

X3T9.2/87-133

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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.

PROPOSSAL: 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 nonmating 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 nonmating 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.

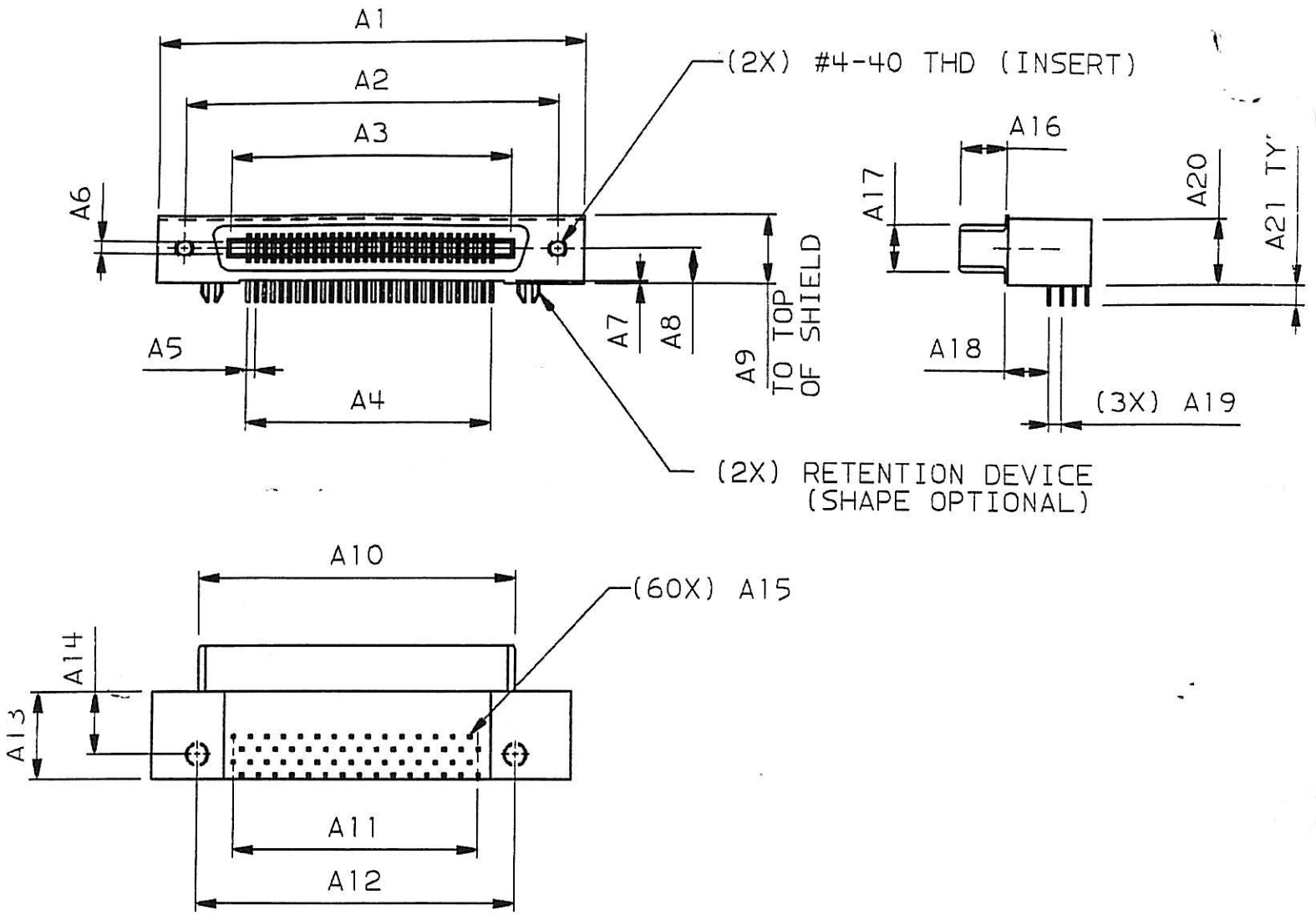
Proposed Extension of Section D2.

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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DIMS.	(mm)	(in.)
A1	64.45	2.537
A2	56.45	2.222
A3	42.4	1.669
A4	36.83	1.45
A5	1.27	0.05
A6	1.9	0.075
A7	0.3	0.012
A8	5.4	0.213
A9	10.4	0.411
A10	47.6	1.874
A11*	36.83	1.45

DIMS.	(mm)	(in.)
A12	47.3	1.882
A13	13.1	0.516
A14	9.45	0.372
A15	0.4 X 0.5	0.016 X 0.020
A16	6.3	0.272
A17	7	0.276
A18	6.3	0.268
A19	1.905	0.053
A20*	9.9	0.39
A21	3 NOTE 2	0.118 NOTE 2

NOTES:

- (1) DIMENSIONS LISTED WITH ASTERISKS ARE SHOWN FOR REFERENCE ONLY.
- (2) TOLERANCE $\pm 0.5\text{mm}$ (0.02 in.)

FIGURE D5. SHIELDED SCSI CABLE CONNECTOR, ALTERNATIVE 3.