The Arria V GZ Hard IP for PCI Express®, Avalon-MM Arria V GZ Hard IP for PCI Express, and Avalon-MM 256-Bit Hard IP for PCI Express IP Cores now have separate user guides. The Avalon-MM 256-Bit Hard IP for PCI Express IP Core is available for Gen2 x8, Gen3 x4, and Gen3 x8 variants. These variants automatically include high-performance DMA Read and DMA Write engines. Click on the link below for the appropriate user guide.

- Arria V GZ Hard IP for PCI Express User Guide for the Avalon Streaming Interface
- Arria V GZ Hard IP for PCI Express User Guide for the Avalon Memory-Mapped Interface
- Arria V GZ Hard IP for PCI Express User Guide for the Avalon Memory-Mapped Interface with DMA