Power Supply Characteristics

Parameter	Description	Test Conditions	Typ.[6]	Max.	Unit
I_{CC}	Quiescent Power Supply Current	V_{CC}=Max., $V_{IN} \leq 0.2V$, $V_{IN} \geq V_{CC}-0.2V$	0.1	0.2	mA
ΔI_{CC}	Quiescent Power Supply Current (TTL inputs HIGH)	V_{CC}=Max., V_{IN}=3.4V,[9] f_1=0, Outputs Open	0.5	2.0	mA
I_{CCD}	Dynamic Power Supply Current[10]	V_{CC}=Max., One Bit Toggling, Preset Mode, 50% Duty Cycle, Outputs Open, $\overline{MR}=V_{CC}=\overline{SR}$, $\overline{PL}=\overline{CE}=U/D=CP=GND$, $V_{IN} \leq 0.2V$ or $V_{IN} \geq V_{CC}-0.2V$	0.06	0.12	mA/MHz
I_C	Total Power Supply Current[11]	V_{CC}=Max., Preset Mode, 50% Duty Cycle, Outputs Open, One Bit Toggling at f_1=5 MHz, $\overline{PL}=\overline{CE}=U/D=CP=GND$. $V_{IN}=V_{CC}, V_{IN}=GND$	0.4	0.8	mA
		V_{CC}=Max., Preset Mode, 50% Duty Cycle, Outputs Open, One Bit Toggling at f_1=5 MHz, V_{IN}=3.4V or $V_{IN}=GND$	0.7	1.8	mA
		V_{CC}=Max., Preset Mode, 50% Duty Cycle, Outputs Open, Four Bits Toggling at f_1=5 MHz, $\overline{PL}=\overline{CE}=U/D=CP=GND$, $V_{IN}=V_{CC}, V_{IN}=GND$	1.3	2.6[12]	mA
		V_{CC}=Max., Preset Mode, 50% Duty Cycle, Outputs Open, Four Bits Toggling at f_1=5 MHz, $\overline{PL}=\overline{CE}=U/D=CP=GND$, V_{IN}=3.4V or $V_{IN}=GND$	2.3	6.6[12]	mA

Notes:
9. Per TTL driven input (V_{IN}=3.4V); all other inputs at V_{CC} or GND.
10. This parameter is not directly testable, but is derived for use in total Power Supply calculations.
11. I_C = $I_{QUIESCENT}$ + I_{INPUTS} + $I_{DYNAMIC}$
    I_C = $I_{CC}+\Delta I_{CC}D_HN_T+I_{CCD}(f_0/2 + f_1N_1)$
    I_{CC} = Quiescent Current with CMOS input levels
    ΔI_{CC} = Power Supply Current for a TTL HIGH input (V_{IN}=3.4V)
    D_H = Duty Cycle for TTL inputs HIGH

N_T = Number of TTL inputs at D_H
I_{CCD} = Dynamic Current caused by an input transition pair (HLH or LHL)
f_0 = Clock frequency for registered devices, otherwise zero
f_1 = Input signal frequency
N_1 = Number of inputs changing at f_1
All currents are in milliamps and all frequencies are in megahertz.
12. Values for these conditions are examples of the I_{CC} formula. These limits are guaranteed but not tested.