# IA8237 Advanced Information Sheet

# Programmable DMA Controller

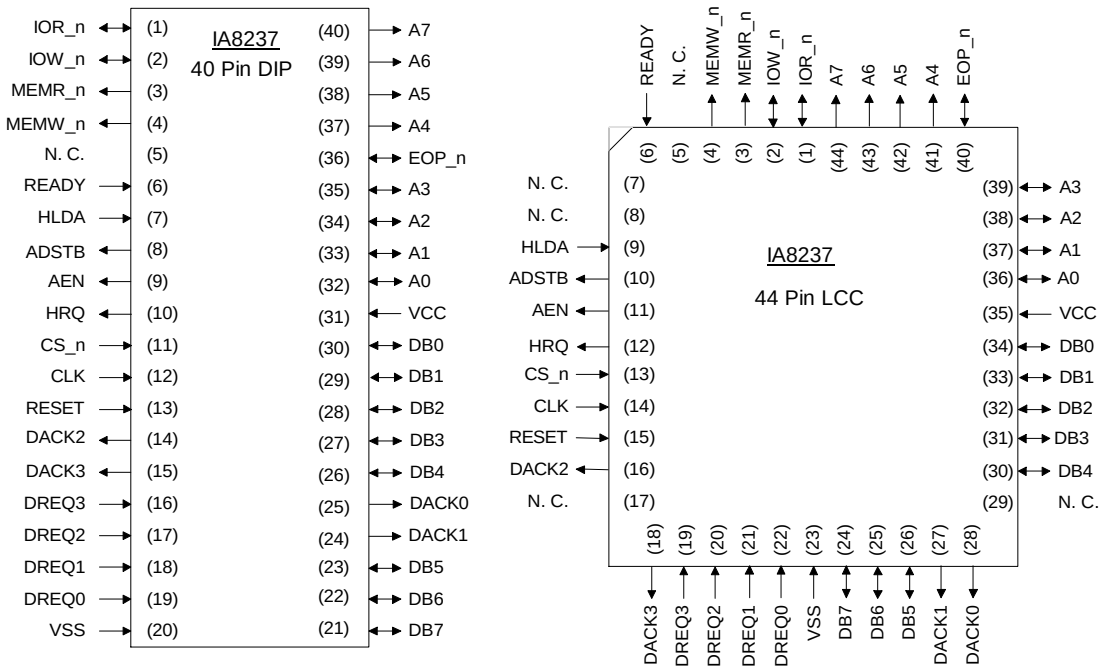
## FEATURES

- **Form, Fit, and Function Compatible with the Intel® 8237A and Harris™ 82C37A**
- **Packaging options available: 40 Pin Plastic Dip or 44 Pin Plastic Leaded Chip Carrier**
- **Static Read/Write or Handshaking Modes**
- **Direct Bit Set/Reset Capability**
- **Memory-to-Memory Transfers**

The IA8237 uses **innovASIC**'s innovative new ***f*³ Program** to provide industry with parts that other vendors have declared obsolete. By specifying parts through this program a customer is assured of never having a component become obsolete again. This advanced information sheet assumes the original part has been designed in, and so provides a summary of capabilities only. For new designs contact **innovASIC** for more detailed information.

Intel is a registered trademark of Intel Corporation
Harris is a copyright trademark of Harris Corporation

### Package Pinout




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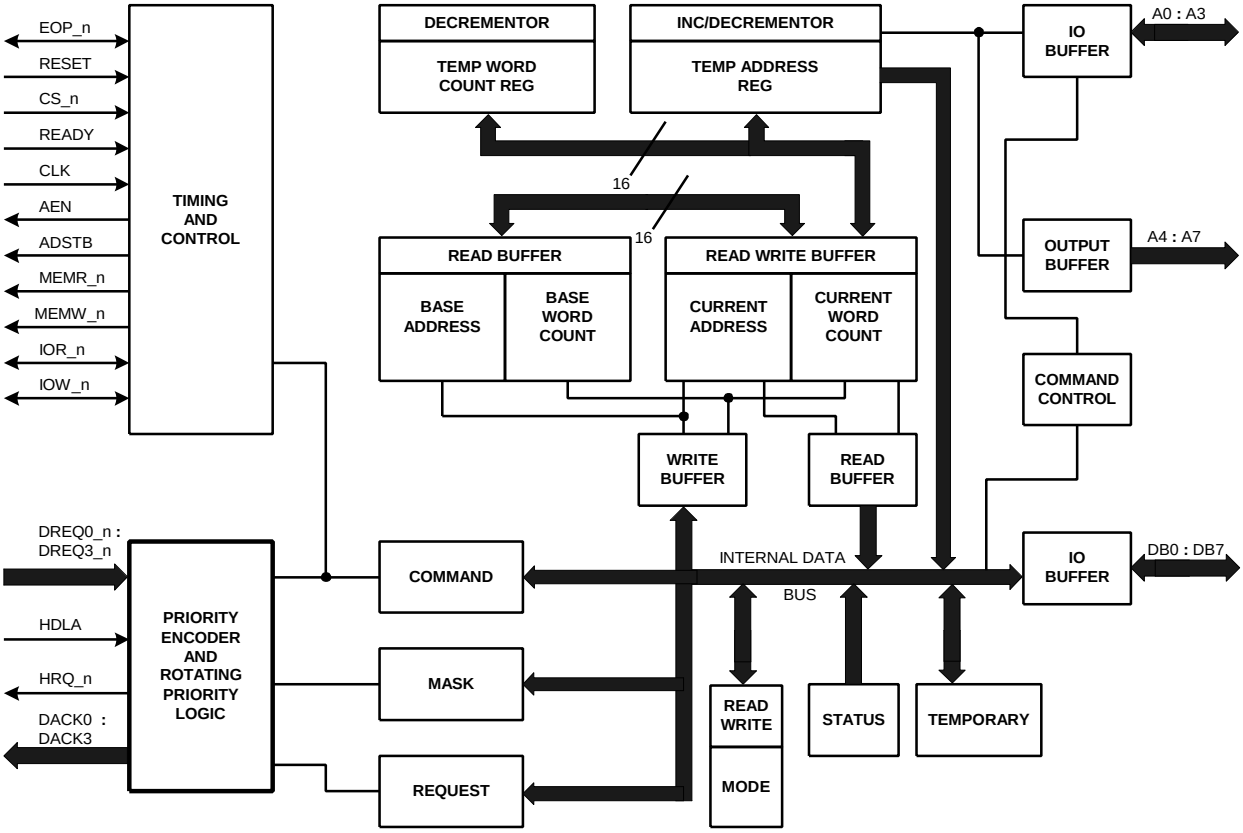
# IA8237
# Programmable DMA Controller

**Advanced Information Sheet**

The IA8237 is a programmable direct memory access (DMA) mega-function designed to be functionally equivalent to the Intel 8237A and Harris 82C37A devices. The A8237 controls data transfers between memory and peripherals, memory-to-memory transfers, and block memory initialization. Four independently programmable channels are available, and requests may be generated via hardware or software.

A block diagram is shown in Figure 1.

## Functional Block Diagram
## Figure 1



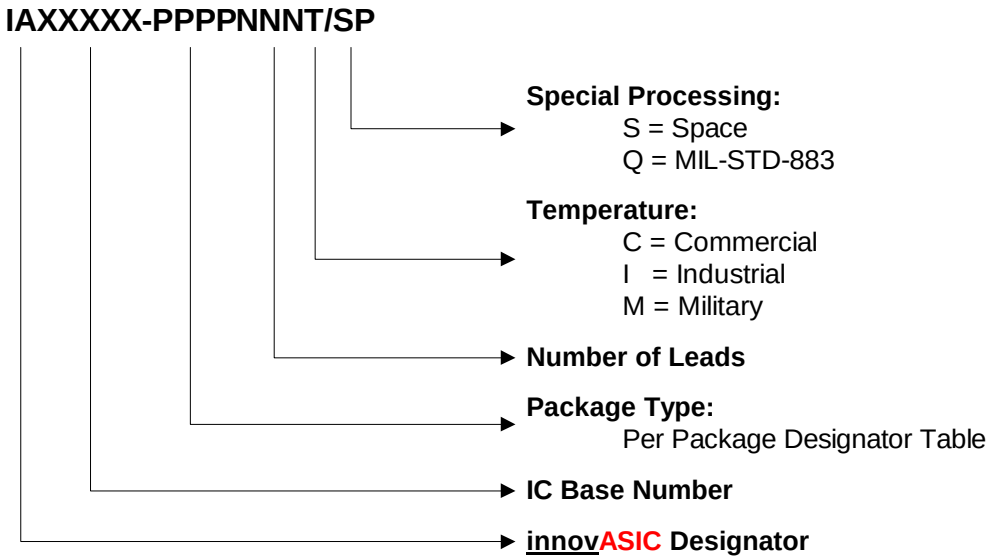

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Qualification Levels

**Table 1**

| Part Number | Environmental / Qual Level |
|---|---|
| IA8237-PDW40C | Commercial |
| IA8237-PLC44C | Commercial |
| IA8237-PDW40I | Industrial |
| IA8237-PLC44I | Industrial |

The following diagram depicts the **innovASIC** Product Identification Number.




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## Package Designator Table

| Package Type | innovASIC Designator |
|---|---|
| Ceramic side brazed Dual In-line | CDB |
| Cerdip with window | CDW |
| Ceramic leaded chip carrier | CLC |
| Cerdip without window | CD |
| Ceramic leadless chip carrier | CLL |
| PLCC | PLC |
| Plastic DIP standard (300 mil) | PD |
| Plastic DIP standard (600 mil) | PDW |
| Plastic metric quad flat pack | PQF |
| Plastic thin quad flat pack | PTQ |
| Skinny Cerdip | CDS |
| Small outline plastic gull-wing(150 mil body) | PSO |
| Small outline medium plastic gull-wing (207 mil body) | PSM |
| Small outline narrow plastic gull wing (150 mil body) | PSN |
| Small outline wide plastic gull wing (300 mil body) | PSW |
| Skinny Plastic Dip | PDS |
| Shrink small outline plastic (5.3mm .208 body) | PS |
| Thin shrink small outline plastic | PTS |
| Small outline large plastic gull wing (330 mil body) | PSL |
| Thin small outline plastic gull-wing (8 x 20mm) [TSOP] | PST |
| | |
| PGA | CPGA |
| BGA | CBGA |

Contact **innovASIC** for other package and processing options.

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