Ultra 3 Amplitude & Skew Budgets - 25 Meter Point To Point

	DUAL EDGE @ 40 MHZ			SINGLE EDGE @ 80 MHZ		
	Nominal	Weak	Proposed	Nominal	Weak	Proposed
1.0 SIGNAL AMPLITUDES						
Driver Vop	445	270	270	455	270	270
Loaded Cable atten	------(64% or -3.8db ; cable -3.0 db)-----			--------(48% or - 6.4 db; cable -4.2db) --------		
Receiver						
(at SCSI pin)	278	162	160	218	130	130
1st Pulse Vop	268	156	150	180	107	107
2.0 NOISE & OFFSETS						
Fail Safe Bias	-112	-125	-50	-112	-125	-50
Receiver offset	10	10	10	10	10	10
Cable Xtalk 2%	5	3	3	4	3	3
Reflections 10%	27	16	15	18	13	13
Totals	154	154	78	144	151	67
Margin	114	2	72	36	(-44)	44
3.0 SKEW INDUCED BY CLOCKING AT RECEIVER						
DC SKEW (" offset")	1.5	2.5	1.6	1.2	(no op)	1.0
AC SKEW ("JITTER")	0.5	0.5	0.5	0.5	(no op)	0.5
Totals (pk to pk)	2.0	3.0	2.1	1.7		1.5
4.0 SKEW INDUCED BY CABLE ASSEMBLY:						
DC SKEW ("pair to pair)	--------0.8 ns-			----------0.8 ns-		
ISI (Group Dispersion)	--------1.5ns---			----------2.0ns--		

Notes:
1. All values in +/- millivolts, unless noted otherwise
2. "Nominal Signal Amplitudes" measured with 28 gauge TP external cable; see Fig 1 & 2.
3. ."Weak" Signal Amplitudes scaled from above measured values.
4. Cable loss & X-talk after C.Grant's 6/10/97 "TurboQuad" Document.
5. Skew calculated from Amplitude & slew rates
6. Cable assembly data from D. Kurita, VOLEX

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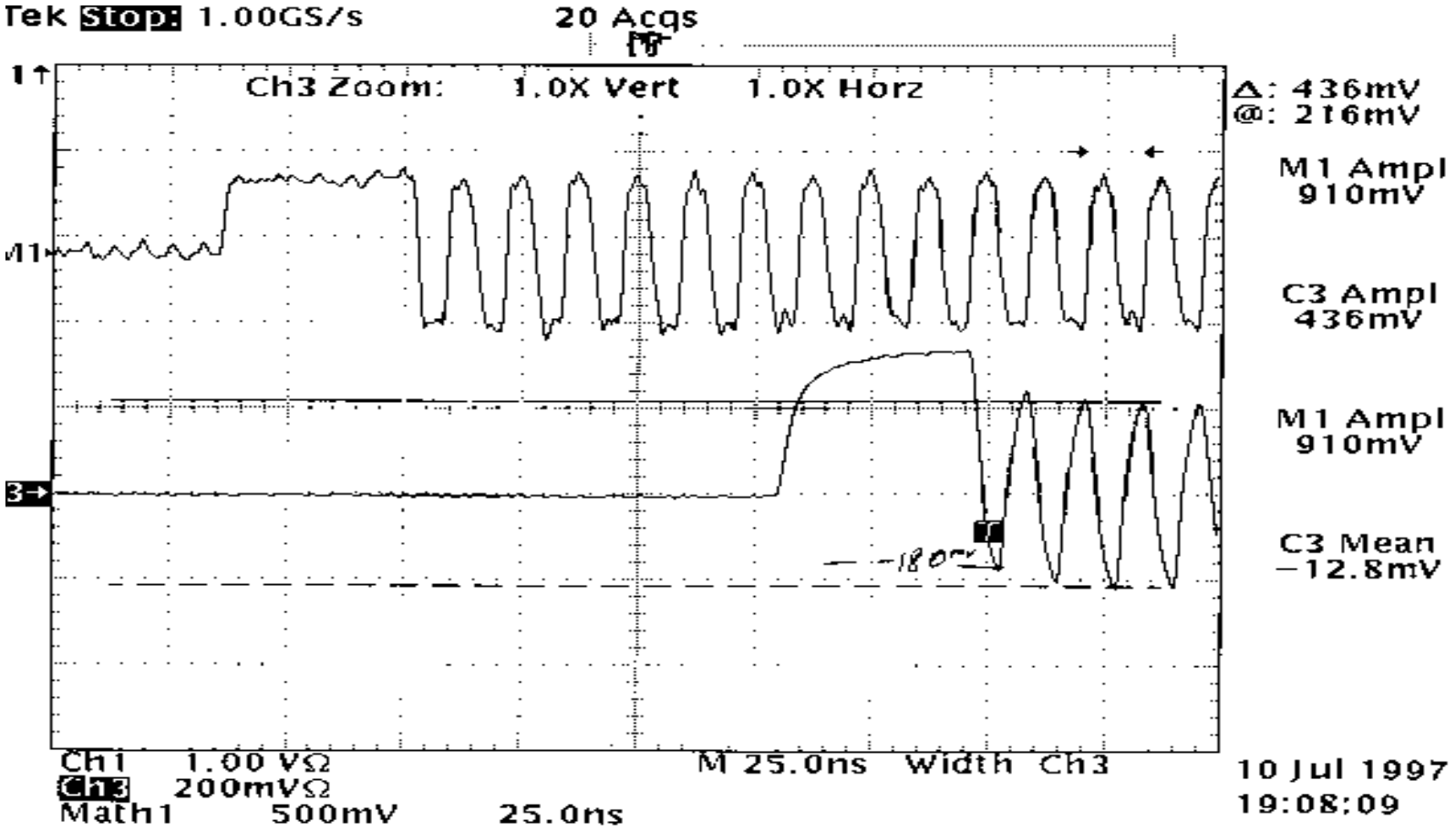

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