Ethernet Alliance PoE Certification Program FAQ

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NEXT ETHERNET ERA

ethernet alliance

Mission and Priorities

A global community of end users, system vendors, component suppliers and academia

➢ ***Mission***

- **Promote existing and emerging IEEE 802 Ethernet standards**
- **Accelerate industry adoption**
- **Demonstrate multi-vendor interoperability**

➢ ***2017 Strategic Priorities***

- **Support Existing Technology Deployment**
- **Support IEEE 802 Standards Development**
- **Marketing & Education**

The Voice of Ethernet

PoE Certification Program Questions

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Why does Power-over-Ethernet need a logo/certification program?

Wikipedia defines Power-over-Ethernet (PoE) in the following manner – “Power over Ethernet or PoE describes any of several standardized or ad-hoc systems which pass electrical power along with data on Ethernet cabling.”

There are many varieties (standardized and non-standardized) of PoE in the market. The IEEE 802.3 Ethernet Working Group first standardized PoE in 2004, and introduced a higher power version, known as PoE+, in 2009. The presence of standardized and non-standardized solutions, with no visible way to distinguish between the two types, has led to interoperability issues and market confusion. This problem will only be exasperated by the predicted shipment by Dell’Oro of ≈700 Million PoE enabled Switch Ports and 250 Million PoE enabled devices over the next 5 years.

	IEEE 802.3 Standards-Based	Other
Predictable Power Delivery	YES	???
Interoperability	YES	???
Reliability	YES	???
Network Safety Using Existing Cabling Infrastructure	YES	???

Why did the Ethernet Alliance decide to develop the PoE Certification Program?

The Ethernet Alliance (aka EA) is a global consortium that includes system and component vendors, industry experts, and university and government professionals. It is responsive to the needs expressed by its membership.

The primary goal of the EA PoE Certification Program is to improve the end-user experience by minimizing market interoperability issues and confusion.

In August 2014, our members could see issues arising in the market as a result of the wide variety of products using the PoE name. We began to explore a certification program that would distinguish PoE standards-based products from proprietary PoE implementations. This led to the formation of the PoE Certification Program.

What will certification mean? What's being certified?

The EA Certified Logo will simplify identification of products designed to the IEEE 802.3 PoE standards.

The Ethernet Alliance PoE Certification Test Plan clearly defines test procedures (based on the IEEE 802.3 Ethernet PoE specifications). EA PoE Certification will identify those devices that have successfully been tested against this test plan.

This program will increase our users confidence that products from multiple manufacturers will work together.

What kinds of products will be certified? (1 of 2)

The ubiquitous nature of Ethernet means that there is a broad array of products that are potential candidates for certification. With the introduction of home automation and IoT, PoE is moving out of the IT world, and into every day life. There are two kinds of PoE devices.

The first is referred to as “power sourcing equipment” (aka PSE) , which may be an Ethernet switch, adapter, or mid-span power injector. Certification may be at either the system or component level. Examples of PSEs for certification include: Ethernet switches and adapters, PoE midspans and midspan power injectors, as well as the component, as well as evaluation boards developed by component vendors.

The second is referred to as “powered devices” (aka PD). There are a multitude of different PDs – wireless access points and network bridges, internet phones, cameras, terminals, digital signs, sensors, access controls and monitoring, lighting, and home / office automation systems. Again, certification may be at either the system or component level.

With over 100 billion meters of cabling sold since 2003 that supports Gigabit (or higher) Ethernet operation and PoE, the potential for different PoE products is limitless.

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What kinds of products will be certified? (2 of 2)

Some examples of PDs include:

- PoE charging ports;
- Internet & video phones; cameras (computer cameras; IP cameras; motion-activated cameras; security cameras);
- Wireless access points, routers, and network bridges,
- Electronic equipment for point-of sales (POS) systems, namely, point-of-sale terminals, bar code readers, optical readers, advertisement display monitors, keyboards, printers, scanners, radio transmitters, radio receivers, computer hardware, and computer operating software; Digital signs;
- Mobile computing and operating platforms consisting of data transceivers, wireless networks, and gateways for collection and management of data; LED position sensors; Electric or electronic sensors;
- Access control and alarm monitoring systems; Lighting control apparatus; Lighting controls; Traffic lights; Lights for use on video cameras;
- Light switches; Luminaries; LED luminaries; Power-over-Ethernet (PoE) luminaries; Power-over-Ethernet (PoE) fixtures; Power-over-Ethernet (PoE) luminaries and fixtures, namely LED luminaries and fixtures;
- Swipe card readers; card reading equipment; card reading equipment for magnetically encoded cards;
- Home and office automation systems comprising wireless and wired controllers, controlled devices for lighting, HVAC, security, safety, and other home and office monitoring and control applications;
- Building security systems (hardware for providing picture, video, alarm status, building plans, and other information to a remote station);
- Electronic video surveillance and security
- Wireless controllers to remotely monitor and control the function and status of other electrical, electronic, and mechanical devices or systems, such as remote metering systems, gas and liquid cylinders, vehicle tracking devices, energy and utility systems, security systems, and lighting systems
- Sensors such as ; Pollutant sensors; Temperature sensors; Electric, electronic, or electrochemical oxygen monitors and sensors for environmental use; LED position sensors; Timing sensors
- Evaluation boards developed by component vendors

What does it mean for a product to be certified/receive the Logo?

The EA Certified Logo will help users identify products that have verified to conform with the industry developed Ethernet Alliance Certification Test Plan.

Products that have been certified will have been successfully tested against the EA PoE Certification Test Plan, which is based on the PoE specifications from the IEEE 802.3 Ethernet standard.

Users can be confident that PSE and PD devices from different manufacturers with the EA PoE Logo will work together.

What steps need to be taken to be approved to use the EA PoE Certification logo?

The EA PoE Certification Program is an industry program, open to both its members and non-members. The steps to participate are simple –

1. Certificate Mark License Agreement (CMLA) – The first step is completion of the CMLA that covers PoE solutions as currently defined in the ratified IEEE 802.3 Ethernet Standard (including current ratified amendments).

2. Successful Testing – Testing for EA PoE Certification is available for all companies at UNH-IOL. Member companies also have the option to perform testing themselves (referred to as 1st Party Testing), using 3rd party commercially available equipment that has been approved by both UNH-IOL and the EA. UNH-IOL will act as the data warehouse for all certification test results, and will forward the Certification applications of any devices meeting the PoE Certification Test to the EA.

3. Certification Application – Companies interested in participating in the Certification Program must submit an application with relevant product information. This application will only be considered upon successfully meeting the EA PoE Certification Test Specification.

Who can receive a Logo?

The EA PoE Certification Program is an industry program, open to both members and non-members.

When will the EA PoE Certfication Program be ready?

The EA PoE Certification Program will be officially launched in August, 2017.

Can an organization get involved in the EA PoE Certification Program now?

The EA PoE Certification Program is currently being finalized. Only EA members may participate in that process.

Does the organization need to be a member of the Ethernet Alliance to participate in the certification program?

The EA PoE Certification Program is an industry program, open to both members and non-members.

What does it cost?

Cost structure shown in table below for members and non-members

		Normal	2017 Fee	Notes
Members	CMLA License Fee	$5,000	$2,500	1. One time fee at time of signing CMLA 2. Includes $2,500 discount for 2017 3. Cost of agreement may be partially or fully covered via a membership benefit
	Certification Fee	$1,000	$1,000	One time fee per device
	Derivative Works Fee	$100	$100	One time fee per device
	1st Party Testing Requirement - Membership			Options – $3,000 – PoE (New Membership Class) $4,900 (Associate) $9,995 (Participating) $17,500 (Principal)
Non Members	CMLA License Fee	$7,500	$5,000	1. One time fee at time of signing CMLA 2. Includes $2,500 discount for 2017
	Certification Fee	$2,500	$2,500	One time fee per device
	Derivative Works Fee	$250	$250	One time fee per device

Note – Final costs to be announced as part of August, 2017 introduction.

What are the key benefits to participants?

The EA PoE Certification Program will improve the user experience by minimizing interoperability issues and market confusion.

Participants in the program will create a PoE ecosystem of products that are easily identifiable as conforming to the IEEE 802.3 Ethernet standard. The Program will help users confidently identify products that will work together, either via the EA Certified Logo or the online registry listing of certified products.

This will help companies that have their products certified to reduce support issues and associated costs.

Will Certified Products Work with Non-certified Products?

There are standardized and non-standardized versions of PoE in the market today. The presence of standardized and non-standardized solutions, with no visible way to distinguish between the two types, has led to interoperability issues and market confusion.

The ability of “Product A” that has earned the EA PoE Certified Logo, to work with “Product B” which has not, is dependent on whether with “Product B” has been designed to conform to the IEEE 802.3 Ethernet standard.

The EA PoE Certification Program can not provide confidence of interoperability with devices that have not earned the EA Certified Logo.

Are there organizations already enrolled in this program? If so, who and what kinds of benefits have they seen to date?

This program was developed by our members and approved by the EA Principal Membership. For a list of our members, please see http://www.ethernetalliance.org/about-us/member-roster/.

Those companies formally enrolled in the program will be announced at the time of the formal launch of the program in August 2017.

Thank You!

If you have any questions or comments, please email admin@ethernetalliance.org

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