X3T9.2/87-207

AT&T

subject: **Cable B Connector Pin Assignments**

date: December 3, 1987

from: David C. Harms

To: Membership, X3T9.2

DOCUMENT #X3T9.2/87- 207

1. Introduction

One attribute of the pin assignments for the connectors on both Cable A and Cable B as presented in Revision 3 of the working draft is that single ended and differential devices can be mistakenly connected on the same cable without causing a short between termination power and ground. Another attribute that the Cable A connector possesses but that Cable B does not is that the Cable A connector (both single ended and differential) can be plugged in upside down (pin 1 on device A connects to pin 50 on device B) without causing a short between termination power and ground. This feature is desirable when not using keyed connectors in that it prevents destructive shorts from occurring.

The following proposal suggests pin assignment changes that allow differential and single ended Cable B's to be interchanged or plugged in upside down without risk of termination power to ground shorts.

2. Proposal

Changes to the following Tables and Notes should be made as noted. All pin assignments not listed should remain unchanged. Note that these pin assignments require a 68-pin connector (i.e. a 64-pin connector will not support this scheme).

Table 4-2: Single-Ended Pin Assignments
Cable B

Signal	Pin Number
~~[see below]~~ GROUND	28
~~[see below]~~ GROUND	30
~~TERMPWRB~~ -DB(16)	32
~~-DB(16)~~ TERMPWRB	34

NOTES:

(1) All odd pins except pin ~~35~~ 35 shall be connected to ground. Pin ~~35~~ 35 shall be connected to TERMPWRB.

Table 4-4: Differential Pin Assignments
Cable B

Signal Name	Pin Number	Pin Number	Signal Name
~~[See below]~~ GROUND	27	28	~~[See below]~~ GROUND
~~[See below]~~ +DB(16)	29	30	~~[See below]~~ -DB(16)
~~TERMPWRB~~ +DB(17)	31	32	~~TERMPWRB~~ -DB(17)
~~+DB(16)~~ GROUND	33	34	~~-DB(16)~~ TERMPWRB
~~+DB(17)~~ TERMPWRB	35	36	~~-DB(17)~~ GROUND