

## Features

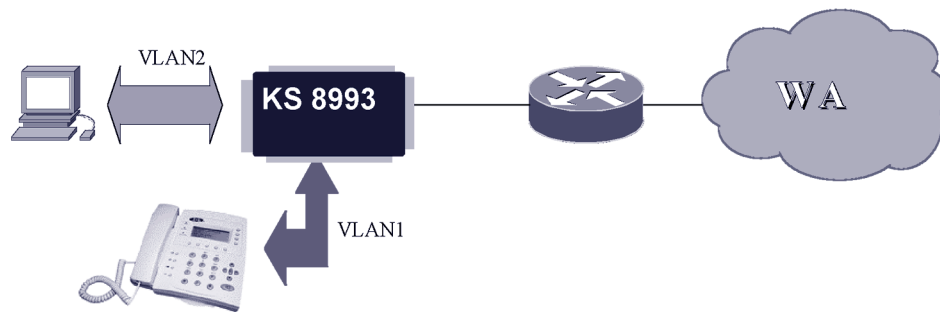
- World's first 3-port 10/100 integrated switch with physical layer transceivers
- 64kB SRAM on chip for frame buffering
- 1.0Gbps high performance memory bandwidth
- Low power dissipation: 300mA (0.75W) including physical transmit drivers
- Supports port-based VLAN
- Supports 802.1p-based priority or port-based priority.
- Support for UTP or fiber installations
- Indicators for link, activity, full/half-duplex and speed
- Unmanaged operation via strapping at system reset time
- Hardware-based 10/100, full/half, flow control and auto-negotiation
- Individual port-forced modes (full-duplex, 100BaseTX) when auto-negotiation is disabled
- On-chip integrated address look-up engine, supports 1K absolute MAC addresses

- Automatic address learning, address aging and address migration
- Full-duplex IEEE 802.3x flow control
- Half-duplex back pressure flow control
- Optional external MAC interface (MII or SNI) for router applications
- 10BaseT, 100BaseTX and 100BaseFX modes of operation
- Single 2.5V power supply
- Available in 128-pin PQFP package

## System Level Applications

The KS8993 can be configured to fit either in a three port 10/100 application or as a two port 10/100 network interface with an extra MII port. This MII port can be connected to an external processor and used for routing purposes or public network access. The major benefits of using the KS8993 are the lower power consumption, unmanaged operation, flexible configuration and built in frame buffering.

Typical Enterprise IP phone application using KS8993 switch to connect one port to phone and other port to PC.



## Contact Micrel Semiconductor

Location	Address		Telephone	Fax
Corporate HQ	1849 Fortune Drive	San Jose, CA 95131 USA	+1 (408) 944-0800	+1-408-944-0970
Eastern USA	93 Branch Street	Medford, NJ 08055 USA	+1 (609) 654-0078	+1 (609) 546-0989
Southeast USA	8105 Bluffridge Drive	Raleigh, NC 27615 USA	+1 (919) 870-7650	+1 (919) 870-7651
Central USA	722 S. Denton Tap Suite 130	Coppell, TX 75019 USA	+1 (972) 393-2533	+1 (972) 393-2540
Western USA	2180 Fortune Drive	San Jose, CA 95131 USA	+1 (408) 944-0800	+1-408-944-0970
Northwest USA	401 NE Ravenna Blvd. Box 152	Seattle, WA 98115 USA	+1 (206) 526-7299	+1 (206) 526-8829
Southwest USA	7545 Irvine Center Dr. Suite 200	Irvine, CA 92618 USA	+1 (949) 623-8343	+1 (949) 623-8305
Korea	4F, KTB Building, 826-14, Yeoksam-dong, Kangnam-ku	Seoul 135-080 Korea	+82 (2) 3466-3000	+82 (2) 3466-2999
Taiwan	7F-6, No. 237, Sec. 2, Fu-Hsing South Road	Taipei, Taiwan, R.O.C.	+886 (2) 2705-4976	+886 (2) 2705-4977
China	12A, XingHao City Garden	Shenzhen, P.R. China	+86 (755) 2693-4601	
Japan	1-16-15 Dogenzaka, Shibuyaku	Tokyo 150-0043 Japan	+81 (3) 5428-0871	+81 (3) 5428-0872
Europe	1st Floor, 3 Lockside Place, Mill Lane	Newbury, Berks RG14 5QS UK	+44 1635 524455	+44 1635 524466
Western Europe	10, avenue du Quebec, Villebon BP116	Courtaboeuf Cedex 91944 France	+33 (0) 1 6092 4189	+33 (0) 6 0868 4489

