### **Highlights**

- High-reliability PCle: robust error containment, hot- and surprise-plug controllers per port, end-to-end data integrity protection, ECC protection on RAMs, high-quality, lowpower SERDES
- Comprehensive diagnostics and debugging: PCle generator and analyzer, per-port performance and error counters, multiple loopback modes and real-time eye capture
- Significant power, cost and board space savings with support for:
  - Up to 48 ports, 48 NTBs and 24 virtual switch partitions
  - Flexible x2, x4, x8 and x16 port bifurcation with no restrictions on configuring ports as either upstream or downstream or on mapping ports to NTBs

#### Peripheral I/O Interfaces

- Up to 11 Two-Wire Interfaces (TWIs) with SMBus support
- Up to 2 SFF-8485-compliant SGPIO ports
- Up to 109 parallel GPIO pins
- Up to 4 UARTs
- JTAG and EJTAG interface

#### High-Speed I/O

- PCle Gen3 8 GT/s
- Supports PCle-compliant link training and manual PHY configuration

#### **Power Management**

- Active State Power Management (ASPM)
- Software controlled power management

#### **Chiplink Diagnostic Tools**

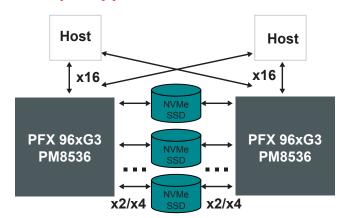
- Extensive debug, diagnostics, configuration and analysis tools with an intuitive GUI
- Access to configuration data, management capabilities and signal integrity analysis tools (such as real-time eye capture)
- Connects to device over in-band PCle or sideband signals (UART, TWI and EJTAG)

#### **Evaluation Kit**

The evaluation kit is a device evaluation environment supporting multiple host and SSD interfaces. These kits can be used for evaluation of the Switchtec PCle Fanout switches. Note that a 96-lane PCle switch is populated on the evaluation kit. The following kit is available:

PM5461-KIT - PAX/PSX/PFX/PFX-I/PFX-L 96/80/64×G3
 PCle Switch HD Evaluation Kit (PMC-2151996)

## **Example Application**



## **Ordering Information**

Product	Lanes	Ports/NTBs	Partitions	Hot-plug Controllers	Package	PFX Ordering No.	PFX-I Ordering No.
96xG3 PCIe Fanout Switch	96	48	24	48	37.5 mm x 37.5 mm	PM8536B-FEI	PM8576B-FEI
80xG3 PCIe Fanout Switch	80	40	20	40	37.5 mm x 37.5 mm	PM8535B-FEI	PM8575B-FEI
64xG3 PCIe Fanout Switch	64	32	16	32	37.5 mm x 37.5 mm	PM8534B-FEI	PM8574B-FEI
48xG3 PCIe Fanout Switch	48	24	12	24	27.0 mm x 27.0 mm	PM8533B-F3EI	PM8573B-F3EI
32xG3 PCle Fanout Switch	32	16	8	16	27.0 mm x 27.0 mm	PM8532B-F3EI	PM8572B-F3EI
24xG3 PCle Fanout Switch	24	12	6	12	27.0 mm x 27.0 mm	PM8531B-F3EI	PM8571B-F3El

The Microchip name and logo and the Microchip logo are registered trademarks and Switchtec is a trademark of Microchip Technology Incorporated in the U.S.A. and other countries. All other trademarks mentioned herein are property of their respective companies.

© 2019, Microchip Technology Incorporated. All Rights Reserved. 2/19

DS00002849B



# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

# Microchip:

<u>PM8532B-F3EI</u> <u>PM8536B-FEI</u> <u>PM8535B-FEI</u> <u>PM8572B-F3EI</u> <u>PM8575B-FEI</u> <u>PM8571B-F3EI</u> <u>PM8574B-FEI</u> PM8576B-FEI