

5-Port Ethernet Switch Family Comparisons



Industrial Ethernet Applications
Media Converter, CPE for FTTH
Fiber-to-the-Office
Remote Console Management

Residential Gateway
Standalone Switch
Wireless LAN AP + Router
Integrated Cable Modem Router

Integrated DSL Router
VPN/Firewall Router
VoIP Gateway
Set-Top Box + Switch

KS8995 Product Feature Comparisons

Product Number	KS8995MA ⁽¹⁾ Recommended for Use in New Designs	KS8995XA Recommended for Use in New Designs	KS8995X	KS8995M	KS8995MI
Description	Integrated 5-Port 10/100 Managed Switch	Integrated 5-Port 10/100 UnManaged Switch	Integrated 5-Port 10/100 UnManaged Switch	Integrated 5-Port 10/100 Managed Switch	Integrated 5-Port 10/100 Managed Switch
Packaging (Pins)	PQFP-128	PQFP-128	PQFP-128	PQFP-128	PQFP-128
Power Dissipation	0.91	0.91	0.91	0.91	0.91
Core Operating Voltage (V)	1.80	1.80	1.80	1.80	1.80
I/O Operating Voltage (V)	2.5 or 3.3	2.5 or 3.3	2.5, 3.3	2.5, 3.3	2.5 or 3.3
Temperature (°C)	0° - 70°	0° - 70°	0° - 70°	0° - 70°	-40° - +85°
Serial Interface Type	SPI, SW-MII, PHY-MII, MIIM	SW-MII, PHY-MII, MIIM	SW-MII, PHY-MII, MIIM	SPI, SW-MII, PHY-MII, MIIM	SPI, SW-MII, PHY-MII, MIIM
Communications Protocol	Ethernet 10BaseT, 100BaseTX, 100BaseFX	Ethernet 10BaseT, 100BaseTX, 100BaseFX	Ethernet 10BaseT, 100BaseTX, 100BaseFX	Ethernet 10BaseT, 100BaseTX, 100BaseFX	Ethernet 10BaseT, 100BaseTX, 100BaseFX
Lead-Free Parts⁽²⁾	-	-	Yes (KSZ8995X)	Yes (KSZ8995M)	-
Traffic Rate-Limiting 32Kbps Granularity	Yes	Yes	Yes	Yes	Yes
MAC Loopback	Yes	Yes	Yes	Yes	Yes
MIB Counters	Yes	-	-	Yes	Yes
VLAN Tag-Based (802.1Q)	Yes	-	-	Yes	Yes
VLAN Port-Based	Yes	Yes	Yes	Yes	Yes
QoS/Cos Prioritization (802.1P)	Yes	Yes	Yes	Yes	Yes
PHY Power-Saving Mode	Yes	Yes	-	-	-
PHY Remote Loopback	Yes	Yes	-	-	-
PHY with Auto Crossover	Yes	Yes	Yes	Yes	Yes
PHY Loopback	Yes	Yes	Yes	Yes	Yes

Notes: 1. KS8995MAI available as of Q1'2004. 2. All parts available in lead-free package as of Q1'2004.

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Transmit Polarity Differences

Pin Number	Pin Number on KS8995MA/XA	Pin Number on KS8995M/X
TXP1	7	8
TXM1	8	7
TXP2	13	14
TXM2	14	13
TXP3	22	23
TXM3	23	22
TXP4	28	29
TXM4	29	28
TXP5	35	36
TXM5	36	35

Evaluation Kit Contents

Evaluation Board
Power Supply and Power Cable
Evaluation Kit CD-ROM



CD-ROM Contents

Application Notes
Board Schematics
Board Support Package (BSP):
— EEPROM Utilities
— SmartBits Configuration Files
— Management Software
Board User Guides
Product Briefs
Datasheets

Lead-Free Products⁽¹⁾

KSZ8995M
Managed 5-Port Switch
PQFP-128

KSZ8995X
Unmanaged 5-Port Switch
PQFP-128

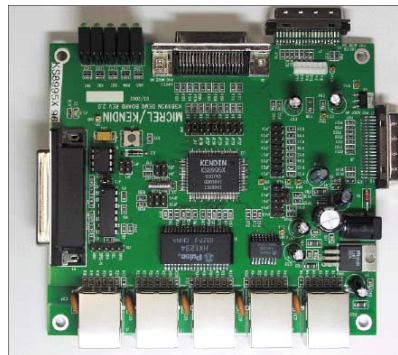
Note:

1. Micrel's lead-free products are denoted by the prefix KSZ.



Available Collateral for Easy Design-In

Application Notes
Board User Guides
Evaluation Board Schematics
Gerber Files
OrCAD Schematics



Contact Micrel Semiconductor

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