DEVICE MIGRATIONS

This document is intended to describe the functional differences and the electrical specification differences that are present when migrating from one device to the next.

**Note:** This device has been designed to perform to the parameters of its data sheet. It has been tested to an electrical specification designed to determine its conformance with these parameters. Due to process differences in the manufacture of this device, this device may have different performance characteristics than its earlier version. These differences may cause this device to perform differently in your application than the earlier version of this device.

Table 1 shows the considerations that must be taken into account when migrating from the PIC16C57 to the PIC16C57C.

**TABLE 1: PIC16C57 → PIC16C57C DIFFERENCES**

<table>
<thead>
<tr>
<th>No.</th>
<th>Difference</th>
<th>H/W</th>
<th>S/W</th>
<th>Prog.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Master Clear Filter added, PIC16C57C. See Electrical Specification #30</td>
<td>✔</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2</td>
<td>Programming algorithm change, PIC16C57C uses a new programming algorithm</td>
<td>—</td>
<td>—</td>
<td>✔</td>
</tr>
<tr>
<td>3</td>
<td>Oscillator configuration bits are user selectable on the PIC16C57C</td>
<td>—</td>
<td>✔</td>
<td>—</td>
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</tbody>
</table>
## Electrical Specification Differences

<table>
<thead>
<tr>
<th>Parm. No.</th>
<th>Sym.</th>
<th>Characteristic</th>
<th>PIC16C57 Data Sheet</th>
<th>PIC16C57C Data Sheet</th>
<th>Units</th>
<th>Conditions</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Min</td>
<td>Typ</td>
<td>Max</td>
<td>Min</td>
</tr>
<tr>
<td>VDD</td>
<td></td>
<td>Supply Voltage</td>
<td>XT, RC Options</td>
<td>3.0</td>
<td>6.25</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LP Option</td>
<td>2.5</td>
<td>6.25</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HS option</td>
<td>4.5</td>
<td>5.5</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>XT, RC Opt. Extended</td>
<td>3.25</td>
<td>6.0</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LP Option Extended</td>
<td>2.5</td>
<td>6.0</td>
<td>3.0</td>
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<tr>
<td>IDD</td>
<td></td>
<td>Supply Current</td>
<td>XT and RC options</td>
<td>—</td>
<td>1.8</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HS option</td>
<td>—</td>
<td>4.8</td>
<td>10</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>LP Option, Commercial</td>
<td>—</td>
<td>15</td>
<td>32</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>LP Option, Industrial</td>
<td>—</td>
<td>15</td>
<td>40</td>
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<td>IPD</td>
<td></td>
<td>Power Down Current</td>
<td>Industrial</td>
<td>—</td>
<td>4.0</td>
<td>14</td>
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<tr>
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<td></td>
<td></td>
<td>Extended</td>
<td>—</td>
<td>0.6</td>
<td>12.0</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td>—</td>
<td>5.0</td>
<td>22</td>
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<td></td>
<td></td>
<td></td>
<td>—</td>
<td>0.8</td>
<td>18</td>
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<tr>
<td>VIL</td>
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<td>Input Low Voltage</td>
<td>V/O Ports</td>
<td>VSS</td>
<td>—</td>
<td>0.2 VDD</td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIH</td>
<td></td>
<td>Input High Voltage</td>
<td>V/O Ports</td>
<td>2.0</td>
<td>0.45 VDD</td>
<td>0.25 VDD +.8V</td>
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</tbody>
</table>

**Note 1:** FOSC=4.0MHz, VDD=5.5V

**Note 2:** FOSC=20MHz, VDD=5.5V

**Note 3:** Fosc=32kHz, VDD=3.0V, WDT disabled

**Note 4:** The LP oscillator option is specified for the PIC16C55 up to 40kHz.

**Note:** The user should verify that the device oscillator starts and performs as expected. Adjusting the loading capacitor values and/or the oscillator mode may be required.
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