X3T9.2 92-39

to: X3T9.2

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re: Blind-pluggable connector

I have recently become aware of a connector type which is particularly attractive for blind-pluggable applications. I would define a "blind" application as one in which the drive is slid into a slot, mating to a board-mounted connector as opposed to a cable mounted connector. This is a significant application, including arrays as well as multi-drive computing systems.

I find this connector particularly attractive for the following reasons:

-- Since it fits nearly all the way across the back of a 3 1/2 inch drive, the mounting configuration should be the same from drive to drive, vendor to vendor.
-- The auxilliary connector could easily be used for setting the SCSI ID (4 bits), and a drive present detect, which tends to be useful for array and back-plane mounts. In the case of a cable mount, these pins can be jumpered.
-- The SCSI connector is a standard 68-pin configuration, which means that vendors can ship standard product for both back-plane and cable configurations.
-- My understanding is that the connector vendor makes the connector mating surfaces as a standard product, changing only the metal "back-end" for different board orientations (straddle, surface through-hole, etc)
-- The connector vendor also makes a mating part for mounting on a backplane.

Since the P-cable connect is standard and the power-connector is industry-wide, the only part left to standardize is the useage of the 10 configuration pins. Just to get the ball rolling, I will suggest the following configuration:

With the power connector on the right, pin one would be on the left upper corner, pin two falling immediately beneath it.

Pin	Description
1	SCSI ID select 0
2	Ground
3	SCSI ID select 1
4	Ground
5	SCSI ID select 2
6	Ground
7	SCSI ID select 3
8	Ground
9	Unused
10	Ground

Obviously, we can discuss possible uses for the Unused pin.

Thanks for your consideration.

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