

CU4HDD Task Force Explanation *Draft*

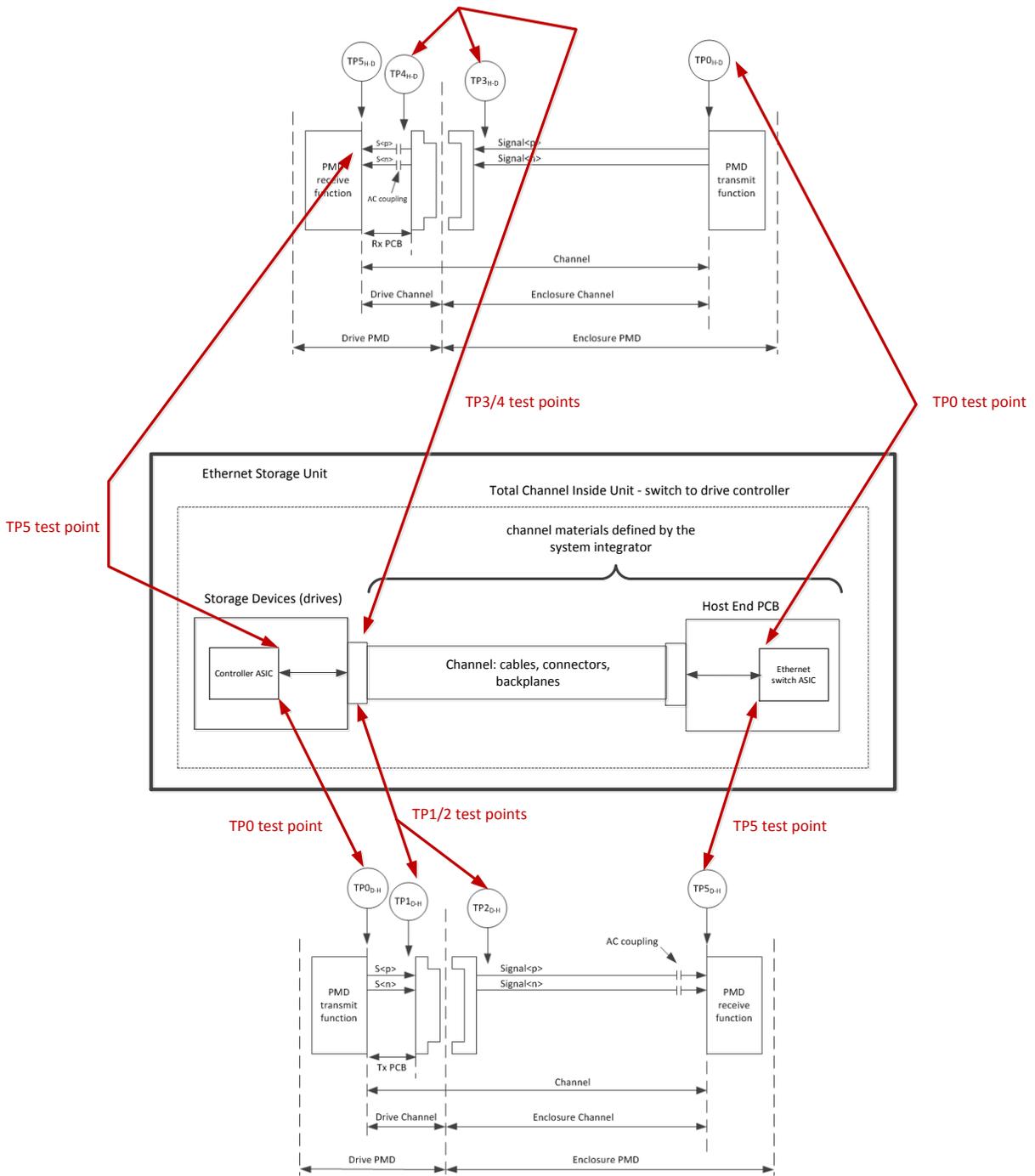
The CU4HDD Task Force is proposing the definition of the “IEEE 802.3 2.5 Gb/s and 5 Gb/s Backplane and Copper Cable” to include a channel which is contained within a storage device enclosure. This internal channel can be made up of storage devices (SSD and HDD drives), backplanes (printed circuit boards), cables (twin axial copper cables), any type of interface connector, and finally, the Ethernet switch/controller, contained on the host side printed circuit board, all within the enclosure. The intention is to define this “enclosure” environment in terms of loss budgets, to create a normative description of this sub-system to allow system integrators to successfully design an enclosure that can accept storage devices operating within the Ethernet guidelines.

The further intention of the CU4HDD Task Force is to simplify the enclosure’s internal channel definition by specifying the drive as one part, and all the rest of the components within the enclosure as the second part, with a total loss budget being the sum of those two parts. This allows flexibility of the system designer to use whatever materials meet the loss budget, without restricting the types of connectors, backplane materials, or use of cable segments along that channel.

An “informative” version of the same structure can be defined as the total loss, end to end, between TP0 and TP5, for possible use in systems that do not contain a storage device.

The above concepts are shown in the diagrammatic representaion below.

Storage Reference Model Test Points – Host to Drive



Storage Reference Model Test Points – Drive to Host