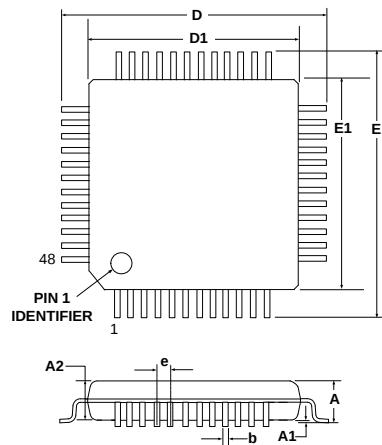


Selected Electrical Specifications

($T_A = -40$ to $+85$ °C, $V_{DD} = 2.7$ V unless otherwise specified)

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
GLOBAL CHARACTERISTICS					
Digital Supply Voltage		2.7		3.6	V
Digital Supply Current with CPU active	Clock = 25 MHz		9		mA
	Clock = 1 MHz		0.4		mA
	Clock = 32 kHz; V_{DD} Monitor Enabled		20		μA
Digital Supply Current (shutdown)	Oscillator not running; V_{DD} Monitor Enabled		10		μA
	Oscillator not running; V_{DD} Monitor Disabled		0.1		μA
Digital Supply RAM Data Retention Voltage			1.5		V
CPU & DIGITAL I/O PORTS					
Clock Frequency Range		DC		25	MHz
Port Output High Voltage	$I_{OH} = -3$ mA, Port I/O push-pull	$V_{DD} - 0.7$			V
Port Output Low Voltage	$I_{OL} = 8.5$ mA			0.6	V
Input High Voltage		$0.7 \times V_{DD}$			V
Input Low Voltage				$0.3 \times V_{DD}$	V
SPI Bus Clock Frequency	fCLK=MCU Clock; SPI Master Mode			fCLK/2	MHz
A/D CONVERTER					
Resolution			12		bits
Integral Nonlinearity			±1	±2	LSB
Differential Nonlinearity	Guaranteed Monotonic			±1	LSB
Signal-to-Noise Plus Distortion		64			dB
Throughput Rate				100	ksps
Input Voltage Range		0		V_{REF}	V
COMPARATORS					
Supply Current	(each Comparator)		1.3		μA
Response Time	$ CP+ - CP- = 100$ mV		4		μs
Input Voltage Range		-0.25		$V_{DD} + 0.25$	V
Input Bias Current		-5	0.001	+5	nA
Input Offset Voltage		-10		+10	mV

Package Information



	MIN (mm)	NOM (mm)	MAX (mm)
A	-	-	1.20
A1	0.05	-	0.15
A2	0.95	1.00	1.05
b	0.17	0.22	0.27
D	-	9.00	-
D1	-	7.00	-
e	-	0.50	-
E	-	9.00	-
E1	-	7.00	-

C8051F206DK Development Kit

