

## DESCRIPTION

The SH51-01 Raptor is an optical subassembly (OSA) that transmits up to 48 Gbps of data (4 x 12 Gbps) PLUS includes a bidirectional 2.5 Gbps side-band channel for control and communication, all on **just one multimode fiber**. The module has a ZIF-terminated flex circuit and accepts a standard SC optical connector. With integrated drivers and amplifiers, the SR51-01 eliminates the need for in-house optical design expertise for all your video, machine vision, and other high-speed solutions.



## FEATURES

- Capable of HDMI 2.1, DisplayPort 1.4, USB 3.x SuperSpeed 10 Gbps signals, and more
- Four TX lanes at 12 Gbps each for 48 Gbps data links
- Bidirectional side-band channel supports up to 2.5 Gbps full-duplex communication
- Onboard micro for non-volatile configuration
- All data multiplexed onto a single multimode fiber
- Accepts standard SC-terminated 50-micron fiber
- Allows FCC Class B compliance at customer end product level

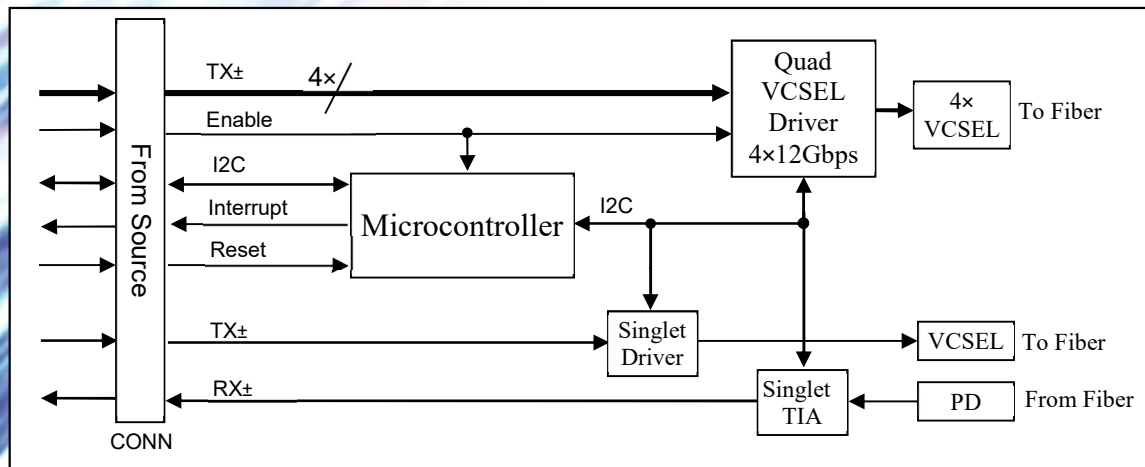
## APPLICATIONS

- HDMI™, Display Port Matrix switches
- Optical Extenders
- Machine Vision Camera Bus

## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
TX6A-SR51-01	4x12 Gbps Transmitter Optical Subassembly + 2.5 Gbps Bi-di
TX6A-SR51-01C	-01 OSA, with clip for retaining SC fiber
TX6A-SR51-01H	-01 OSA, with clip and heatsink

## BLOCK DIAGRAM



## DESCRIPTION

The SH51-01 Raptor is an optical subassembly (OSA) that receives up to 48 Gbps of data (4 x 12 Gbps) PLUS includes a bidirectional 2.5 Gbps side-band channel for control and communication, all on **just one multimode fiber**. The module has a ZIF-terminated flex circuit and accepts a standard SC optical connector. With integrated drivers and amplifiers, the SR51-01 eliminates the need for in-house optical design expertise for all your video, machine vision, and other high-speed solutions.



## FEATURES

- Capable of HDMI 2.1, DisplayPort 1.4, and USB 3.x SuperSpeed 10 Gbps signals, and more
- Four RX lanes at 12 Gbps each for 48 Gbps data links
- Bidirectional side-band channel supports up to 2.5 Gbps full-duplex communication
- Onboard micro for non-volatile configuration
- All data multiplexed onto a single multimode fiber
- Accepts standard SC-terminated 50-micron fiber
- Allows FCC Class B compliance at customer end product level

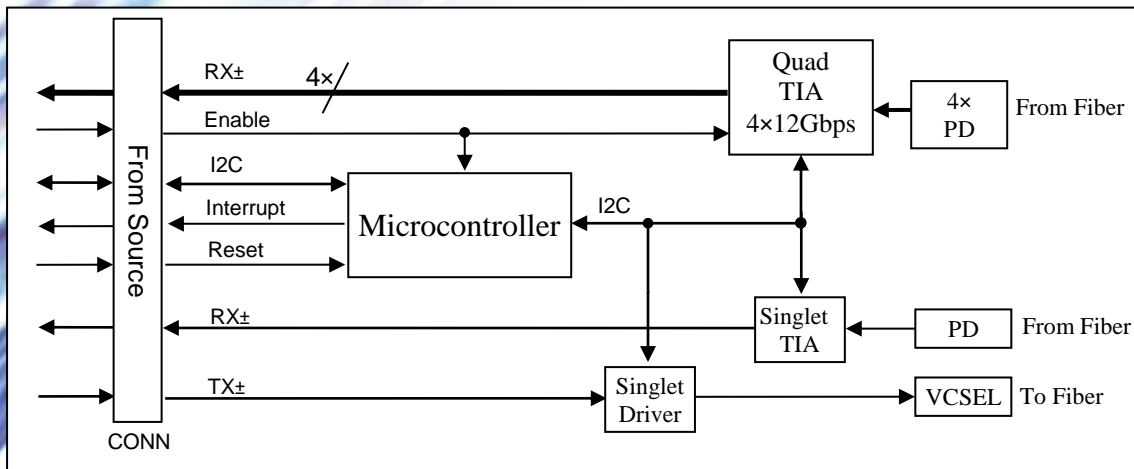
## APPLICATIONS

- HDMI™, DisplayPort Matrix switches
- Optical Extenders
- Machine Vision Camera Bus

## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
RX6A-SR51-01	4x12 Gbps Receiver Optical Subassembly + 2.5 Gbps Bi-di
RX6A-SR51-01C	-01 OSA, with clip for retaining SC fiber
RX6A-SR51-01H	-01 OSA, with clip and heatsink

## BLOCK DIAGRAM



Complete datasheets and specifications are available under non-disclosure agreement (NDA).

Our experienced design team is available to help you get started today!

Contact Inneos: [contact@inneos.com](mailto:contact@inneos.com)