

February 2, 1998



To: GBIC Distribution  
From: Bob Snively  
Subject: Resolution of GBIC comments, Revision 4.4

The resolutions of the comments resulting from the study of revision 4.4 of the GBIC specification are described in this letter. Most of the comments resolutions result from the meeting held on December 9 in Florida. The resulting revision 4.5 of the GBIC specification, dated February 2, 1998, is the final GBIC document and all annexes are considered stable and normative. Editorial modifications have been made to the document to reflect this agreed-upon status. Additions to the GBIC document will be treated as input for a GBIC-2 document if required.

#### COMMENT RESOLUTIONS:

##### 1) Change of terminology

The terms "intracabinet" and "intercabinet" are now replaced by the terms "intra-enclosure" and "inter-enclosure" for consistency with the latest revision of FC-PH-3. this change was made throughout the document.

##### 2) Update curves for long-wave transmitters.

The curves for 1062 Mbaud single mode transmitters have been upgraded. They will be referenced instead of included in the GBIC document for MOD\_DEF 3. The reference is the "Low Cost 10 Km" link standard (100-SM-LC-L). Changes were placed in section 2.0, in Table 8, in Annex C, and in Annex F.

The curves for the 1250 Mbaud single mode transmitters are not the same as those for the 100-SM-LC-L. Updated curves were provided by James Myers and are included in the MOD\_DEF 6 annex.

##### 3) Correct 10 km long-wave definition

The name of the 10 km long-wave single-mode Fibre Channel has been renamed 100-SM-LC-L. The name is corrected throughout the document.

##### 4) Update references

The draft standard for the 100-SM-LC-L technology is now included in the reference list.

##### 5) Update LC-L specification

The receiver sensitivity definition for the 100-SM-LC-L technology has been corrected to the values specified by the standard.

6) RX\_LOS and TX\_DISABLE on MOD\_DEF 1

The major copper MOD\_DEF 1 GBIC users require that RX\_LOS and TX\_DISABLE be implemented. As a result, the RX\_LOS and TX\_DISABLE functions will be required for MOD\_DEF 1 GBICs. The RX\_LOS will be tested with a 531 MHz square wave. The amplitude threshold for detection of loss of signal will be above 100 mv differential peak to peak and below 400 mv differential peak to peak. The RX\_LOS detection shall have a 50 mv hysteresis. The detection shall follow the same timing rules as the optical RX\_LOS. TX\_FAULT remains optional.

These changes are included in Annex A. A number of sentences are deleted to clarify that the TX\_DISABLE and RX\_LOS signals are not optional. A new section is installed to define the RX\_LOS signal.

7) MOD\_DEF 1 compatibility with GBE

Table 8 on page 13 does not include GBE support in its description of MOD\_DEF 1, although it is properly included in Annex A. The table is corrected.

8) Annex A, Table A.1

Table A.1 should reference both style 1 and style 2 connectors for MOD\_DEF 1. The text will be searched for similar errors.

9) Annex B, Table B.1

Table B.1 should reference both style 1 and style 2 connectors for MOD\_DEF 2. The text will be searched for similar errors.

10) Support for 3.3 volt

The document must clarify that the I2C port for the serial port requires 5 volt pull-ups to transition correctly. Chips managing the MOD\_DEF 4 bits must accept 5 volt inputs, even if they are 3.3 volt protocol chips. This change is made in section 4.3.

GBICs using 3.3 volts will not be specified by this document, but may be included in a GBIC-2 document.

11) Complete Annex D

There are some notes and draft questions remaining in Annex D that can now be removed. They have been deleted.



12) Specify maximum serial data rate

There is some variation in the maximum clock rate of the EEPROMs. To allow maximum flexibility in implementation, the maximum clock rate is limited to 100 KHz. Section D.2 is modified to reflect this.

Sincerely,

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