**General Description**

With the IOM-2 interface, designers have more flexibility with respect to handling of D-channel information. Layer-1 transceivers are connected over the IOM-2 interface directly to either the PEB 2055 (EPIC-1) or the PEB 2054 (EPIC-S). These devices are capable of switching not only the B-channels but also the D-channel. Thus, the designer can decide whether he wants to process D-channel signaling information decentralized, on the line card, or pass it through to be processed centrally.

The IDEC has been optimized for processing the D-channel signaling information on digital exchange line cards. Four independent HDLC controllers have been implemented on a single IC. Thus, one IDEC can handle the D-channels of up to four subscriber lines.

The IDEC is based on the same core architecture as the PEB 2070 ICC, but has been optimized for exchange line cards and then repeated four times.

<table>
<thead>
<tr>
<th>Type</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEB 2075-N</td>
<td>P-LCC-44-1 (SMD)</td>
</tr>
<tr>
<td>PEB 2075-P</td>
<td>P-DIP-28-1 (not for new designs)</td>
</tr>
<tr>
<td>PEF 2075-N</td>
<td>P-LCC-44-1 (SMD)</td>
</tr>
</tbody>
</table>

**Features**

- Four independent HDLC channels
- 64-byte FIFO buffering per channel and direction
- Handling of basic HDLC functions
- Single or quad connection to serial transmission lines
- IOM- or PCM interfaces
- Programmable time-slots and channel data rates (up to 4 Mbit/s)
- Collision detection and resolution circuitry for shared time-slots
- 8-bit parallel μP interface with vector interrupt
- Advanced low power CMOS technology: 50 mW

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**Block Diagram**

```
// Diagram content
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