

# Microchip PoE Powers Networks

Learn more about how our Power over Ethernet (PoE) technology is used in network infrastructure.



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## Power Over Ethernet (PoE) Technology Empowering Networks

PoE technology streamlines the installation process by allowing the simultaneous transmission of power and data over a single Ethernet cable, facilitating the swift setup of diverse Ethernet-connected devices such as:

- Wireless LAN Access Points, 5G small cells, wireless backhubs and point-to-point radios for wireless networks
- IP cameras and access control systems for security networks
- Lighting controls and automation sensors in smart building networks
- Patient monitoring systems and medical devices in healthcare networks
- Point-of-Sale (POS) terminals and digital signage in retail networks

Overall, PoE technology is versatile and widely adopted across various network environments due to its ability to address the network challenge:

- Fast and cost-effective installation
- Increased data traffic
- Reliable power source
- Remote power management
- Flexibility and scalability
- Energy efficiency

## The PoE Legacy

Microchip is a pioneer and a market leader in PoE. We were the first to introduce the **Power Sourcing Equipment (PSE) Integrated Circuit (IC)** to put power onto an Ethernet cable, as well as the **Powered Device (PD) IC** to take power off the Ethernet cable and put it into an end-point device. Thereafter, having quickly recognized that the switches did not offer power, we introduced the first PoE midspan/injector which, when connected to an Ethernet switch, could deliver both data and power over

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a single Ethernet cable. We are also the first to introduce outdoor and multi-Gigabit PoE midspans. Having spearheaded many advancements in the PoE technology, we have actively contributed to the IEEE 802.3af/at/bt standards.

We continue to innovate in PoE solutions with the aim of supporting newer applications that demand higher power, greater speed and challenging indoor and outdoor specifications, while reducing operating expenses and offering faster deployment.

## Robust and Reliable PoE Solutions for Network Infrastructure

As an innovator and thought leader in PoE technology, Microchip is the only supplier of PoE Powered Device (PD) ICs, PoE Power Sourcing Equipment (PSE) ICs, PoE systems (PoE midspans/injectors and PoE switches) and test equipment.

Our PSE ICs are designed into switches, wireless routers and various networking and communication equipment to power networks efficiently and conveniently using the PoE technology. In scenarios wherein non-PoE switches, routers, etc. are used but PoE functionality is desired to power the network devices, we offer PoE midspans and specialty switches that reliably deliver both power and data over standard Ethernet cables to the end devices leaving the existing infrastructure completely unaltered.

Microchip offers a comprehensive portfolio of PoE midspans and switches to leverage your existing infrastructure while transitioning to PoE with minimum costs and overhead.

- 15W, 30W, 60W and 90W power levels
- 1, 6, 12 and 24 ports
- Data rates of 1 Gbps, 2.5 Gbps, 5 Gbps and 10 Gbps
- Indoor, outdoor and industrial environments

Our stand-alone, fully tested and certified PoE systems enable seamless deployment of PoE technology to Ethernet-based devices even in remote, inaccessible and harsh environments. Microchip PoE helps you deploy the right solution for the right environment, thus maximizing the value of your infrastructure investment.