

# MosChip VPN Firewall Solution

A PRODUCTION-READY SOLUTION TO ACCELERATE TIME TO MARKET

## VPN Firewall Appliance Reference Design

- > Turnkey hardware and software package
- > MosChip MCS1000 IPsec Processor
- > MosChip Secure VPN Firewall Software

### Turnkey solution for rapid time to market

MosChip Semiconductor has partnered with Kenati Technologies to offer a complete turnkey solution for VPN firewall appliance manufacturers. The pairing of the MCS1000 with state-of-the-art software offers a competitive solution to OEMs/ODMs. No other silicon vendor offers such a complete solution.

### MosChip MCS1000 IPsec Processor

The MCS1000 is a highly integrated SoC with a 200MHz 32-bit ARM926EJ microprocessor core, hardware-based IPsec accelerator and three integrated MAC/PHY Ethernet interfaces. It is ideally suited for SOHO VPN Firewall appliances. The high integration keeps the system BOM to a minimum.

### MosChip VPN Firewall Software by Kenati Technologies

Kenati has ported their highly successful VPN Firewall software to the MosChip MCS1000 Processor to take advantage of the superior performance of the MCS1000's integrated IPsec acceleration hardware and its high integration. The Kenati software combined with the MCS1000 provides an innovative industry-leading complete VPN Firewall solution.

Available as a production-ready binary, the software can be customized for the OEM/ODM with their logo, name and color scheme. The Linux-based software is full-featured, tested and requires no modification by the customer.

**3-Port VPN Reference Design**

**MCS1000 Features**

- > ARM926EJ 32-bit 200MHz CPU core
- > Hardware IPsec Accelerator
- > DES/3DES, AES, SHA1/2 and MD5
- > Three internal 10/100 Ethernet MAC/PHYs

**VPN Firewall Software Features**

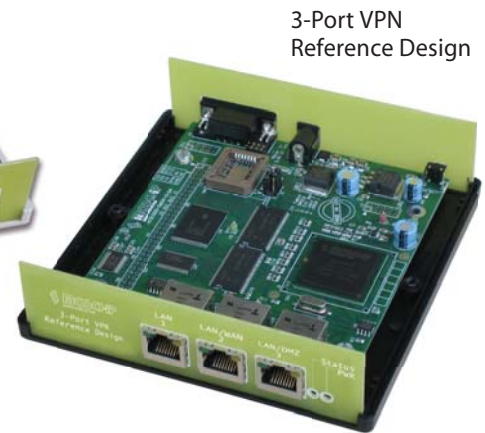
- > Full featured VPN Gateway
- > Packaged with CLI, SNMP and Web Interfaces
- > Customizable skins with specific name, logo and color scheme
- > Including NAT +T, PPTP and L2TP
- > Licensed as a binary with support
- > Tested production-ready solution

## Reference Design Hardware Details

- MosChip MCS1000 ARM-based SOC
- 32 Megabytes of SDRAM
- 8 Megabytes of Flash
- RS-232 Console port
- 3-Port and 6-Port options



6-Port VPN Reference Design  
( with Ethernet Switch)



3-Port VPN  
Reference Design

## Software Package Details

### • Firewall Mode of Operation

- Policy-based NATP
- Route mode
- Virtual IP

### • VPN Security

- VPN Tunnels: 50 Maximum
- IPSec Server/Client
- DHCP over IPSec
- Authentication Transforms: MD-5, SHA-1 and SHA-2
- Encryption Transforms: DES, 3DES and AES
- DNS Resolving of Remote Gateway

### • Firewall Security

- Network Address Translation
- Stateful Packet Inspection (SPI)
- Packet filter, Custom Protocol Filters, Custom ICMP Filter
- Content filter (URL Keyword/Java/ActiveX/Cookie/Proxy)
- Policy-Based Firewall and Session Protection

### • Firewall & VPN User Authentication

- RADIUS (external) Client
- Internal Database: 50 Users Maximum Administration
- Activity Filter
- E-mail alerts
- Web Access Log
- SYSLog Support
- Firmware backup
- Internet Access Monitor
- Web-based Configuration
- Remote Management from VPN
- Remote Management from WAN
- Simple Network Management Protocol (SNMP)

### • Network Service

- DHCP Server/Client
- DHCP Relay
- Network Address Translation plus Traversal (NAT+T)
- PPPoE
- PPTP Server/Client
- L2TP Client
- IPSec/PPTP/L2TP Pass-Through
- Simple Network Time Protocol (SNTP)
- H.323 Application Level Gateway
- FTP Application Level Gateway

**Production Ready**  
**Go to Market with MosChip**