Basic Objectives

1. Define a scalable logical (term?) framework that can support arbitrary port speeds and counts while retaining as many of the feature in our Feature Objectives as possible.

2. Define an electrical interface to provide connectivity to a **single** Ethernet port with 8 or fewer pins operating at line speeds up to 100 Mb/s.

3. Provide **single** port connectivity without a SerDes.

4. Define an electrical interface to provide connectivity to as many as 8 ports, each with speeds up to 100 Mb/s using 8 or fewer pins.

5. 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.

5. Support full-duplex operation.

6. Support auto-negotiation (e.g. Clause 28, Clause 98)

7. Do not preclude the transmission of PTP timestamps across the MII using in-band data.

8. Do not modify the preamble, thus precluding features that rely on the preamble being passed intact by the MII. ~~Support frame preemption.~~