

### 6.2.5 Power Consumption

The following table lists typical power consumption for the BitsyX with varying input voltage and activity levels. Run mode efficiency of the power supply decreases slightly with higher input voltage.

Power consumption varies based on peripheral connections, components populated on the system and the LCD panel connected. Input voltage, temperature and the level of processor activity affect power consumption to a lesser extent. The measurements are accurate to  $\pm 5-10\%$ .

LCD displays and backlights add significantly to the total power consumption of a system. ADS Development systems include the Sharp LQ64D343 5V TFT VGA display, which draws about one watt, and the Taiyo-Yuden LS520 backlight inverter, which draws about six watts at full intensity.

Test Condition	VBATT_POS							
	6.5 V		9 V		12 V		15 V	
Sleep mode	2.9	19	2.3	20	1.9	22	1.6	25
CPU idle (note 19)	110	690	83	740	66	790	55	830
Run mode, max (note 20)	190	1200	140	1300	120	1400	100	1500
Turbo mode, max				[TBD]				
Units	mA	mW	mA	mW	mA	mW	mA	mW

Notes: Power consumption was measured on fully-populated 64 MiB BitsyX systems with no peripheral connections and the following additional conditions:

- 19. System in Run mode with 200 MHz CPU clock and 100 MHz memory clock. Running only the Windows CE desktop (build 4.10.20), the system is predominantly in Idle mode (<5% CPU utilization).
- 20. System in Run mode at 200 MHz, Windows CE build 4.10.20. Full (95-100%) processor utilization achieved by running multiple instances of a graphical application.

