

Ethernet-APL Test Guide

Device Under Test Setup:

- It is expected that all tests are performed with PHY communication abilities disabled. This is achieved by disabling Auto-Negotiation and setting the PHY to SLAVE mode. Regardless of the PHY state, each data line of the port under test shall be terminated with a 50 Ohm resistance behind a 1 μ F series capacitor in the Telebyte Probe.
- Enter the Power Class for the Device Under Test (Class A, B or C) into the test automation software.

Expected Results (Pass/Fail Criteria):

Step	Status	Description
4, 8	PASS	The port powers normally in both polarity configurations; and $I_{PL(1)}$ and $I_{PL(2)}$ are in the range of $I_{PL(MIN)}$ (Class A,B & C = 20mA) to $I_{PS(MAX)}$ (Class A = 55.56mA, Class B = 115mA & Class C = 95mA)
4, 8	FAIL	The port does not power normally in both polarity configurations; or $I_{PL(1)}$ and/or $I_{PL(2)}$ are not in the range of $I_{PL(MIN)}$ to $I_{PS(MAX)}$ (20mA to Class A = 55.56mA, Class B 115mA or Class C = 95mA)

Notes:

References:

- [1] APL Port Profile 1.2 Section 6.3
- [2] Methods Annex – Disabling PHY
- [3] Methods Annex – Power Supply Voltage Sensing