**DESCRIPTION**

PT2260 is a remote control encoder paired with either PT2270 or PT2272 utilizing CMOS Technology. It encodes data and address pins into a serial coded waveform suitable for RF modulation. PT2260 has a maximum of 10 bits tri-state address pins providing up to 59,049 (or $3^{10}$) address codes; thereby, drastically reducing any code collision and unauthorized code scanning possibilities.

PT2260 is one of the first generation of Encoder/Decoder ICs that utilizes the unique PTC Technology. When paired with PT2270, this encoder/decoder (PT2260/PT2270) pair can operate at very wide temperature range (see Features). Thus, this very important feature enables your Encoder/Decoder to operate under the worst environmental condition.

**FEATURES**

- High performance CMOS technology
- Low power consumption
- Very high noise immunity
- Wide operating temperature range: -40℃ ~ 85℃
- 8 or 10 Tri-State code address pins
- 2 or 4 data pins
- Wider range of operating voltage: 1.8 ~ 10.0V
- Single resistor oscillator
- Least external components

**APPLICATIONS**

- Home/Car security system
- Garage door controller
- Remote fan controller
- Remote control toys

**BLOCK DIAGRAM**

[Diagram showing the block diagram of PT2260, including System Timing, Control Logic, Code Generation, and Output (DOUT).]
APPLICATION CIRCUIT

UHF Band 4-Data Transmitter Circuit is recommended.
**ORDER INFORMATION**

<table>
<thead>
<tr>
<th>Valid Part Number</th>
<th>Package Type</th>
<th>Top Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT2260-R2</td>
<td>16 Pins, DIP, 300mil</td>
<td>PT2260-R2</td>
</tr>
<tr>
<td>PT2260-R2S</td>
<td>16 Pins, SOP, 150mil</td>
<td>PT2260-R2S</td>
</tr>
<tr>
<td>PT2260-R4S</td>
<td>16 Pins, SOP, 150mil</td>
<td>PT2260-R4S</td>
</tr>
</tbody>
</table>

Notes:
1. R: RF Application.
2. 2: 2 Data Pins; 4: 4 Data Pins.

**PIN CONFIGURATION**

![PIN CONFIGURATION Diagram]

**PIN DESCRIPTION**

<table>
<thead>
<tr>
<th>Pin Name</th>
<th>I/O</th>
<th>Description</th>
<th>Pin No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0 ~ A7</td>
<td>I</td>
<td>Code Address Pin Nos. 0 ~ 7. These eight tri-state pins are detected by PT2260 to determine the encoded waveform bit 0 ~ bit 7. Each bit can be set to “0”, “1”, or “f” (floating).</td>
<td>1 ~ 8</td>
</tr>
<tr>
<td>A8/D3 ~ A9/D2</td>
<td>I/PL*</td>
<td>Code Address Pin No. 8 ~ 9/Data Pin No. 3 ~ 2. These two tri-state pins are detected by PT2260 to determine the encoded waveform bit 8 ~ bit 9. When these pins are used as address pins (as in PT2260-R2), they can be set to “0”, “1”, or “f” (floating). When these pins are used as data pins (as in PT2260-R4), they can only be set to “0” or “1”.</td>
<td>10 ~ 11</td>
</tr>
<tr>
<td>D1, D0</td>
<td>I/PL</td>
<td>Data Pin No. 1/0. These pins can only be set to “0” or “1”</td>
<td>12, 13</td>
</tr>
<tr>
<td>OSC</td>
<td>I</td>
<td>Oscillator Pin. A resistor connected between the Osc Pin and the Vcc determines the fundamental frequency of the PT2260</td>
<td>14</td>
</tr>
<tr>
<td>DOUT</td>
<td>O</td>
<td>Data Output Pin. The encoded waveform is serially outputted to this pin. When PT2260 is not transmitting, DOUT outputs low (Vss) voltage</td>
<td>15</td>
</tr>
<tr>
<td>Vcc</td>
<td></td>
<td>Positive Power Supply</td>
<td>16</td>
</tr>
<tr>
<td>Vss</td>
<td></td>
<td>Negative Power Supply</td>
<td>9</td>
</tr>
</tbody>
</table>

Note:
- PL -- Pull-low Resistor is connected internally
- PL* -- If those two pins are used as Data Pins (PT2260-R2), pull-low resistor is connected internally; otherwise, no pull-low resistor is connected.
IMPORTANT NOTICE
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