

**ELECTRICAL SPECIFICATIONS****Absolute Maximum Ratings**

Storage Temperature .....	-65°C to +150°C
Case Temp under Bias .....	-65°C to +120°C
Supply Voltage	
with Respect to $V_{SS}$ .....	-0.5V to +6.5V
Voltage on other Pins	
with Respect to $V_{SS}$ .....	-0.5V to $V_{CC} + 0.5V$

**Recommended Connections**

Power and ground connections must be made to multiple  $V_{CC}$  and  $V_{SS}$  pins. Every 80C186EB-based circuit board should include separate power ( $V_{CC}$ ) and ground ( $V_{SS}$ ) planes. Every  $V_{CC}$  pin must be connected to the power plane, and every  $V_{SS}$  pin must be connected to the ground plane. Pins identified as "NC" must not be connected in the system. Liberal decoupling capacitance should be placed near the processor. The processor can cause transient power surges when its output buffers transition, particularly when connected to large capacitive loads.

NOTICE: This data sheet contains preliminary information on new products in production. It is valid for the devices indicated in the revision history. The specifications are subject to change without notice.

*\*WARNING: Stressing the device beyond the "Absolute Maximum Ratings" may cause permanent damage. These are stress ratings only. Operation beyond the "Operating Conditions" is not recommended and extended exposure beyond the "Operating Conditions" may affect device reliability.*

Low inductance capacitors and interconnects are recommended for best high frequency electrical performance. Inductance is reduced by placing the decoupling capacitors as close as possible to the processor  $V_{CC}$  and  $V_{SS}$  package pins.

Always connect any unused input to an appropriate signal level. In particular, unused interrupt inputs (INT0:4) should be connected to  $V_{CC}$  through a pull-up resistor (in the range of 50 K $\Omega$ ). **Leave any unused output pin or any NC pin unconnected.**