

- 802.1x authentication engine
- 802.3x flow control at the UNI.
- Multi protocol classifier includes:
 - Ethertype
 - L2/L3/L4 source and destination address/IP/Port
 - IPv4/IPv6 support
 - Single/Double VLAN table
 - VLAN insert/remove/exchange operations
 - DSCP
 - Multicast group (MLDV2 and IGMPv3)
- QoS and Traffic Shaping features include:
 - Internal frame buffer, dynamically shared between US and DS
 - Multiple queues in upstream and downstream with flexible mapping per user/service
 - Dual-token leaky bucket shaper per queue for GBW and PBW enforcement
 - WFQ/SP scheduling
 - Per Port-ID upstream configurable rate limiter and coloring
 - Broadcast rate limiting
- 1W typical power consumption at 1Gbps throughput

Interfaces

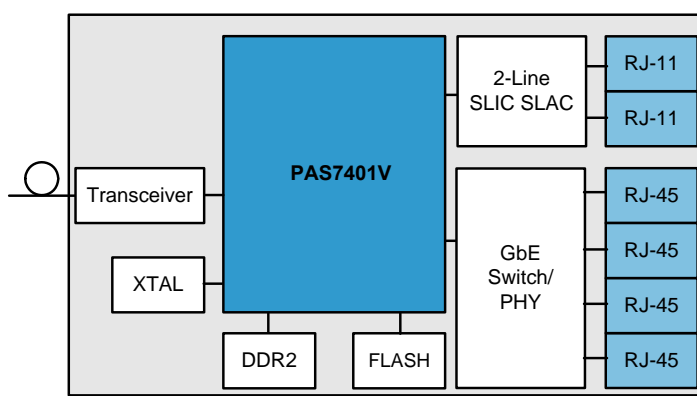
- 2.488/1.244 Gbps GPON port with integrated CDR/SERDES
- 2xGMII/MII Ethernet ports with optional 802.3ad link aggregation for connectivity to standard switch ICs or PHY devices
- Voice - 2x dual SPI/MPI interface for direct connection to SLIC/SLAC devices supports up to 4x FXS ports
- 16 bit DDR2 SDRAM memory
- 16 bit memory controller for FLASH and peripherals access
- 16x dedicated GPIO and 5x alarm inputs
- 12xLED outputs
- UART and JTAG interfaces for debug and control

Software

PAS740x is provided with a comprehensive, turnkey level software package which includes:

- Fully featured GPON protocol stack and networking drivers
- Fully featured ONT OMCI stack
- Complete VoIP software solution
 - G.711, G.729a, G.729ab, G.723.1 Codecs
 - RTP
- Based on open source Linux kernel
- API enables integration of customer applications

Example Application Diagram



Further Resources

Technology Webpage

www.pmc-sierra.com/ftth-gpon/

Technical Documentation

www.pmc-sierra.com/documents

About PMC-Sierra

PMC-Sierra is a leading provider of broadband communications and storage semiconductors for metro, access, fiber to the home, wireless infrastructure, storage, laser printers, and fiber access gateway equipment. PMC-Sierra offers worldwide technical and sales support, including a network of offices throughout North America, Europe, Israel and Asia. The company is publicly traded on the NASDAQ Stock Market under the PMCS symbol.

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