

## Model No.: CABLE-MC8C8F75



### 1. Product Overview

The Athena CABLE-MC8C8F75 is a high-speed interconnect cable assembly designed for PCI Express (PCIe) Gen4 and Gen5 data transmission. It features MCIO 8i to MCIO 8i connectors that meet the SFF-TA-1016 mechanical specification. With premium 3M twin-ax flexible flat cable, the assembly achieves low insertion loss, strong signal integrity, and reliable EMI performance.

The cable is optimized for enterprise servers, JBODs, RAID subsystems, and storage backplane applications.

### 2. Main Features

- Compliant with PCI Express Gen4 and Gen5 protocols (32 GT/s).
- MCIO 8i male-to-male straight connectors, per SFF-TA-1016 specification.
- 85  $\Omega$  impedance with silver-coated copper twin-ax conductors.
- Premium 3M flexible flat ribbon cable allows 90° and 180° bending.
- Enhanced shielding reduces crosstalk and EMI for signal integrity.
- Slim profile for high-density system integration.
- Latch mechanism provides secure and reliable connection.
- Fully RoHS compliant with UL94-V0 flame retardant housing materials.
- Optimized for servers, JBODs, RAID, and industrial storage applications.

### 3. Technical Specifications

Product Description	MCIO 8i to MCIO 8i high-speed cable assembly
Connector Type	MCIO 8i (Male) to MCIO 8i (Male) Straight
Cable Length	750 mm ± 10 mm tolerance
Conductor	Silver-coated copper, twin-ax shielded
Impedance	85 Ω ± 10%
Data Rate	32 GT/s (PCIe Gen5)
Current Rating	0.5 A per contact
Operating Temperature	0°C to +70°C
Cable Color	Black
Material	High-purity copper conductors, glass-filled LCP housing, stainless latch
Compliance	RoHS, SFF-TA-1016, PCIe Gen5
Country of Origin	China

### 4. Mechanical Structure Reference

This cable follows the MCIO 8X Straight-to-Straight Drawing , ensuring proper pin assignment and signal mapping between transmit (TX) and receive (RX) pairs.

Each differential pair is individually shielded, and all ground pins are bus-connected to ensure signal integrity.

### 5. Applications

- Enterprise-class servers and storage systems
- JBOD and RAID subsystems
- High-performance computing clusters
- Industrial control and automation equipment
- AI data centers with NVMe Gen5 storage nodes

### 6. Ordering Information

Model No.	Description	Remark
CABLE-MC8C8F75	High-Speed MCIO 8i to MCIO 8i Flat Cable Assembly, PCIe Gen4/Gen5, 85Ω	Length: 750 mm, Black Color, RoHS Compliant

ATHENA COMPUTER POWER CORP.  
reserves the right to make changes to the product at any time without notice.