

## **POSEDGE ANNOUNCES HIGH PERFORMANCE 10 GBPS IEEE 802.1AE (MACsec) IP CORE**

Sunnyvale, CA – November 12<sup>th</sup>, 2009 – **Posedge** has announced the availability of L2SEC Soft IP Core that performs full duplex 10 Gbps MAC layer Security fully conforming to IEEE 802.1AE standard. Posedge has developed the L2SEC engine leveraging its vast experience in Internet Security technologies such as IPSEC, SSL and high performance crypto engines.

IEEE-802.1AE defines Layer-2 security standard and Posedge along with other Industry leading networking companies believes that Layer-2 security is the clear evolutionary path to secure the local networks in enterprises and data centers by providing data confidentiality, data integrity, and source authentication. It secures LANs from attacks of passive wiretapping, masquerading, replay, denial of service, and intrusion.

“The Posedge L2SEC offerings are built on our industry-leading experience in developing security solutions from Layer-2 to Layer-4 with our customers. These new products expand the capabilities of the Security Engines to implement Layer-2 security in the 10 Gbps networks at wire-speed with short packet lengths” said Venkat Kodavati, V.P Engineering at Posedge. “The L2SEC offers complete functionality and high level of configurability to enable integration into different network components.”

The L2SEC IP Core supports full duplex 10 Gbps short packet performance with very low latency and is designed ground up for optimal power/performance and is interoperable with Layer-2 security devices from various switch vendors. The architecture is very generic and highly modular to address customer specific requirements with generic FIFO and Host Interfaces.

### **L2SEC IP Core Key Features:**

- ◆ Complete inline processing architecture suitable for Ethernet Switch or PHY devices.
- ◆ Scalable architecture to higher (40 Gbps) and lower speed (1Gbps)
  - Optimal Gate count Vs Frequency trade off Options
- ◆ Optional Hardware based Classification Engine.
- ◆ Configurable number of Secure Associations with SA back-up feature.
- ◆ AES-GCM support for Crypto and Authentication
- ◆ Anti-replay verification on Ingress
- ◆ Encryption/Decryption and Authentication with ICV generation/verification
- ◆ MIB counter update as per the MACsec Standard with generic AHB/AXI/APB/LMI Interface

The L2SEC IP has advanced features such as Layer-2+ classification (Q in Q) that is suitable for integration into PHY devices and highly configurable switches. The L2SEC IP core can be used in various applications including, but not limited to -

- 10 Gbps Fiber and/or Base-T Ethernet PHY devices
- 10 Gbps Ethernet switches
- EPON Gateways

Posedge provides, as part of the IP licensing package reference drivers and extensive customer support. The IP package consists of Verilog RTL code, self checking OVM based testbench/testcases and elaborate documentation with functional coverage results. Posedge also offers a suite of design services for customization and integration of the IP cores into customer's ICs or FPGAs for prototyping.

If you are interested in finding out more about the L2SEC IP core, please download the datasheet from the following link:

[http://www.posedge.com/datasheets/Posedge\\_L2sec\\_Datasheet.pdf](http://www.posedge.com/datasheets/Posedge_L2sec_Datasheet.pdf)

### About Posedge Inc.



Posedge Inc. ([www.posedge.com](http://www.posedge.com)), headquartered in Sunnyvale, CA, USA, is leading supplier of Wired / Wireless Secure Networking Semiconductor Intellectual Property (“IP”) solutions for SOC/FPGA. Posedge’s highly differentiated product portfolio includes Multi-Gigabit Layer2+ Switch, 10 Gbps MACsec engine, TCP Offload Engine, IPSEC Protocol Processor, Multi-Gigabit Routing Processor in addition to SoC Solutions such as SD / SDIO, Flash and Bus Protocols. Posedge's solutions include hardware, software drivers, firmware, software stacks as applicable and the IP is augmented with leading-edge design and verification **Services** for customization.

Founded in 2006, Posedge has 50 employees in two design centers in Sunnyvale, CA, USA and Hyderabad, India. Posedge’s Semiconductor “IP” and designs services have been used by major semiconductor vendors and startups including: *AMD, AMCC, Broadcom, Maxim, TI* and others. For further information please visit

<http://www.posedge.com>

### Posedge

Sales Contact  
Chakra Parvathaneni  
408-393-3645

[sales@posedge.com](mailto:sales@posedge.com)