

ConverGate™ -C is the latest addition to Infineon's family of ATM and Ethernet communication convergence processors. ConverGate-C is designed for xDSL traffic aggregation on IP-DSLAM linecards.

ConverGate-C provides system designers with a flexible platform for value added services such as video distribution via Multicast and sets the base for business class VPNs with its extensive capabilities for VLAN handling.

With its versatile multiprocessor architecture and high-speed standard interfaces, ConverGate-C provides protocol stack support for current and evolving network protocols. Combined with Infineon's xDSL PHY solutions, high performance, low-cost linecard system solutions are now possible.



ConverGate-C

Applications

- IP-DSLAM linecards
- IP-DSLAM pizza boxes
- ATM to Ethernet Gateways

Features

- ATM AAL5 SAR termination for Ethernet Metro uplinks
- Transparent ATM over Ethernet (AoE) encapsulation for legacy ATM uplinks
- GbE capabilities provide non-blocking ADSL2+ linecards
- Line side connectivity of up to 128 xDSL lines
- Scalable Ethernet system side interface with integrated MAC
- Can cascade up to 256 xDSL lines
- Integrated buffer memory for very low BOM
- Supports architectures according to DSL Forum TR-59
- Handles 512 bi-directional AAL5 ATM VCCs

- Ethernet handling for up to 1k flows
 - Aggregation/Bridging
 - Supports up to 4k VLANs
 - Stacked VLANs up to two tags
 - Port security
- Advanced QoS classification and prioritization

Interfaces

- Pin-shared 2xGMII/TBI and 4xMII/SMII full duplex system side interface, load share and redundancy
- Pin-shared 128-port UTOPIA L2 / POS-PHY Level 2, 16-bit, 50 MHz line side interface
- 8/16-bit parallel µC interface

Supported Protocol Stacks

- Line side: PPPoE, PPPoA, IPoA
- System side: PPPoE, IPoE, AoE

Multicast For Video Replication

- Layer 2 Ethernet multicast for up to 256 groups
- IGMP snooping

Control and Management

- In-band management requires no control backplane
- Recognition of F4/F5 ATM OAM cells, any unclassified ATM cell, any Ethernet frame and extraction to local or remote host

Software

- All functions delivered with firmware, no tool-chain required
- Easy configuration via function API

Physical Characteristics

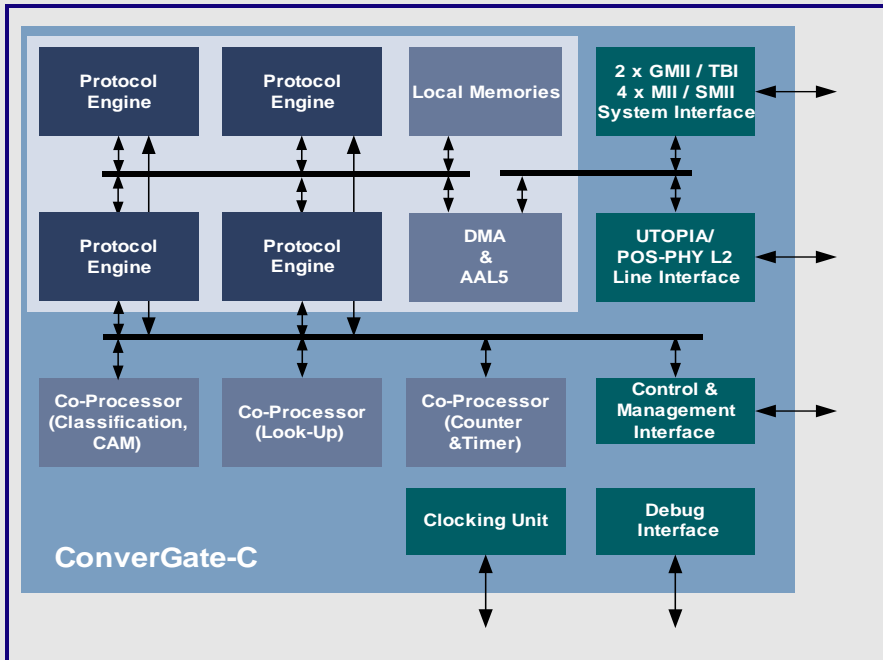
- Power consumption: < 1.5 W
- Power supply 1.5 V core, 3.3 V I/Os
- Operating range from -40°C to +85°C

ConverGate™ - C
 ATM to Ethernet
 Communication Convergence Processor
 PXF 4270 E



Never stop thinking.

ConverGate-C, PXF 4270 E Block Diagram

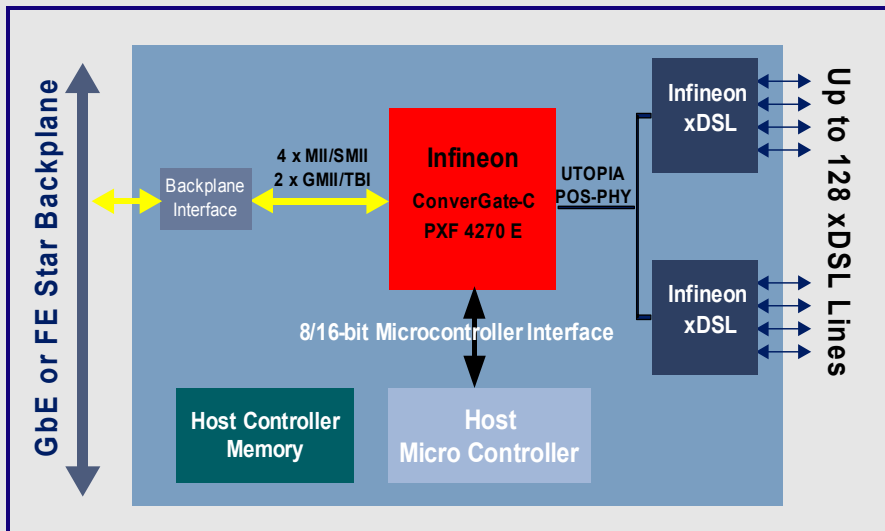


Ordering Information

ConverGate-C

| Product Sales Code | Description | Package |
|--------------------|--|------------|
| PXF 4270 E | ConverGate-C ATM to Ethernet communication processor | P-LBGA-324 |

IP-DSLAM xDSL Linecard Application Example



How to reach us:

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Infineon Technologies is an approved CECC manufacturer.

Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office in Germany or our Infineon Technologies Representatives worldwide.

Warnings

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