

4. Maximum values are characterized values and not test limits in production.

## 26.2.2 ATmega88P DC Characteristics

$T_A = -40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ ,  $V_{CC} = 1.8\text{V}$  to  $5.5\text{V}$  (unless otherwise noted)

Symbol	Parameter	Condition	Min.	Typ. <sup>(2)</sup>	Max.	Units
$I_{CC}$	Power Supply Current <sup>(1)</sup>	Active 1 MHz, $V_{CC} = 2\text{V}$		0.3	0.5	mA
		Active 4 MHz, $V_{CC} = 3\text{V}$		1.7	2.5	mA
		Active 8 MHz, $V_{CC} = 5\text{V}$		6.3	9	mA
		Idle 1 MHz, $V_{CC} = 2\text{V}$		0.05	0.15	mA
		Idle 4 MHz, $V_{CC} = 3\text{V}$		0.3	0.7	mA
		Idle 8 MHz, $V_{CC} = 5\text{V}$		1.4	2.7	mA
	Power-save mode <sup>(3)(4)</sup>	32 kHz TOSC enabled, $V_{CC} = 1.8\text{V}$		0.72	1.6	$\mu\text{A}$
		32 kHz TOSC enabled, $V_{CC} = 3\text{V}$		0.9	2.6	$\mu\text{A}$
	Power-down mode <sup>(3)</sup>	WDT enabled, $V_{CC} = 3\text{V}$		4.4	8	$\mu\text{A}$
		WDT disabled, $V_{CC} = 3\text{V}$		0.2	2	$\mu\text{A}$

- Notes: 1. Values with "Minimizing Power Consumption" enabled (0xFF).  
2. Typical values at  $25^{\circ}\text{C}$ . Maximum values are test limits in production.  
3. The current consumption values include input leakage current.  
4. Maximum values are characterized values and not test limits in production.

## 26.2.3 ATmega168P DC Characteristics

$T_A = -40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ ,  $V_{CC} = 1.8\text{V}$  to  $5.5\text{V}$  (unless otherwise noted)

Symbol	Parameter	Condition	Min.	Typ. <sup>(2)</sup>	Max.	Units
$I_{CC}$	Power Supply Current <sup>(1)</sup>	Active 1 MHz, $V_{CC} = 2\text{V}$		0.3	0.5	mA
		Active 4 MHz, $V_{CC} = 3\text{V}$		1.8	2.5	mA
		Active 8 MHz, $V_{CC} = 5\text{V}$		6.7	9	mA
		Idle 1 MHz, $V_{CC} = 2\text{V}$		0.06	0.15	mA
		Idle 4 MHz, $V_{CC} = 3\text{V}$		0.4	0.7	mA
		Idle 8 MHz, $V_{CC} = 5\text{V}$		1.7	2.7	mA
	Power-save mode <sup>(3)(4)</sup>	32 kHz TOSC enabled, $V_{CC} = 1.8\text{V}$		0.8	1.6	$\mu\text{A}$
		32 kHz TOSC enabled, $V_{CC} = 3\text{V}$		0.9	2.6	$\mu\text{A}$
	Power-down mode <sup>(3)</sup>	WDT enabled, $V_{CC} = 3\text{V}$		4.6	8	$\mu\text{A}$
		WDT disabled, $V_{CC} = 3\text{V}$		0.1	2	$\mu\text{A}$

- Notes: 1. Values with "Minimizing Power Consumption" enabled (0xFF).  
2. Typical values at  $25^{\circ}\text{C}$ . Maximum values are test limits in production.