

Ethernet

Featured Products

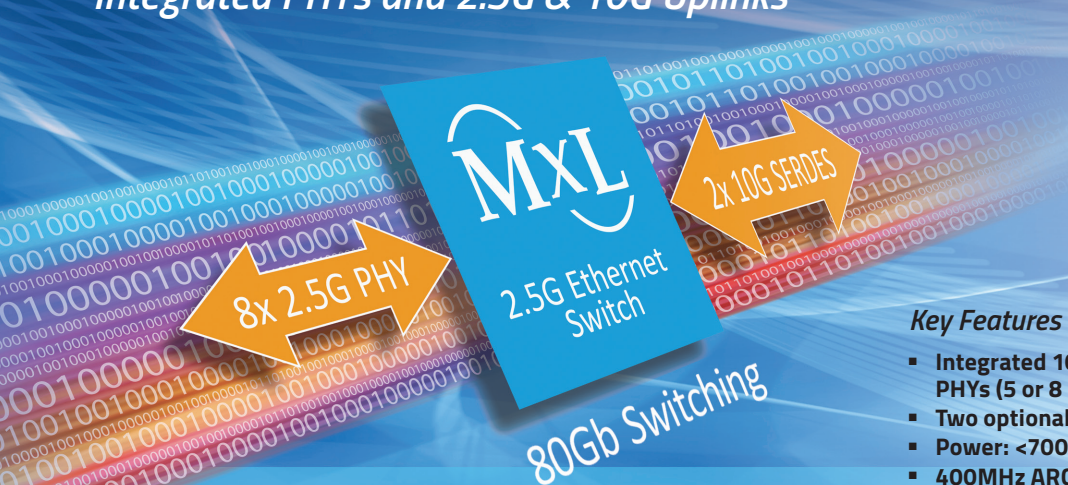
Ethernet Transceivers (PHYs)

Ethernet Switches

Featured Products

MxL86252, MxL86282

5- and 8-port 2.5G Ethernet Switches with Integrated PHYs and 2.5G & 10G Uplinks



Key Features

- Integrated 10/100/1000/2.5GBASE-T PHYs (5 or 8 ports)
- Two optional 10G uplink ports
- Power: <700mW per PHY
- 400MHz ARC CPU: Web smart
- Unblocking wire speed switching
- VLAN, QinQ, QoS, traffic shaping, ...
- BGA-277 12x12mm, 0.628mm pitch

Benefits

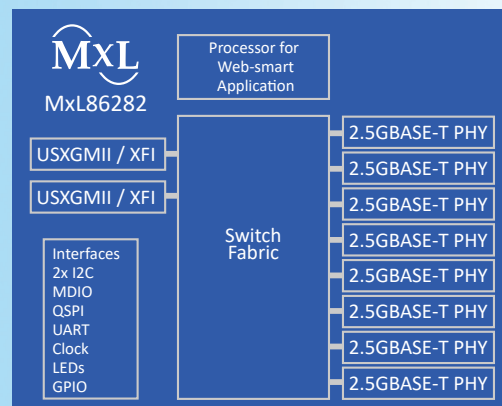
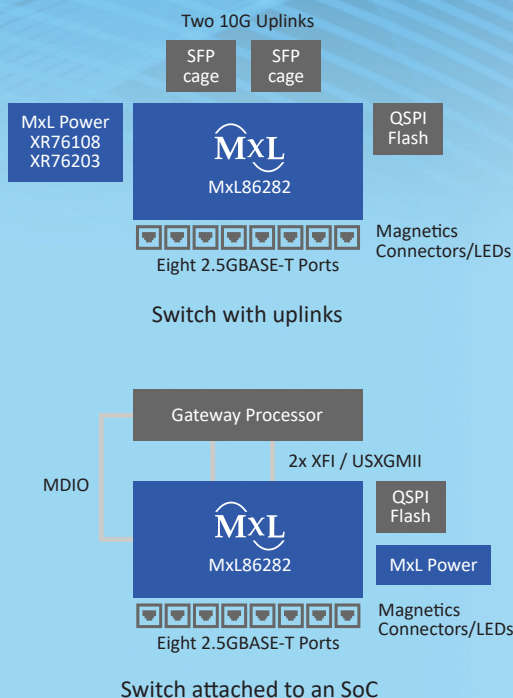
- Low-power consumption through high integration
- Power saving modes for short cables, through Energy Efficient Ethernet (EEE) and no-link detection
- Integrated processor enables web-smart switch applications

Applications

- Standalone five or eight-port 2.5G switches
- Eight-port SMB switches with two 10G uplinks
- Five-port SMB switches with 10G and 2.5G uplinks
- Unmanaged and web-smart switches
- External switches for gateway SoCs

Standards

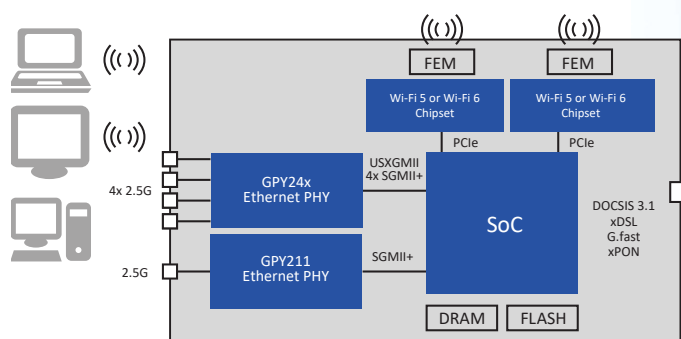
- IEEE Standard for Ethernet, IEEE 802.3™-2022



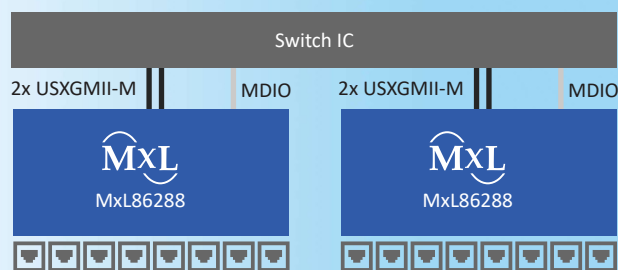
MxL86282 Block Diagram

Ethernet Transceivers (PHYs)

Product	Ethernet Ports	Ethernet Bandwidth (Mbps)	Interfaces	MACsec	1588v2	SyncE	EEE	Thermal Protection	Min Temp (°C)	Max Temp (°C)	Package (X x Y mm)	Evaluation Board/s
MxL86288L	8	10, 100, 1000, 2500	2 x USXGMII-M		•	•	•	•	0	70	BGA-256 (13x13)	MxL86288L-EVK-1
MxL86288I	8	10, 100, 1000, 2500	2 x USXGMII-M		•	•	•	•	-40	85	BGA-256 (13x13)	MxL86288L-EVK-1
GPY245	4	10, 100, 1000, 2500	SGMII+, USXGMII-M	•	•	•	•	•	-40	85	BGA-236 (12x12)	GPY245-EVK-1 & 2
GPY241	4	10, 100, 1000, 2500	SGMII+, USXGMII-M		•		•	•	0	70	BGA-236 (12x12)	GPY245-EVK-1 & 2
GPY215	1	10, 100, 1000, 2500	SGMII+	•	•	•	•	•	-40	85	QFN-56 (7x7)	GPY215-EVK-1 & 3
GPY211	1	10, 100, 1000, 2500	SGMII+		•		•	•	0	70	QFN-56 (7x7)	GPY215-EVK-1
MxL86211C	1	10, 100, 1000, 2500	SGMII+		•		•	•	0	70	QFN-40 (5x5)	MxL86211C-EVK-1
MxL86211I	1	10, 100, 1000, 2500	SGMII+		•		•	•	-40	85	QFN-40 (5x5)	MxL86211C-EVK-1
GPY115	1	10, 100, 1000	SGMII	•	•	•	•	•	-40	85	QFN-56 (7x7)	GPY215-EVK-1
MxL86110C	1	10, 100, 1000	RGMII			•	•		0	70	QFN-40 (5x5)	MxL86110I-EVK-1
MxL86110I	1	10, 100, 1000	RGMII			•	•		-40	85	QFN-40 (5x5)	MxL86110I-EVK-1
MxL86111C	1	10, 100, 1000	RGMII, RGMII/1000BASE-X/100BASE-FX			•	•		0	70	QFN-48 (6x6)	MxL86110I-EVK-1
MxL86111I	1	10, 100, 1000	RGMII, RGMII/1000BASE-X/100BASE-FX			•	•		-40	85	QFN-48 (6x6)	MxL86110I-EVK-1
MxL86112C	1	10, 100, 1000	SGMII			•	•	•	0	70	QFN-40 (5x5)	MxL86112C-EVK-1
MxL86112I	1	10, 100, 1000	SGMII			•	•	•	-40	85	QFN-40 (5x5)	MxL86112C-EVK-1



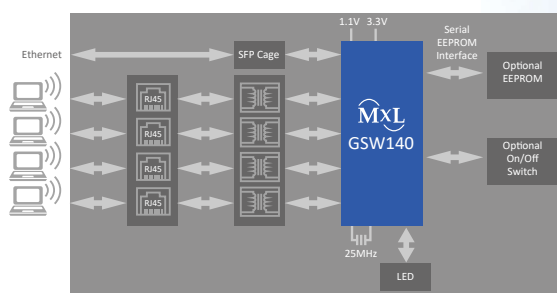
5 ~ 16
2.5GbE LAN



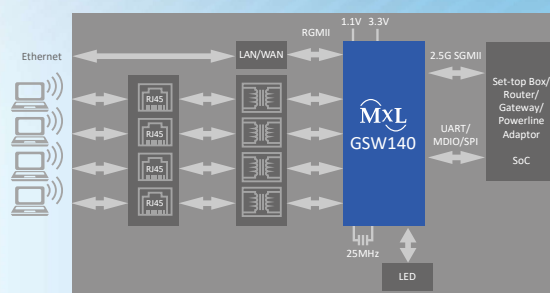
N x Eight 2.5GBASE-T Ports

Ethernet Switches

Product	Ethernet Ports	Ethernet Bandwidth (Mbps)	Interface/Uplink Ports	Interfaces	Supply Voltage (V)	Web-Smart Support	1588v2	SyncE	EEE	Min Temp (°C)	Max Temp (°C)	Package (X x Y mm)	Evaluation Board
MxL86281S	16	10, 100, 1000, 2500	2	USXGMII	3.3/1.8/1.2/0.8	•			•	0	70	2x BGA-277 (12x12)	MxL86282S-EVK-1
MxL86282C	8	10, 100, 1000, 2500	2	XFI / USXGMII / SGMII+	3.3/1.8/1.2/0.8				•	0	70	BGA-277 (12x12)	MxL86282S-EVK-1
MxL86282I	8	10, 100, 1000, 2500	2	XFI / USXGMII / SGMII+	3.3/1.8/1.2/0.8	•			•	-40	85	BGA-277 (12x12)	MxL86282S-EVK-1
MxL86282S	8	10, 100, 1000, 2500	2	XFI / USXGMII / SGMII+	3.3/1.8/1.2/0.8	•	•	•	•	0	70	BGA-277 (12x12)	MxL86282S-EVK-1
MxL86252C	5	10, 100, 1000, 2500	2	XFI / USXGMII / SGMII+	3.3/1.8/1.2/0.8				•	0	70	BGA-277 (12x12)	MxL86252S-EVK-1
MxL86252I	5	10, 100, 1000, 2500	2	XFI / USXGMII / SGMII+	3.3/1.8/1.2/0.8	•	•	•	•	-40	85	BGA-277 (12x12)	MxL86252S-EVK-1
MxL86252L	5	10, 100, 1000, 2500	2	XFI / USXGMII / SGMII+	3.3/1.8/1.2/0.8				•	0	70	BGA-277 (12x12)	MxL86252S-EVK-1
MxL86252S	5	10, 100, 1000, 2500	2	XFI / USXGMII / SGMII+	3.3/1.8/1.2/0.8	•			•	0	70	BGA-277 (12x12)	MxL86252S-EVK-1
GSW145	4	10, 100, 1000	2	RGMII, SGMII+	3.3/1.1				•	-40	85	MRQFN-105 (8x8)	GSW145-EVK-1
GSW141	4	10, 100, 1000	2	RGMII, SGMII	3.3/1.1				•	0	70	MRQFN-105 (8x8)	GSW145-EVK-1
GSW140	4	10, 100, 1000	2	RGMII, SGMII+	3.3/1.1				•	0	70	MRQFN-105 (8x8)	GSW145-EVK-1
GSW125	2	10, 100, 1000	2	RGMII, SGMII+	3.3/1.1				•	-40	85	MRQFN-105 (8x8)	GSW145-EVK-1
GSW120	2	10, 100, 1000	2	RGMII, SGMII+	3.3/1.1				•	0	70	MRQFN-105 (8x8)	GSW145-EVK-1



Standalone Desktop Switch with Optional Brightness On/Off Switch



Home Gateway



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