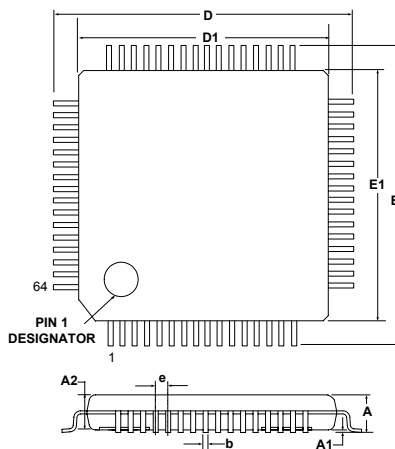


Selected Electrical Specifications

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

| PARAMETER | CONDITIONS | MIN | TYP | MAX | UNITS |
|---------------------------------|---|-----------------|--------------------------|------------------------|---------------------|
| GLOBAL CHARACTERISTICS | | | | | |
| Supply Voltage | | 2.7 | | 3.6 | V |
| Supply Current (CPU active) | Clock = 25 MHz Clock = 1 MHz Clock = 32 kHz; V_{DD} Monitor Enabled | | 18 0.7 20 | | mA mA μ A |
| Supply Current (shutdown) | Oscillator not running; V_{DD} Monitor Disabled | | 0.1 | | μ A |
| Clock Frequency Range | | DC | | 25 | MHz |
| 16-BIT A/D CONVERTERS | | | | | |
| Resolution | | | 16 | | bits |
| Integral Nonlinearity | Single-ended Mode Differential Mode | | ± 0.75 ± 0.50 | ± 2 ± 1 | LSB LSB |
| Differential Nonlinearity | Guaranteed Monotonic | | ± 0.5 | ± 1 | LSB |
| Signal-to-Noise Plus Distortion | $F_{in} = 10$ kHz, Single-ended $F_{in} = 10$ kHz, Differential | | 86 89 | | dB dB |
| Total Harmonic Distortion | $F_{in} = 10$ kHz, Single-ended $F_{in} = 10$ kHz, Differential | | 96 103 | | dB dB |
| Spurious-Free Dynamic Range | $F_{in} = 10$ kHz, Single-ended $F_{in} = 10$ kHz, Differential | | 97 104 | | dB dB |
| Throughput Rate | | | | 1 | Msp/s |
| Input Voltage Range | Single-ended ($A_{INn} - A_{INnG}$) Differential ($A_{IN0} - A_{IN1}$) | 0 $-V_{REF}$ | | V_{REF} V_{REF} | V V |
| Power Supply Current (each ADC) | Operating Mode, 1 Msp/s ($AV_{DD} + AV_{+}$) Shutdown Mode | | 5.5 1 | | mA μ A |

Package Information



| | MIN (mm) | NOM (mm) | MAX (mm) |
|----|----------|----------|----------|
| A | - | - | 1.20 |
| A1 | 0.05 | - | 0.15 |
| A2 | 0.95 | - | 1.05 |
| b | 0.17 | 0.22 | 0.27 |
| D | - | 12.00 | - |
| D1 | - | 10.00 | - |
| e | - | 0.50 | - |
| E | - | 12.00 | - |
| E1 | - | 10.00 | - |

C8051F060DK Development Kit

