Intel® Puma™ 7 Development Kit

Optimized platform for development of cable gateways

The Intel® Puma™ 7 development kit is a reference platform that helps accelerate development of cable gateway solutions. It integrates a powerful host SoC and the latest Wi-Fi and Ethernet technologies to deliver high-performance connectivity for applications such as online gaming and VR/AR where very large files are being moved between the PC and the cloud. The platform is optimized at the system level for easier, faster, and more cost-effective development, and offers flexibility for OEMs to customize the solution for their unique requirements.

Product Details

• Host SoC: The Intel® Puma™ 7 SoC is a DOCSIS® 3.1 solution that offers advantages in computing and networking performance, RF noise rejection and packet processor flexibility, and is architected for a wide range of WAN and LAN use cases.

• Advanced Wi-Fi: The Intel® Home Wi-Fi Chipset WAV600 Series is a portfolio of Wi-Fi 6 solutions. It includes a 4x4 160 MHz configuration that is designed for both fast and consistent Wi-Fi connectivity, supports Gigabit Wi-Fi, and provides the ability to connect up to 256 clients simultaneously. The Wi-Fi chipsets are optimized for the Intel Puma 7 SoC to fully offload the wireless traffic with zero CPU utilization, freeing up the CPU performance for advanced services.

• 2.5 Gigabit Ethernet: The Intel® Ethernet Connection GPY211 and GPY212 are cost-effective, low-power Ethernet PHYs that are optimized for Intel’s 2.5G Ethernet solutions for PCs and provide great interoperability for the IEEE 802.3bz standard. The GPY212 also supports Media Access Control Security (MACsec).
Intel® Home Wi-Fi Development Kit Features

Tool Package
- Reference board
- Cables and power supply
- Schematics and layout, BOM
- Ready-to-use software image
- Calibration tools

Technical Specifications
- Tower enclosure design
- Designed to meet DOCSIS 3.1, PacketCable 1.5
- MoCA 2.5 Profile C specifications
- 2x2 OFDM/OFDMA and 32x8 single carrier channels
- PacketCable 2.0 and eRouter compatible
- Reference hardware and software platform meets Thermal and Power Regulatory requirements (ErP, CoC, and Energy Star)
- Intel® Home Wi-Fi Chipset WAV600 Series is Wi-Fi Alliance CERTIFIED a/b/g/n/ac, with plans for Wi-Fi CERTIFIED 6
- Supports tri-band configuration using up to 4x PCIe
- Supports various usage models such as IoT, multiple Wi-Fi configurations, and co-existence with Wi-Fi and IoT
- Ethernet: 2.5 Gigabit Ethernet PHY (add-on card), Ethernet switch with 4x1 Gigabit port
- Full SDK package that meets Intel® Security Development Lifecycle (SDL)
- Source code is available for ease of development
- Aligned to the latest RDK-B-LLC release for a complete gateway solution
- Encrypted images on flash
- USB 3.0 Type-A and Type-C

For more information on Intel® products and technologies for cable broadband, visit intel.com/cable.