



# Madison Cable Corporation

X3T9.2/92-69

March 13, 1992

Mr. John Lohmeyer, Chairman  
NCR Corporation  
3718 N. Rock Road  
Wichita, KS 67226-1397

Dear John,

The following is further input for the committee on controlled impedance variation of foamed polyolefin shielded cable discussed at the X3T9.2 SCSI Parallel Interface (SPI) Working Sub-Group meeting on February 18th in Austin.

<u>Layer</u>	<u>Impedance (Single Ended)</u>
Core	86 +/- 2
Middle	87 +/- 3
Outer	83 +/- 2

The "max/max" impedance variation is 9 ohms. (81 minimum to 90 maximum.)

This is actual data obtained from Madison Cable MS-4242 which is our 25 Pair 28 AWG Foamed Polyolefin SCSI cable. The differential impedance of this cable is 132 Ohms nominal.

I am also enclosing a table of our family of High Performance SCSI-2 and SCSI-3 Multi-Pair Cables. This should give the end user some idea of the wide choice of cable options available to serve his particular impedance requirements.

Sincerely,

Robert A. Bellino  
Senior Vice President  
Technical Director

RAB/sh  
cc: W. Spence, ENDL-Texas  
M. Patel

**MADISON'S HIGH PERFORMANCE**  
**IPI, HiPPI SCSI-2 AND SCSI-3**  
**MULTI-PAIR CABLES**

<u>MADISON SPEC NO.</u>	<u>NUMBER OF PAIRS</u>	<u>INS.</u>	<u>IMPEDANCE</u>		<u>NOMINAL CABLE O.D. INCHES/MM</u>
			<u>TDR (OHMS) DIFF</u>	<u>SE</u>	
28 AWG ---- 28 AWG ---- 28 AWG ---- 28 AWG ---- 28 AWG					
<u>105 OHMS</u>					
4084-CL2	25(F/10/15)	SP	105	65	.360/9.1
4267-CL2 EF	25(3/9/13)	SP	105	67	.355/9.0
4108-CL2	34(5/11/18)	SP	105	67	.400/10.2
4079-CL2/FT4	50(IPI/HiPPI)	SP	108	67	.485/12.3
4244-CL2/FT4	55(SCSI-3)	SP	108	68	.490/12.4
<u>120 OHMS</u>					
4099-CL2	25(3/9/13)	SP	120	79	.405/10.3
4444-CL2-EF	25(3/9/13)	SP	120	79	.405/10.3
4179-CL2/FT4	25(3/9/13)	SP	123	79	.425/10.8
4205-CL2/FT4	34(P Cable)	SP	123	79	.490/12.4
4300-CL2/FT4	50(IPI/HiPPI)	SP	123	79	.560/14.2
4297-CL2/FT4	55(SCSI-3)	SP	123	79	.630/16.0
<u>132 OHMS</u>					
4135-CL2/FT4	25(F/10/15)	FP	132	85	.430/10.9
4242-CL2/FT4	25(3/9/13)	FP	132	85	.425/10.8
4206-CL2/FT4	34(P Cable)	FP	132	85	.490/12.4
4269-CL2/FT4	50(IPI/HiPPI)	FP	132	85	.560/14.2
<u>150 OHMS</u>					
4173-CL2	25(F/10/15)	FP	150	97	.485/12.3
<u>158 OHMS</u>					
4325-CL2/FT4	25(3/9/13)	FP	158	100	.515/13.1



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