August 14, 1987

TO: John Lohmeyer, Chairman X3T9.2
FROM: Gerald Marazas, IBM Corporation

SUBJECT: Proposal for High Density Shielded SCSI-2 Connector

References in the proposal below are made relative to Appendix D (Recommended Shielded Connectors), section D2 (Shielded Connector, Alternative 2) as appearing in document ANSI X3.131-1986, (SCSI-1). The rationales behind the proposal are: 1) Provide a match between connector size and downsized attachment cards used in current microcomputer systems, and 2) to maintain a single connector part for both Cable A and Cable B in SCSI-2. Connector keying will be required to distinguish between the two connectors.

PROPOSAL: In the SCSI-2 specification, an extension is proposed to Section D2 so as to define a higher density version of a shielded ribbon type connector to be used in association with Cable A which supports the first 8 bits plus parity of the SCSI bus and its associated control lines. For completeness, the present wording of section D2 is repeated. Following this, additional wording per the subject proposal is given.

D2. Shielded Connector, Alternative 2:

The shielded device connector (Figure D3) is a 50-conductor connector consisting of two rows of ribbon contacts spaced 2.16 mm (0.085 in) apart. The non mating portion of the connector is shown for reference only. FCC document Part 68 Subpart F 68.500 should be used for reference.

The shielded cable connector (Figure D4) is a 50-conductor connector consisting of two rows of ribbon contacts spaced 2.16 mm (0.085 in) apart. The non mating portion of the connector is shown for reference only.

The connector pin assignments are shown in Table D1 for single-ended drivers and are shown in Table D2 for differential drivers.

Proposed Extension of Section D2.

The shielded device connector (Figure D5) is a 60-conductor connector consisting of two rows of ribbon contacts spaced 1.27 mm (0.05 inch) apart. Connector pin assignments for conductors 1 through 50 are shown in Table D1 for single-ended drivers and are shown in Table D2 for differential drivers. Conductors 51 through 60 are vendor unique.

Electrical continuity is to be maintained for all 60 conductors. Adaption between 60 wire originators and a 50 wire device will be accomplished either within the confines of the cable or within the unit box holding the 50 wire device.

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NOTES:
(1) DIMENSIONS LISTED WITH ASTERISKS ARE SHOWN FOR REFERENCE ONLY.
(2) TOLERANCE ±0.5mm (0.02 in.)

FIGURE D5. SHIELD & SCXI CABLE CONNECTOR, ALTERNATIVE 3.