

10.0 ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Min	Max	Units	Remarks
DC Supply voltage	VCC	-0.3	+7	Volts	
Input voltage	VIN	-0.3	VCC+0.3	Volts	Note 1
DC Input current	IIN	-10	10	Microamps	Note 2
Input zapping	VZAPP	2,000		Volts	Note 3
Latch-up trigger current	ILATCH		200	Milliamps	Note 4
Thermal resistance	TJ		15	Deg. C/W	
Storage temperature	TSTG	-65	150	Deg. C	
Lead temperature	TL	300		Deg. C	

Note 1: VCC referenced to ground

Note 2: Does not include current through internal 64K ohm pull-up/down resistors.

Note 3: As defined for ESDS in Method 3015 of MIL-STD-883.

Note 4: The latch-up triggering current is the maximum current that will not cause latch-up on an I/O BUFFER.

OPERATING CONDITIONS

Parameter	Symbol	Min	Max	Units
Supply voltage	VCC	4.5	+5.5	Volts
Supply current	ICC			
0% TX duty-cycle			90	Milliamps
100% TX duty-cycle			675	Milliamps
Output level on bus	Vpp	7.1	9	Volts
Output level on Stub	Vpp	20	27	Volts
Ambient operating temperature range	TA	-55	+125	Deg. C

I/O TYPES	DESCRIPTION
1	Bi-directional 3-state buffer with 64K ohm pull-up
2	Bi-directional 3-state buffer with 64K ohm pull-up
3	Output Buffer
4	Output Buffer
5	Open-drain Output Buffer
6	Input Buffer with 64K ohm pull-up
7	Input Buffer with 64K ohm pull-down
8	Input Buffer

Signal Name	I/O	Signal Name	I/O	Signal Name	I/O	Signal Name	I/O
H_DAT(15:0)	1	DSC_INTPO_L CMDS	3	DTACK_L IRQ_L	5	CLK10	7
I/O_DAT(7:0) I/O_ADR(2:1)	2	MDCDRST PLSCMD I/O_RD_L I/O_WR_L	4	H_ADR(12:1) HRD_L HWRL_L HWRH_L HCS_L RST_L INTPL_L INTACK_L SSF_TF	6	TXINH_A TXINH_B	8

I/O ELECTRICAL CHARACTERISTICS

Parameter	I/O Type	Condition	Min	Max	Units
Low-level input voltage	1,2,6,7,8			0.8	Volts
High-level input voltage	1,2,6,7,8		2		Volts
Low-level output voltage	1	IOL < 8.0 ma		0.4	Volts
	2	IOL < 4.0 ma		0.4	Volts
	3	IOL < 4.0 ma		0.4	Volts
	4	IOL < 6.0 ma		0.4	Volts
	5	IOL < 12.0 ma		0.4	Volts
High-level output voltage	1	IOH > -8.0 ma	2.4		Volts
	2	IOH > -4.0 ma	2.4		Volts
	3	IOH > -4.0 ma	2.4		Volts
	4	IOH > -6.0 ma	2.4		Volts
Input Cap.				10	PF