

### Current and Power Consumption

## Internal 1.8V Current and Power Consumption

### Active Operation

Parameter	Min	Max	Unit
VCC core	1.7	1.9	V
ICC current	39	48	mA
POWER core	66.3	91.2	mW

### Quiescent Operation

Parameter	Min	Max	Unit
VCC core	1.7	1.9	V
ICC current	0.4	0.55	mA
POWER core	0.68	1.05	mW

\*NOTE: Operating conditions assumed to be 75°C @ 55MHz operation (under the most demanding memory interfacing situation)

## 3.3V I/O Current and Power Consumption

Internal I/O ring (3.3V) draw is estimated at between 200-400mW during normal operation.

Using the equation (Power = N.C.V<sup>2</sup>.F) we can estimate the power required by the user to drive various external loads under certain LF3312 operating conditions and configurations\*.

### Typical VCC (3.3V)

Configuration	VCC	Pins	Load Cap	Freq	Switching	I/O Current	I/O Power
Single Channel	3.3	14	10pF	74MHz	30%	11mA	36mW
Dual Channel	3.3	26	10pF	74MHz	30%	20mA	66mW

### High VCC (3.6V)

Configuration	VCC	Pins	Load Cap	Freq	Switching	I/O Current	I/O Power
Single Channel	3.6	14	10pF	74MHz	30%	12mA	40mW
Dual Channel	3.6	26	10pF	74MHz	30%	23mA	75mW

\*NOTE: Output ports are assumed to be driving 12bits plus 2 additional pins for flags. 'Switching' refers to the number of bits in the 12 or 24bit port that switch every clock cycle. The Power estimations in the table do not include the estimated internal I/O ring current draw. The 10pF load is an estimation of combined trace and next device's input-pin capacitance.