

MEMORANDUM -- 18 Feb 1992

TO: John Lohmeyer, Chairman, X3T9.2

FROM: Bill Spence

SUBJECT: Termination of Reserved Lines

PROPOSAL: In the API draft document, in Par. 6.3.1 (RESERVED Lines), replace the first sentence with the following: The lines labeled RESERVED shall be terminated normally in the bus terminator assemblies or in the end devices on the SCSI cable. Existing terminator assemblies with RESERVED lines connected to ground may continue to be used.

DISCUSSION

The history of this matter, as I recall it, is that years ago it was felt that it was dangerous to leave RESERVED lines open, as the draft standard then permitted. The argument was that the open-ended lines could resonate and create enhanced opportunities for EMI. No experimental data was presented, however, showing that grounded lines were to be preferred.

Standing waves can be set up in lines grounded at each end just as in lines open at each end. With, again, no experimental data, I suggest that a normally terminated line is less likely to set up a radiating wave than either a shorted or an open line.

THE PAYOFF: A RESERVED line normally terminated at the ends can be reclaimed for some future use with no requirement to replace the existing terminators, as is required under the SCSI-2 standard.