**Automotive** Ethernet is one of Ethernet’s latest success stories. Forecasts predict up to 500 million ports of Ethernet will ship in over 100 million vehicles by 2023. Ethernet links within cars provide data and power to reduce the cost and weight in vehicles while providing economies of scale and interoperability. The bandwidth demand of connected cars could be the next big driver for Ethernet to go beyond 400GbE!

**Enterprise** and Campus applications drive the bulk of Ethernet port shipments with hundreds of millions of ports shipping per year. Ethernet’s roots are in enterprise local area networks (LANs) where the entire Ethernet family, including the BASE-T products, can be found. LANs are rich in copper where over 70 billion meters of cable have been deployed over the past 15 years. Enterprise data centers are very cost sensitive and most servers deploy GbE and 10GbE, and are expected to transition to 25GbE.

**Service Providers** have driven higher speed Ethernet solutions for decades. Router connections, EPON, client side optics for optical transport network (OTN), equipment, and wired and wireless backhaul. In particular, the 5G mobile deployment is driving dramatic increases in both fronthaul and backhaul applications, and continues to push Ethernet to higher rates and longer distances. And with global demand by consumers for video, this shows no signs of changing.

**Interoperability and Certification**

The Ethernet Alliance is committed to leading the change to innovating industry confidence in Ethernet standards through its multi-vendor interoperability demonstrations and plugfests. Our PoE Certification Program takes this mission to the next level. Our industry-defined PoE Certification Test Plan is based on the IEEE 802.3bt standard, and products passing this test will be granted the Ethernet Alliance PoE Certification Logo. This logo will provide recognition for products that are based on the IEEE 802.3bt standard, and provide confidence in the multi-vendor interoperability of all products bearing it. The logos will also provide clear guidance on which device will work with each other.

The first generation of the program certifies Type 1 and Type 2 products that use 2-Pair of wires. The second generation of the program tackles the higher power Class 2-Pair PoE – Type 1 and Type 2 products that use 2-Pair of wires. The Ethernet community defined the IEEE 802.3bt standard. This table explains the second generation of the program tackles the higher power Class 2-Pair PoE – Type 1 and Type 2 products that use 2-Pair of wires. The Ethernet community defined the IEEE 802.3bt standard.