitoring solution
- For Linux and Windows platforms

# SSD7580C Hardware Description

## SSD7580C Layout


### SSD7580C Layout (with heat sink)

The following figure shows the key components of the SSD7580C.



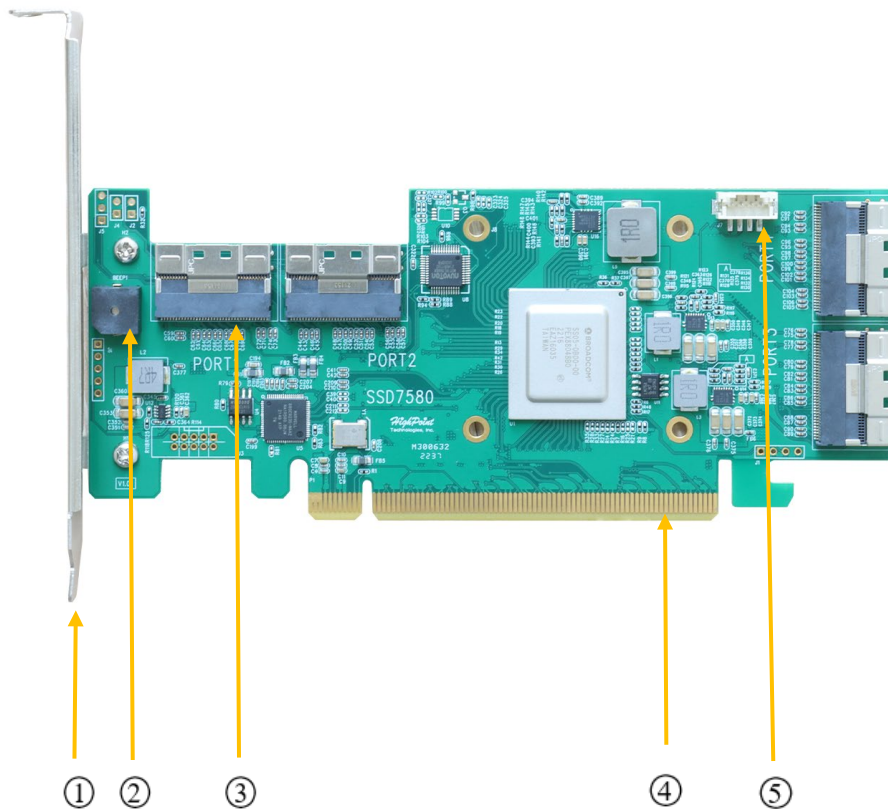
The following table describes the key components on the SSD7580C.

Number	Type	Description
①	Bracket	Full-Height bracket (optional Low-Profile bracket included) The SSD7580C is secured to the chassis by a bracket.
②	Beeper	Audible alarm. It will activate in the event of a disk related failure.
③	Storage Interface	Four SFF-8654 internal connectors Connect the adapter by cable to the storage devices.
④	Cooling Fan	Anodized aluminum heatsink with a built-in Low- Decibel fan Used to dissipate heat from electronic components that are prone to

		heat generation.
⑤	PCIe Host Interface	The interface between the storage adapter and the host system. With the PCIe interface, this connector provides power to the board.
⑥	J7	 4-pin connectors Connects the adapter to a Cooling Fan module.


### SSD7580C Layout (without heat sink)

The following figure shows the connectors and interfaces on the SSD7580C.



The following table describes the key components on the SSD7580C.

Number	Type	Description
①	Bracket	Full-Height bracket (optional Low-Profile bracket included) The SSD7580C is secured to the chassis by a bracket.

②	Beeper	Audible alarm. It will activate in the event of a disk related failure.
③	Storage Interface	Four SFF-8654 internal connectors Connect the adapter by cable to the storage devices.
④	PCIe Host Interface	The interface between the storage adapter and the host system. With the PCIe interface, this connector provides power to the board.
⑤	J7	 4-pin connectors Connects the adapter to a Cooling Fan module.

## PCIe Host Interface

The SSD7580C's PCIe 4.0 host interface provides maximum transmission.

Other PCIe host interface features include the following:

- 16-lane PCIe host interface
- Support of x16 link width
- Link transfer rate of 16 GT/s
- Sixteen-lane aggregate bandwidth of up to 28,000 MB/s

## Storage Interface

PCIe 4.0 x16 (NVMe)

- **PCIe (NVMe) interface features:**
  - Supports up to eight NVMe devices (up to x4 lanes, U.2/U.3 media)
  - Data transfer at 16 GT/s

## Basic Specifications

### Board Dimension

The SSD7580C AIC measures 6.5” in length, 2.71” in height, and 0.91” in width (depth). The component height on the top and bottom of the SSD7580C complies with the PCIe specification.

### Operating Temperature

- Work Temperature: +5°C ~ + 55°C
- Storage Temperature: -20°C ~ +80°C

### Power Supply Requirements

All power is supplied to the SSD7580C through the PCIe 3.3V rails and the 12V rail.

The SSD7580C’s power consumption is limited to 13.72W.

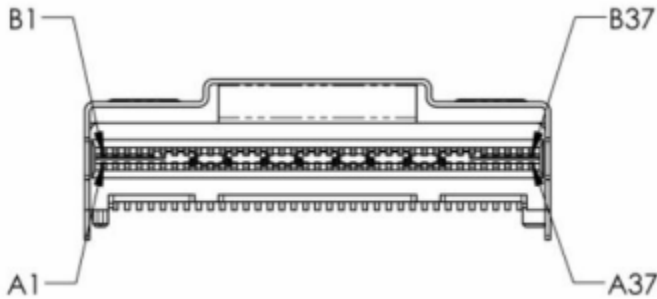


# Cable and Cabling Configuration

## SFF-8654 Pin Designations

The connector signal assignments for the internal adapter follow the SFF-8654 standard. According to the SFF-8654 specification, each x8 connector is designated as A and B.

The following figure shows the x8 SFF-8654 pinouts.



## SFF-8654 Connector Pinout

The following table defines the SSD7580C's SFF-8654 connector pinouts.

Pin	Name	Pin	Name
A1	GND	B1	GND
A2	PERp0	B2	PETp0
A3	PERn0	B3	PETn0
A4	GND	B4	GND
A5	PERp1	B5	PETp1
A6	PERn1	B6	PETn1
A7	GND	B7	GND
A8	NC	B8	U0_SCL
A9	NC	B9	U0_SDA
A10	GND	B10	GND
A11	SFF8654_LCK1_P	B11	PE_RESET#
A12	SFF8654_LCK1_N	B12	U0_CWAKE#
A13	GND	B13	GND
A14	PERp2	B14	PETp2

A15	PERn2	B15	PETn2
A16	GND	B16	GND
A17	PERp3	B17	PETp3
A18	PERn3	B18	PETn3
A19	GND	B19	GND
A20	PERp4	B20	PETp4
A21	PERn4	B21	PETn4
A22	GND	B22	GND
A23	PERp5	B23	PETp5
A24	PERn5	B24	PETn5
A25	GND	B25	GND
A26	NC	B26	U1_SCL
A27	NC	B27	U1_SDA
A28	GND	B28	GND
A29	SFF8654_LCK2_P	B29	PE_RESET#
A30	SFF8654_LCK2_N	B30	U1_CWAKE#
A31	GND	B31	GND
A32	PERp6	B32	PETp6
A33	PERn6	B33	PETn6
A34	GND	B34	GND
A35	PERp7	B35	PETp7
A36	PERn7	B36	PETn7
A37	GND	B37	GND

## **Backplane Connector**

The SSD7580C's SFF-8654 connectors can interface with a wide range of NVMe backplanes via HighPoint cabling accessories.

Backplanes that use OCuLink connectors should follow the PCI Express OCuLink Specification.

The SSD7580C supports the following backplane connectors:

- SFF-8639 connector
- SFF-8643 connector
- SFF-8654 connector
- SFF-8611 connector
- MCIO connector

## Cable Accessories

A wide selection of flexible cabling options are available for the SSD7580C, which enable the AIC to host both RAID, non-RAID, and mixed configurations of U.2/U.3 or M.2 NVMe SSDs, via SFF-8639, SFF-8643, SFF-8654, SFF-8611 and MCIO connectors.

The following sections indicate the cable pinout and cable connections diagram for supported cable accessories.

### TS8i-8639-060

SFF-8654 Host to U.2 SFF-8639 Device cable with a 15-pin SATA power connector. Each cable supports two U.2 NVMe SSDs. Length 0.6M.

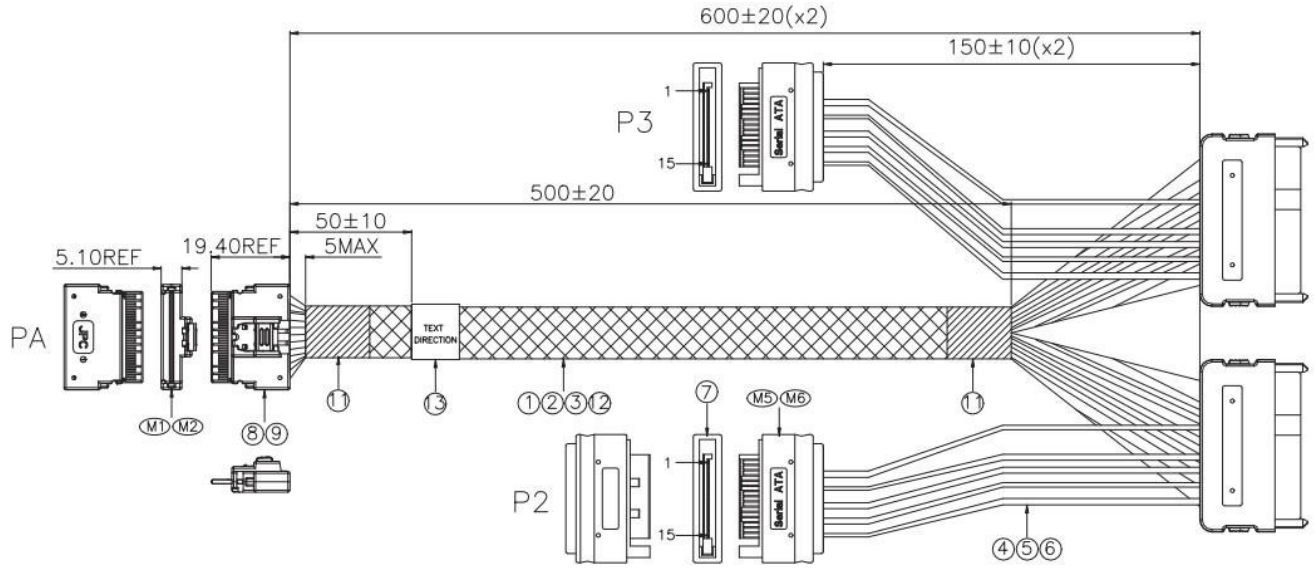
#### Cable Diagram

SFF-8654



## Cable Drawings and Pinouts

The following figure shows the pinout for the HighPoint TS8i-8639-060 cable, an x8 SFF-8654 to 2 x4 SFF-8639 connection.



WIRING TABLE

PA		P0		
GROUND	A1	E9	GROUND	
PERp0	A2	E14	PERp0	
PERn0	A3	E13	PERn0	
GROUND	A4	E12/S16	GROUND	
PERp1	A5	S21	PERp1	
PERn1	A6	S20	PERn1	
GROUND	A7	S19	GROUND	
BP_TYPEA(SB7)	A8	N/C		
ZW_RSTA(SB4)	A9	N/C		
SB3	A10	N/C		
REFCLKA+	A11	E7	REFCLK+	
REFCLKA-	A12	E8	REFCLK-	
GROUND	A13	E9/S22	GROUND	
PERp2	A14	S27	PERp2	
PERn2	A15	S26	PERn2	
GROUND	A16	S25/E16	GROUND	
PERp3	A17	E21	PERp3	
PERn3	A18	E20	PERn3	
GROUND	A19	E19	GROUND	
GROUND	B1	E15	GROUND	
PETp0	B2	E10	PETp0	
PETn0	B3	E11	PETn0	
GROUND	B4	E12/S22	GROUND	
PETp1	B5	S17	PETp1	
PETn1	B6	S18	PETn1	
GROUND	B7	S19	GROUND	
ZW-CLKB(SB0)	B8	RED	E23	SMB_CLK
ZW-SDAA(SB1)	B9	BLUE	E24	SMB_DAT
SB2	B10	N/C	E25	
PERSTA(SB5)	B11	YELLOW	E5	PERST#
CPRSNTA(SB6)	B12	GREEN	P10	PRNST#
GROUND	B13	S28	GROUND	
PETp2	B14	S23	PETp2	
PETn2	B15	S24	PETn2	
GROUND	B16	S25/E22	GROUND	
PETp3	B17	E17	PETp3	
PETn3	B18	E18	PETn3	
GROUND	B19	E19	GROUND	

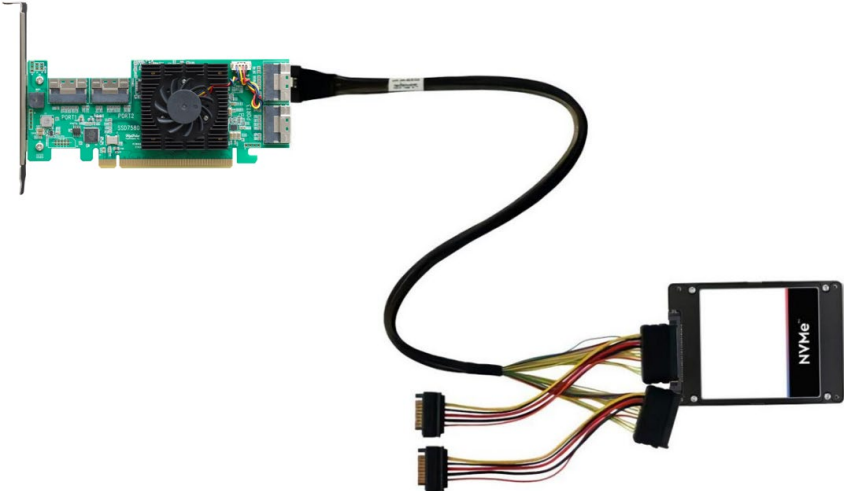
PA		P1		
GROUND	A19	E9	GROUND	
PERp4	A20	E14	PERp0	
PERn4	A21	E13	PERn0	
GROUND	A22	E12/S16	GROUND	
PERp5	A23	S21	PERp1	
PERn5	A24	S20	PERn1	
GROUND	A25	S19	GROUND	
BP_TYPEB(SB7)	A26	N/C		
ZW_RSTB(SB4)	A27	N/C		
SB3	A28	N/C		
REFCLKB+	A29	E7	REFCLK+	
REFCLKB-	A30	E8	REFCLK-	
GROUND	A31	E9/S22	GROUND	
PERp6	A32	S27	PERp2	
PERn6	A33	S26	PERn2	
GROUND	A34	S25/E16	GROUND	
PERp7	A35	E21	PERp3	
PERn7	A36	E20	PERn3	
GROUND	A37	E19	GROUND	
GROUND	B19	E15	GROUND	
PETp4	B20	E10	PETp0	
PETn4	B21	E11	PETn0	
GROUND	B22	E12/S22	GROUND	
PETp5	B23	S17	PETp1	
PETn5	B24	S18	PETn1	
GROUND	B25	S19	GROUND	
ZW-CLKB(SB0)	B26	RED	E23	SMB_CLK
ZW-SDAB(SB1)	B27	BLUE	E24	SMB_DAT
SB2	B28	N/C	E25	
PERSTB(SB5)	B29	YELLOW	E5	PERST#
CPRSNTB(SB6)	B30	GREEN	P10	PRNST#
GROUND	B31	S28	GROUND	
PETp6	B32	S23	PETp2	
PETn6	B33	S24	PETn2	
GROUND	B34	S25/E22	GROUND	
PETp7	B35	E17	PETp3	
PETn7	B36	E18	PETn3	
GROUND	B37	E19	GROUND	

P1		P3		
3.3V	E3	ORANGE(26AWG)	1	3.3V
3.3V	P1	nc	2	3.3V
3.3V	P2	nc	3	3.3VPre
3.3VPre	P3	nc	4	GND
GND	P4	BLACK(18AWG)	5	GND
GND	P5	nc	6	GND
GND	P6	nc	7	5VPre
5VPre	P7	RED(18AWG)	8	5V
5V	P8	nc	9	5V
5V	P9	nc	10	GND
GND	P11	BLACK(24AWG)	11	GND
GND	P12	nc	12	GND
12VPre	P13	YELLOW(18AWG)	13	12VPre
12V	P14	nc	14	12V
12V	P15	nc	15	12V

P0		P2		
3.3V	E3	ORANGE(26AWG)	1	3.3V
3.3V	P1	nc	2	3.3V
3.3V	P2	nc	3	3.3VPre
3.3VPre	P3	nc	4	GND
GND	P4	BLACK(18AWG)	5	GND
GND	P5	nc	6	GND
GND	P6	nc	7	5VPre
5VPre	P7	RED(18AWG)	8	5V
5V	P8	nc	9	5V
5V	P9	nc	10	GND
GND	P11	BLACK(24AWG)	11	GND
GND	P12	nc	12	GND
12VPre	P13	YELLOW(18AWG)	13	12VPre
12V	P14	nc	14	12V
12V	P15	nc	15	12V

**Cable Connection**

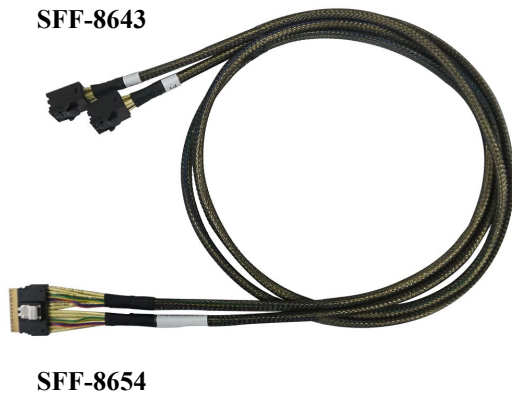
The following figure shows the connection of a U.2 SSD to the SSD7580C using the TS8i-8639-060 cable.



## 8654-8643-210

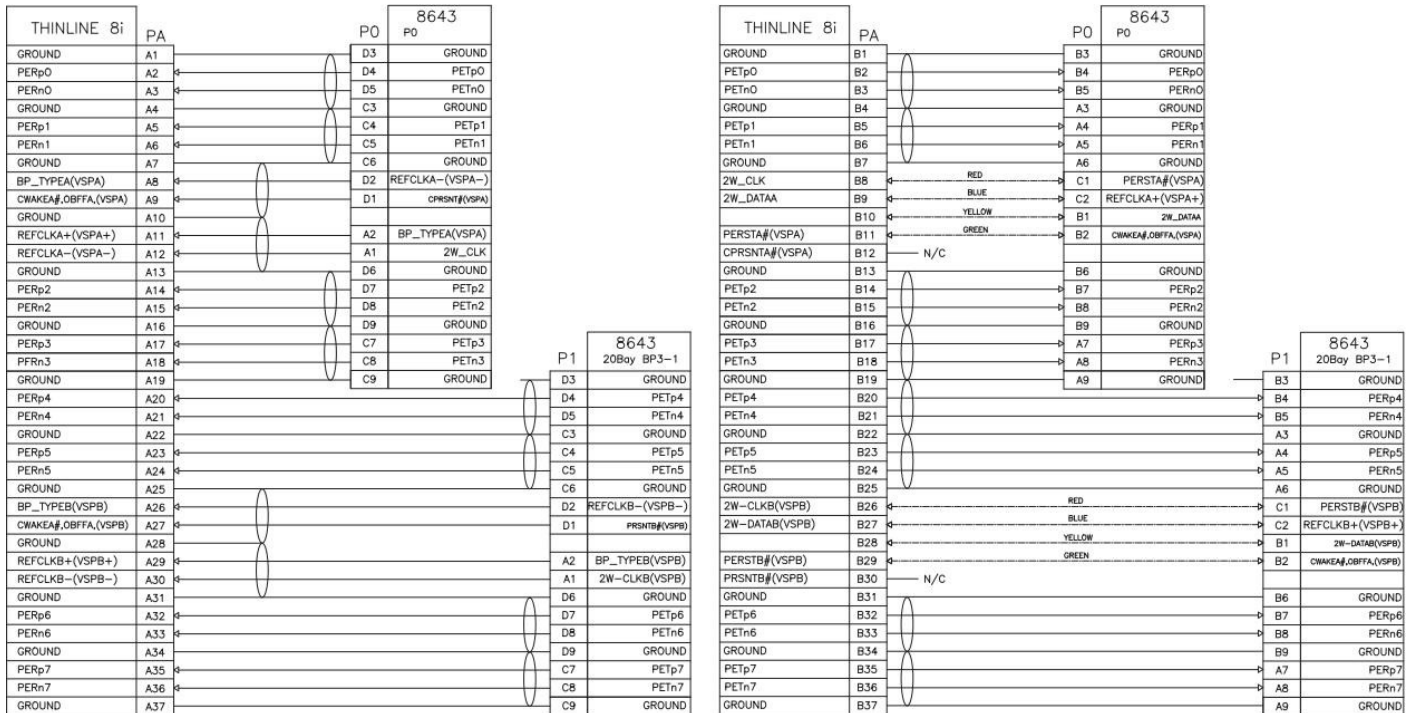
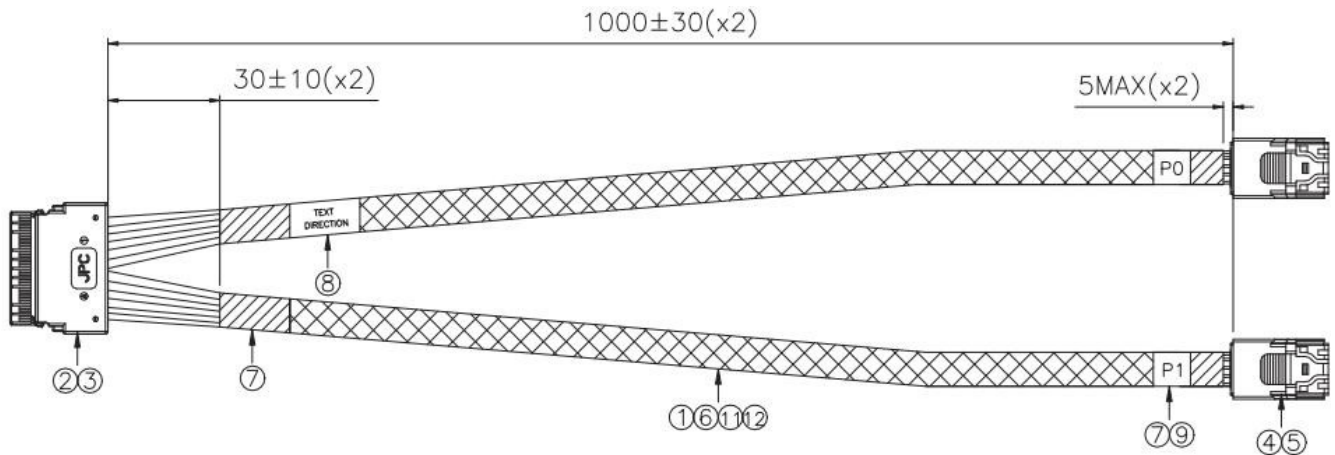
SFF-8654 Host to SFF-8643 Device cable. Each cable can host up to 2x NVMe SSDs. Length 1M.

### Cable Diagram



## Cable Drawings and Pinouts

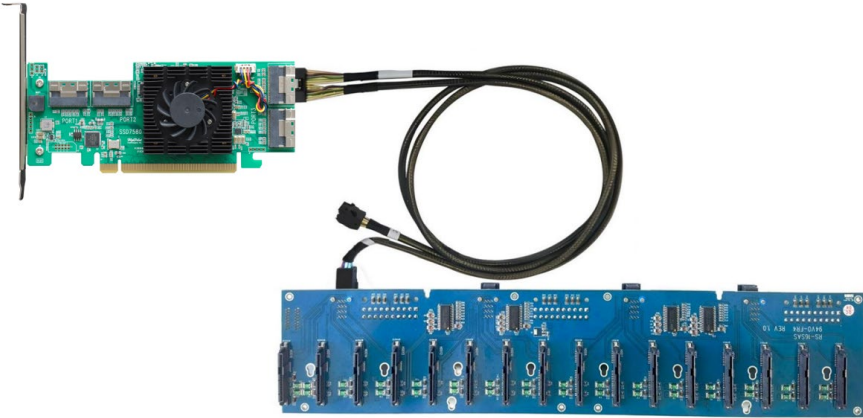
The following figure shows the pinout for the HighPoint 8654-8643-210 cable, an x8 SFF-8654 to 2 x4 SFF-8643 connection.





**Cable Connection**

The following figure shows the connection of the backplane to the SSD7580C using the 8654-8643-210 cable.



## 8654-8611-205

SFF-8654 (host) to SFF-8611 OCuLink Device cable. Each cable can host up to 2x NVMe SSDs. Length 0.5M.

### Cable Diagram

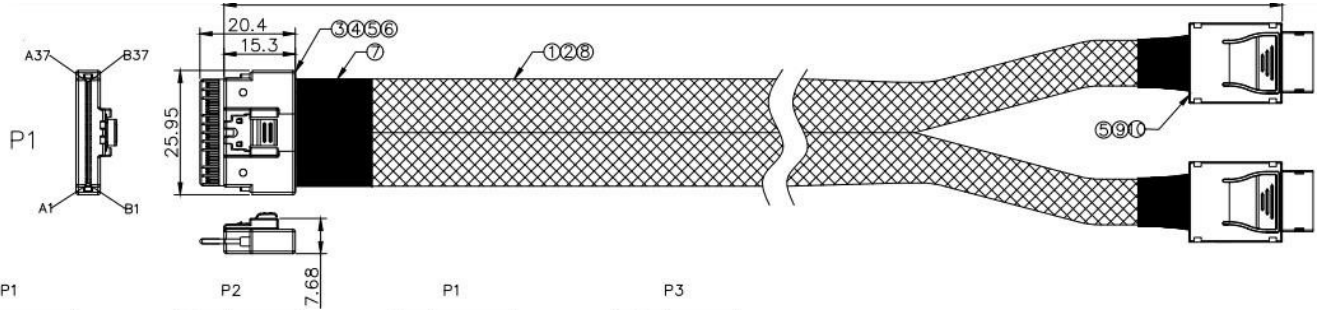
SFF-8611



SFF-8654

## Cable Drawings and Pinouts

The following figure shows the pinout for the HighPoint 8654-8611-205 cable, an x8 SFF-8654 to 2 x4 SFF-8611 connection.



P1		P2		P1		P3	
B19	GND	A20	GND	B37	GND	A20	GND
B18	TX3-	A19	RX3-	B36	TX7-	A19	RX3-
B17	TX3+	A18	RX3+	B35	TX7+	A18	RX3+
B16	GND	A17	GND	B34	GND	A17	GND
B15	TX2-	A16	RX2-	B33	TX6-	A16	RX2-
B14	TX2+	A15	RX2+	B32	TX6+	A15	RX2+
B13	GND	A14	GND	B31	GND	A14	GND
B12	SB 6A	A13	SB 6A	B30	SB 6A	A13	SB 6A
B11	SB 2A	A12	SB 2A	B29	SB 2A	A12	SB 2A
B10	SB 8A	A11	SB 8A	B28	SB 8A	A11	SB 8A
B9	SB 1A	A10	SB 1A	B27	SB 1A	A10	SB 1A
B8	SB 0A	A9	SB 0A	B26	SB 0A	A9	SB 0A
B7	GND	A8	GND	B25	GND	A8	GND
B6	TX1-	A7	RX1-	B24	TX5-	A7	RX1-
B5	TX1+	A6	RX1+	B23	TX5+	A6	RX1+
B4	GND	A5	GND	B22	GND	A5	GND
B3	TX0-	A4	RX0-	B21	TX4-	A4	RX0-
B2	TX0+	A3	RX0+	B20	TX4+	A3	RX0+
B1	GND	A2	GND	B19	GND	A2	GND
A19	GND	B20	GND	A37	GND	B20	GND
A18	RX3-	B19	TX3-	A36	RX7-	B19	TX3-
A17	RX3+	B18	TX3+	A35	RX7+	B18	TX3+
A16	GND	B17	GND	A34	GND	B17	GND
A15	RX2-	B16	TX2-	A33	RX6-	B16	TX2-
A14	RX2+	B15	TX2+	A32	RX6+	B15	TX2+
A13	GND	B14	GND	A31	GND	B14	GND
A12	SB 5A	B13	SB 5A	A30	SB 5A	B13	SB 5A
A11	SB 4A	B12	SB 4A	A29	SB 4A	B12	SB 4A
A10	SB 9A	B11	SB 9A	A28	SB 9A	B11	SB 9A
A9	SB 3A	B10	SB 3A	A27	SB 3A	B10	SB 3A
A8	SB 7A	B9	SB 7A	A26	SB 7A	B9	SB 7A
A7	GND	B8	GND	A25	GND	B8	GND
A6	RX1-	B7	TX1-	A24	RX5-	B7	TX1-
A5	RX1+	B6	TX1+	A23	RX5+	B6	TX1+
A4	GND	B5	GND	A22	GND	B5	GND
A3	RX0-	B4	TX0-	A21	RX4-	B4	TX0-
A2	RX0+	B3	TX0+	A20	RX4+	B3	TX0+
A1	GND	B2	GND	A19	GND	B2	GND

**Cable Connection**

The following figure shows the connection of the disk box to the SSD7580C using the 8654-8611-205 cable.



## 8654-8654-110

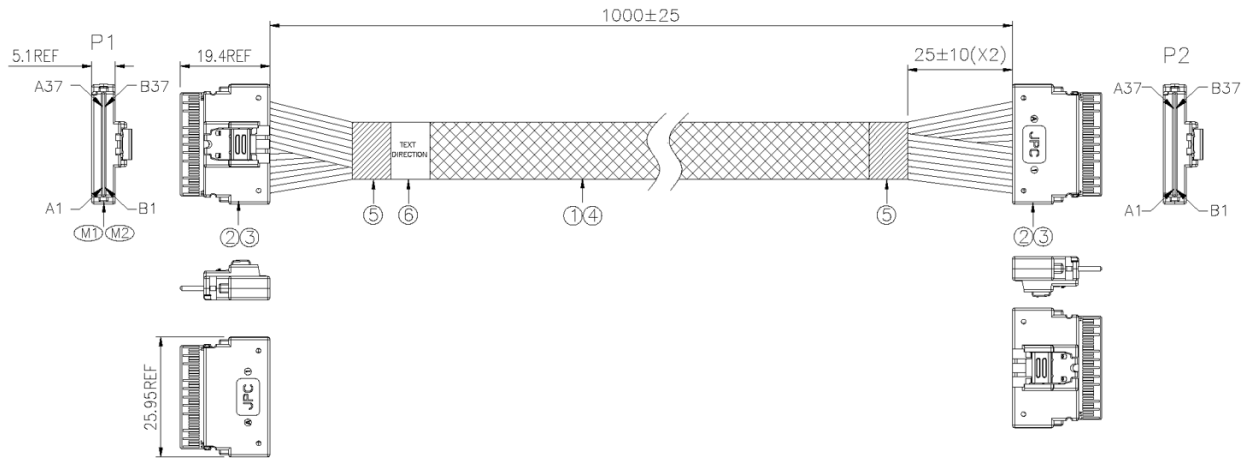
SFF-8654 to SFF-8654 cable. Each cable can host up to two NVMe SSDs. Length 1M.

### Cable Diagram



## Cable Drawings and Pinouts

The following figure shows the pinout for the HighPoint 8654-8654-110 cable, an x8 SFF-8654 to 1 x4 SFF-8654 connection.



P1		P2			
GROUND	B37	B37	A37	A37	GROUND
TX7-	B36	B36	A36	A36	RX7-
TX7+	B35	B35	A35	A35	RX7+
GROUND	B34	B34	A34	A34	GROUND
TX6-	B33	B33	A33	A33	RX6-
TX6+	B32	B32	A32	A32	RX6+
GROUND	B31	B31	A31	A31	GROUND
SIDEBAND	B30	B30	A30	A30	SIDEBAND
SIDEBAND	B29	B29	A29	A29	SIDEBAND
GROUND	B28	B28	A28	A28	GROUND
SIDEBAND	B27	B27	A27	A27	SIDEBAND
SIDEBAND	B26	B26	A26	A26	SIDEBAND
GROUND	B25	B25	A25	A25	GROUND
TX5-	B24	B24	A24	A24	RX5-
TX5+	B23	B23	A23	A23	RX5+
GROUND	B22	B22	A22	A22	GROUND
TX4-	B21	B21	A21	A21	RX4-
TX4+	B20	B20	A20	A20	RX4+
GROUND	B19	B19	A19	A19	GROUND
TX3-	B18	B18	A18	A18	RX3-
TX3+	B17	B17	A17	A17	RX3+
GROUND	B16	B16	A16	A16	GROUND
TX2-	B15	B15	A15	A15	RX2-
TX2+	B14	B14	A14	A14	RX2+
GROUND	B13	B13	A13	A13	GROUND
SIDEBAND	B12	B12	A12	A12	SIDEBAND
SIDEBAND	B11	B11	A11	A11	SIDEBAND
GROUND	B10	B10	A10	A10	GROUND
SIDEBAND	B9	B9	A9	A9	SIDEBAND
SIDEBAND	B8	B8	A8	A8	SIDEBAND
GROUND	B7	B7	A7	A7	GROUND
TX1-	B6	B6	A6	A6	RX1-
TX1+	B5	B5	A5	A5	RX1+
GROUND	B4	B4	A4	A4	GROUND
TX0-	B3	B3	A3	A3	RX0-
TX0+	B2	B2	A2	A2	RX0+
GROUND	B1	B1	A1	A1	GROUND

P1		P2			
GROUND	A37	A37	B37	B37	GROUND
RX7-	A36	A36	B36	B36	TX7-
RX7+	A35	A35	B35	B35	TX7+
GROUND	A34	A34	B34	B34	GROUND
RX6-	A33	A33	B33	B33	TX6-
RX6+	A32	A32	B32	B32	TX6+
GROUND	A31	A31	B31	B31	GROUND
SIDEBAND	A30	A30	B30	B30	SIDEBAND
SIDEBAND	A29	A29	B29	B29	SIDEBAND
GROUND	A28	A28	B28	B28	GROUND
SIDEBAND	A27	A27	B27	B27	SIDEBAND
SIDEBAND	A26	A26	B26	B26	SIDEBAND
GROUND	A25	A25	B25	B25	GROUND
RX5-	A24	A24	B24	B24	TX5-
RX5+	A23	A23	B23	B23	TX5+
GROUND	A22	A22	B22	B22	GROUND
RX4-	A21	A21	B21	B21	TX4-
RX4+	A20	A20	B20	B20	TX4+
GROUND	A19	A19	B19	B19	GROUND
RX3-	A18	A18	B18	B18	TX3-
RX3+	A17	A17	B17	B17	TX3+
GROUND	A16	A16	B16	B16	GROUND
RX2-	A15	A15	B15	B15	TX2-
RX2+	A14	A14	B14	B14	TX2+
GROUND	A13	A13	B13	B13	GROUND
SIDEBAND	A12	A12	B12	B12	SIDEBAND
SIDEBAND	A11	A11	B11	B11	SIDEBAND
GROUND	A10	A10	B10	B10	GROUND
SIDEBAND	A9	A9	B9	B9	SIDEBAND
SIDEBAND	A8	A8	B8	B8	SIDEBAND
GROUND	A7	A7	B7	B7	GROUND
RX1-	A6	A6	B6	B6	TX1-
RX1+	A5	A5	B5	B5	TX1+
GROUND	A4	A4	B4	B4	GROUND
RX0-	A3	A3	B3	B3	TX0-
RX0+	A2	A2	B2	B2	TX0+
GROUND	A1	A1	B1	B1	GROUND

**Cable Connection**



# 8654-CIO8-110

SFF-8654 Host to MCIO 8i Device cable. Each cable can host up to two NVMe SSDs. Length: 1M.

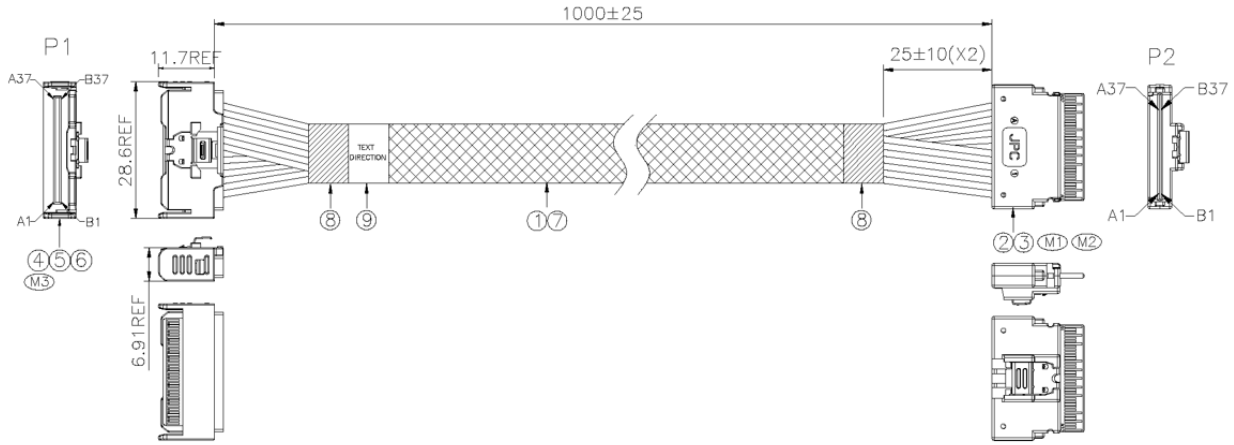
## Cable Diagram





## Cable Drawings and Pinouts

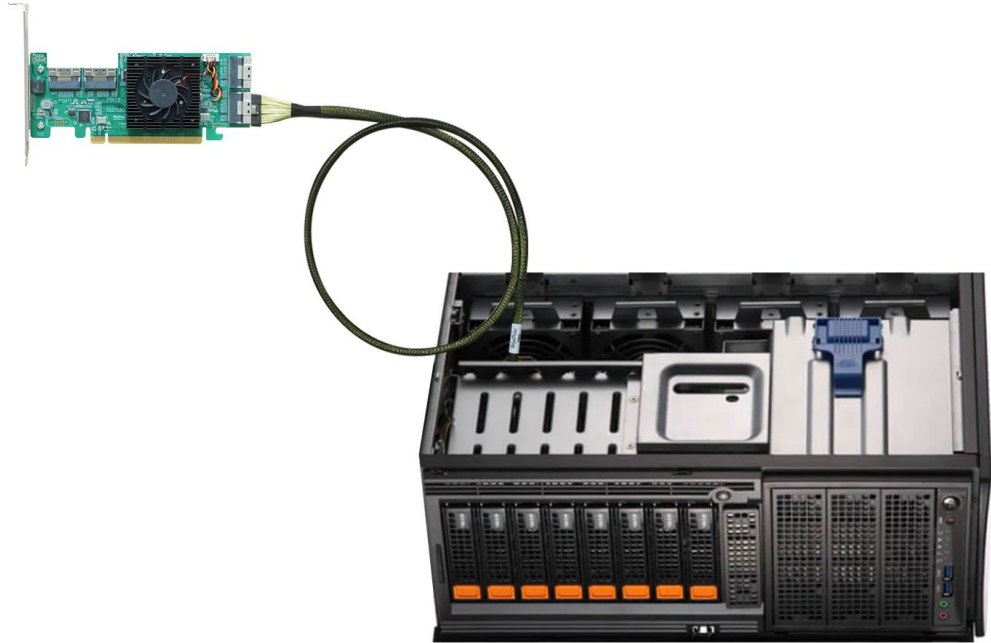
The following figure shows the pinout for the HighPoint 8654- CIO8-110 cable, an x8 SFF-8654 to 1 x4 MCIO connection.



P1		P2	
GROUND	B37	A37	A37
TX7-	B36	A36	A36
TX7+	B35	A35	A35
GROUND	B34	A34	A34
TX6-	B33	A33	A33
TX6+	B32	A32	A32
GROUND	B31	A31	A31
SIDEBAND	B30	A30	A30
SIDEBAND	B29	A29	A29
GROUND	B28	A28	A28
SIDEBAND	B27	A27	A27
SIDEBAND	B26	A26	A26
GROUND	B25	A25	A25
TX5-	B24	A24	A24
TX5+	B23	A23	A23
GROUND	B22	A22	A22
TX4-	B21	A21	A21
TX4+	B20	A20	A20
GROUND	B19	A19	A19
TX3-	B18	A18	A18
TX3+	B17	A17	A17
GROUND	B16	A16	A16
TX2-	B15	A15	A15
TX2+	B14	A14	A14
GROUND	B13	A13	A13
SIDEBAND	B12	A12	A12
SIDEBAND	B11	A11	A11
GROUND	B10	A10	A10
SIDEBAND	B9	A9	A9
SIDEBAND	B8	A8	A8
GROUND	B7	A7	A7
TX1-	B6	A6	A6
TX1+	B5	A5	A5
GROUND	B4	A4	A4
TX0-	B3	A3	A3
TX0+	B2	A2	A2
GROUND	B1	A1	A1

P1		P2	
GROUND	A37	B37	B37
RX7-	A36	B36	B36
RX7+	A35	B35	B35
GROUND	A34	B34	B34
RX6-	A33	B33	B33
RX6+	A32	B32	B32
GROUND	A31	B31	B31
SIDEBAND	A30	B30	B30
SIDEBAND	A29	B29	B29
GROUND	A28	B28	B28
SIDEBAND	A27	B27	B27
SIDEBAND	A26	B26	B26
GROUND	A25	B25	B25
RX5-	A24	B24	B24
RX5+	A23	B23	B23
GROUND	A22	B22	B22
RX4-	A21	B21	B21
RX4+	A20	B20	B20
GROUND	A19	B19	B19
RX3-	A18	B18	B18
RX3+	A17	B17	B17
GROUND	A16	B16	B16
RX2-	A15	B15	B15
RX2+	A14	B14	B14
GROUND	A13	B13	B13
SIDEBAND	A12	B12	B12
SIDEBAND	A11	B11	B11
GROUND	A10	B10	B10
SIDEBAND	A9	B9	B9
SIDEBAND	A8	B8	B8
GROUND	A7	B7	B7
RX1-	A6	B6	B6
RX1+	A5	B5	B5
GROUND	A4	B4	B4
RX0-	A3	B3	B3
RX0+	A2	B2	B2
GROUND	A1	B1	B1

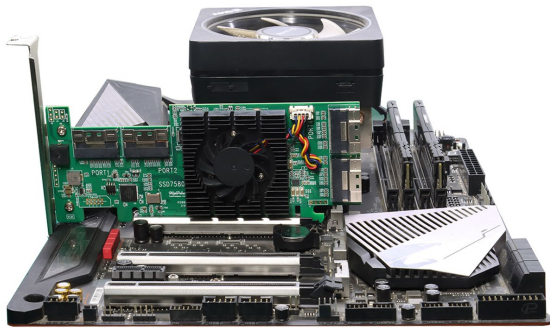
**Cable Connection**



## SSD7580C Installation

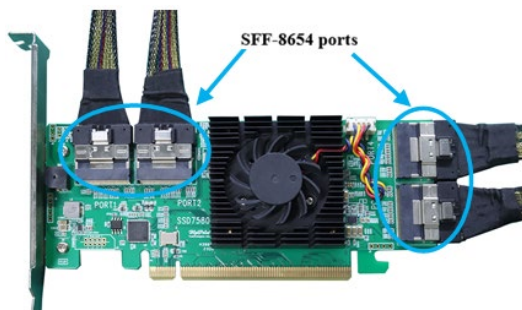
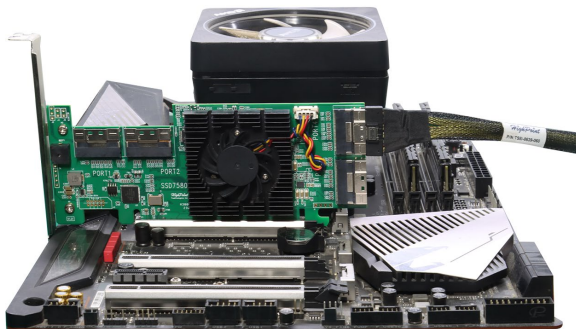
SSD7580C Installation Procedure:

1. Use a wired ESD wrist strap that is properly grounded.
2. Unpack and remove the SSD7580C, check the SSD7580C for damage. If the SSD7580C appears damaged, please contact HighPoint Technical Support.
3. Shut down the system, disconnect the AC power cord and remove the computer cover.
4. Insert the SSD7580C into one of the system's open PCIe 3.0/ 4.0/ 5.0 x16 slots.



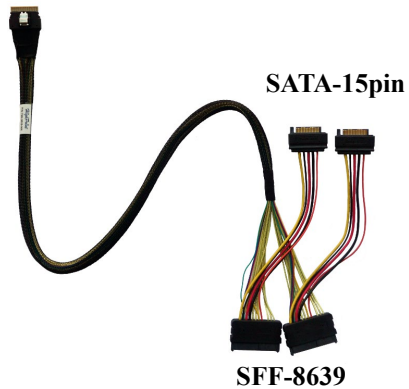
**Note:** If your system requires it, replace the Full-Height bracket on the SSD7580C with the included Low-Profile bracket.

5. Connect SFF-8654 port to SSD7580C.



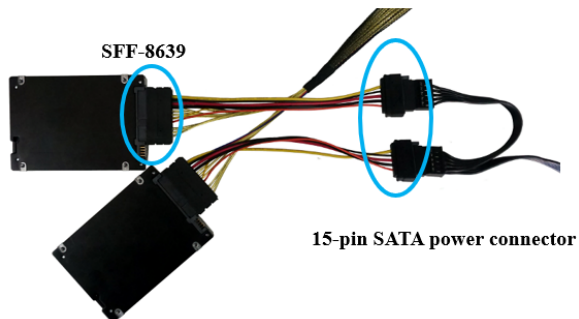
6. Configure and install the NVMe SSDs to the computer.
  - a). The following procedure explains how to connect U.2 NVMe SSDs directly to the SSD7580C using HighPoint TS8i-8639-060 NVMe cables.

**SFF-8654**



**Note:** The SSD7580C provides four device ports which utilize SFF-8654 connectors. These ports accept a variety of HighPoint Certified [Cable Accessories](#).

- b). Connect two pieces of NVMe SSDs with SFF-8639 port, and connect SFF-8654 port to SSD7580C. Connect the 15-pin SATA power connector to the system's power supply.



7. Connect the remaining NVMe SSDs to the SSD7580C as described above.
8. When finished, turn on the power to the system.

**Notes:**

*Please make sure the cables are securely connected to the SSD7580C's device ports and the NVMe SSDs or backplane. Loose connections can lead to a variety of problems including instability, slower than expected performance and broken RAID arrays or dropped disks.*

*If you encounter any problems with damaged parts (e.g. fans, screws, etc.) during use, you need to contact our customer support team for professional help and guidance to avoid unexpected situations. You will be responsible for all the consequences of solving the problem by yourself.*

## Resources

A variety of manuals, guides and FAQs are available for the SSD7580C NVMe RAID AIC.

For Documentation and more information about this product, please visit the following website:

<https://www.highpoint-tech.com/nvme1/ssd7580C>

### **Certified Accessories:**

<https://www.highpoint-tech.com/nvme-accessories>

### **FAQ & Troubleshooting:**

[FAQ - HighPoint Technologies, Inc. \(helpjuice.com\)](https://www.highpoint-tech.com/helpjuice.com)

## Technical Support Contacts

If you encounter any problems while utilizing the SSD7580C, or have any questions about this or any other HighPoint Technologies, Inc. product, feel free to contact our Customer Support Department.

### **Web Support:**

<https://www.highpoint-tech.com/support-and-services>

### **HighPoint Technologies, Inc. websites:**

<https://www.highpoint-tech.com>

## Revision History

**Version 1.00, January 8, 2024**

Initial version.