Chapter 11

Basic I/O Interface

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The 8255 PIA

- The 8255 PIA is available in DIP or surface mount forms.
- The 8255 allows the microprocessor to communicate with the outside world through three 8-bit wide I/O ports.
- The PC uses a few 8255 (in the chip set) to control the keyboard, speaker, and parallel port.
82C55

DIP Version

MSM82C55A/FP

Surface mount (flat pack) version
Group A is Port A and $\frac{1}{2}$ of Port C (PC7-PC4).

Group B is Port B and $\frac{1}{2}$ of Port C (PC3-PC0).

<table>
<thead>
<tr>
<th>A1</th>
<th>A0</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>Port A</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>Port B</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>Port C</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Command Register</td>
</tr>
</tbody>
</table>
*Note: Current max is 480 mA, nominal 260 mA