LINEAR TECHNOLOGY

SPECIFICATION NOTICE

LTC1348

November 1996

The **LTC®1348** will operate on supply voltages ranging from V_{CC} = 3V to 5.5V. The original data sheet was defined for operation at 3.3V or 5V. To guarantee the wider supply range, the following Electrical Characteristics apply. Note the typical supply current at 3.3V is 600µA and is 800µA at 5V.

For complete specifications, typical performance curves and applications information, please see the **LTC1348** data sheet.

DC ELECTRICAL CHARACTERISTICS

V_{CC} = 3V to 5.5V, C1 to C4 = 0.1µF, unless otherwise noted.

PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
Any Driver						
Output Voltage Swing	V_{CC} = 3.3V, 3k to GND Positive	●	5.0	6.2		V
	Negative	●	–5.0	–6.0		V
Logic Input Voltage Level	Input High Level (V_{OUT} = Low), V_{CC} = 3.3V	●	2.0			V
	Input High Level (V_{OUT} = Low), V_{CC} = 5V	●	2.4			V
Logic Input Current	V_{IN} = 0V	●		–5	–35	µA
Any Receiver						
Hysteresis	Normal Mode			0.3		V
Output Voltage	Output Low, I_{OUT} = –1.6mA	●		0.2	0.4	V
	Output High, I_{OUT} = 160µA	●	V_{CC} – 0.6V			V
Power Supply						
V_{CC} Supply Current	No Load (Note 2) V_{CC} = 3.3V	●		0.6	2.0	mA
	No Load (Note 2) V_{CC} = 5V	●		0.8	2.5	mA
Dr/Rx Enable Threshold Low		●			0.8	V
Dr/Rx Enable Threshold High	V_{CC} = 3.3V	●	2.0			V
	V_{CC} = 5V	●	2.4			V

AC ELECTRICAL CHARACTERISTICS

V_{CC} = 3V to 5.5V, C1 to C4 = 0.1µF, unless otherwise noted.

PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
Maximum Data Rate	R_L = 3k, C_L = 1000pF, One Driver Switching	●	120	250		kbps
Slew Rate	V_{CC} = 5V, R_L = 3k, C_L = 51pF			8	30	V/µs
	V_{CC} = 3.3V, R_L = 3k, C_L = 2500pF		3			V/µs
Driver Propagation Delay (TTL to RS232)	t_{HLD} (Figure 1)	●		2.5	4	µs
	t_{LHD} (Figure 1)	●		2.5	4	µs
Receiver Propagation Delay (RS232 to TTL)	t_{HLR} (Figure 2) Normal Mode	●		0.3	1	µs
	t_{LHR} (Figure 2) Normal Mode	●		0.2	1	µs
	t_{HLR} (Figure 2) Receiver Alive Mode	●		1.0	4	µs
	t_{LHR} (Figure 2) Receiver Alive Mode	●		0.2	4	µs

Note 3: Supply current measurement in shutdown is performed with V_{DREN} and V_{RXEN} = 0V.

Note 4: Supply current measurement in receiver alive mode is performed with V_{DREN} = 0V and V_{RXEN} = V_{CC}.

For further information regarding this specification notice contact:

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