## **Basic Objectives**

- 1. Define an electrical interface to provide connectivity to a **single** Ethernet port with fewer than 8 pins operating at line speeds up to 100 Mb/s.
- 2. Provide **single** port connectivity without a SerDes.
- 3. Define an electrical interface to provide connectivity to as many as 8 ports, each with speeds up to 100 Mb/s using fewer than 8 pins.
- 4. Provide eight-port connectivity with a SerDes not to exceed 2 Gbps.

## Feature Objectives

- 1. Provide an optional in-band MDIO management interface.
- 2. Support Energy Efficient Ethernet (EEE).
- 3. Support half-duplex operation.
- 4. Support PLCA.
- Support full-duplex operation.
- 6. Support auto-negotiation
- 7. Support in-band PTP timestamping. doesn't fit 802.3 model
- 8. Support frame preemption. needs explanation, doesn't fit model