IA8251

Advanced Information Sheet

Programmable Communication Interface
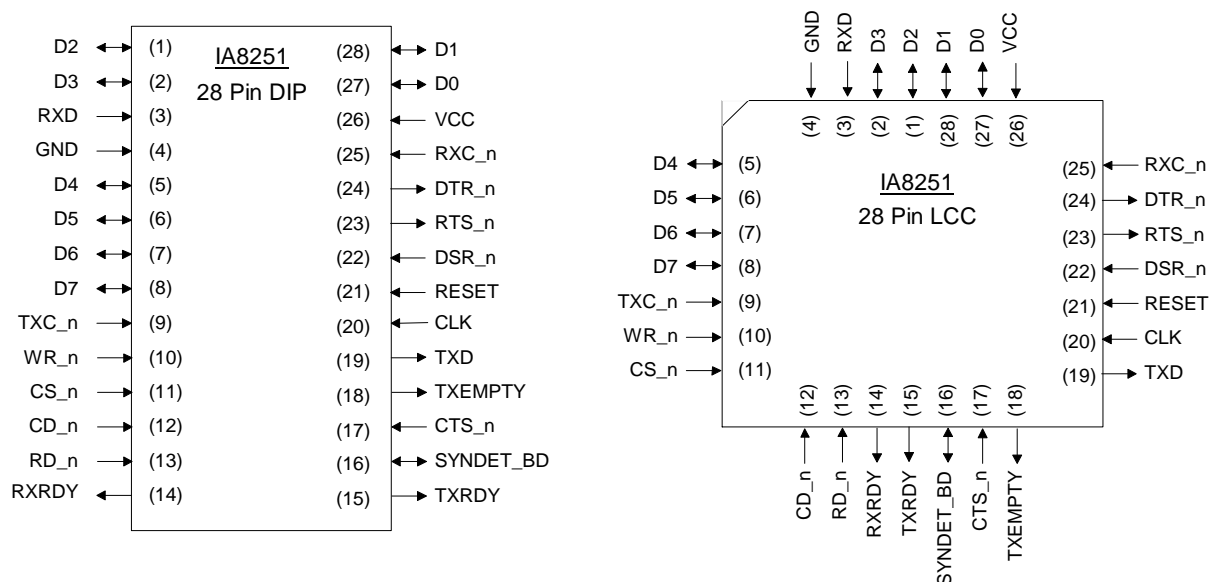
FEATURES

- **Form, Fit, and Function Compatible with the Intel^{â} 8251A**
- **Packaging options available: 28 Pin Plastic Dip or 28 Pin Plastic Leaded Chip Carrier**
- **Synchronous and Asynchronous Operation**
- **Full Duplex, Double-Buffered Transmitter and Receiver**
- **Programmable Word Length, Stop Bits, and Parity**
- **Offers Divide-by-1, -16, or –64 Mode**
- **Includes:**
  - **Error Detection**
  - **False Start Detection**
  - **Automatic Break Detection and Handling**
  - **Internal and External Sync Character Detection**

The IA8251 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
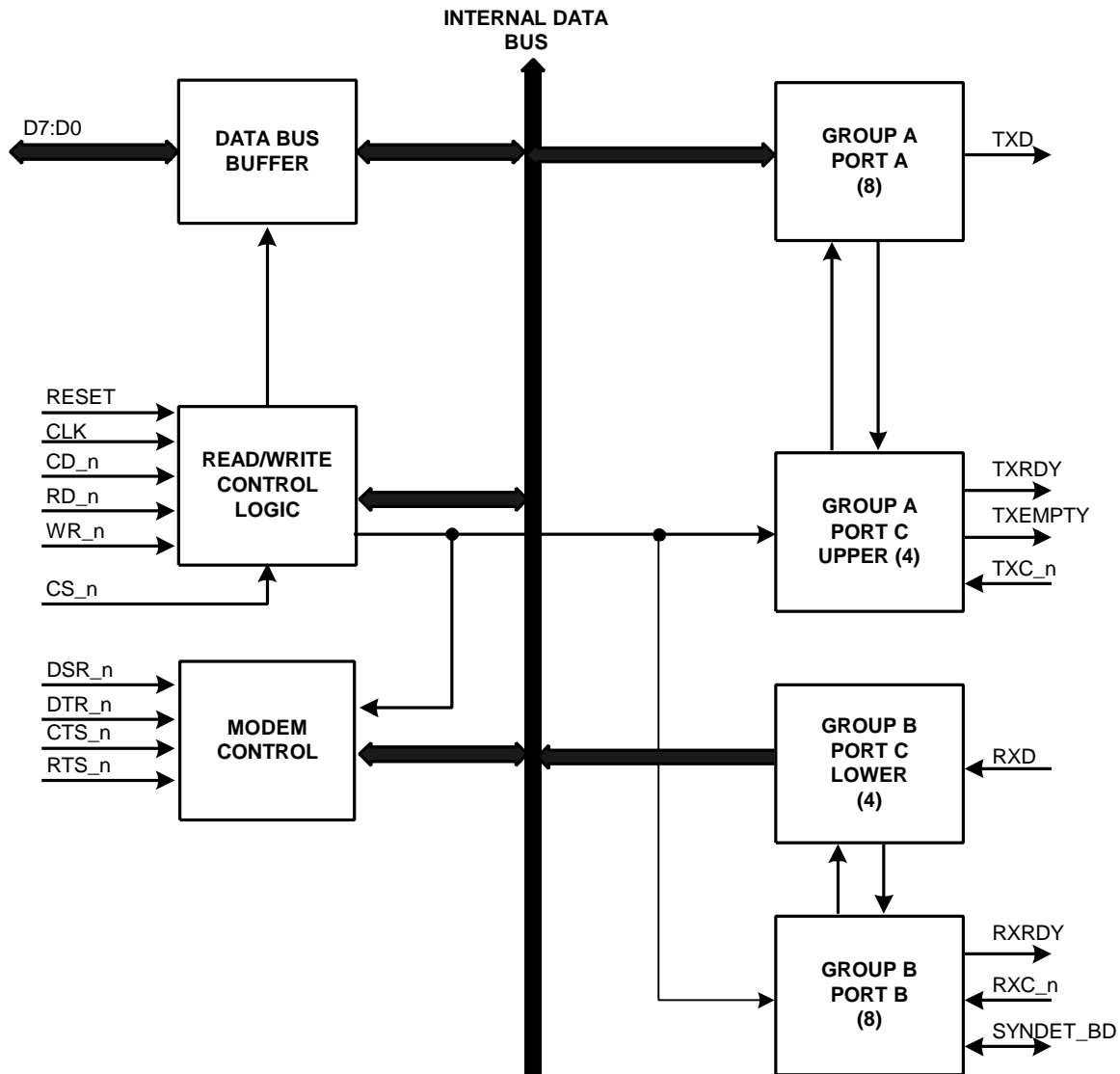
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Package Pinout

innov**ASIC**
Customer Specific IC Solutions

IA8251

Programmable Communication Interface

The IA8251 provides an interface between a microprocessor and a serial communications channel. The IA8251 receives and transmits data in a variety of configurations including 7- or 8-bit data words, with odd, even , or no parity, and 1 or 2 stop bits. The transmitter and receiver can be designed for synchronous or asynchronous operation.

A block diagram is shown in Figure 1.

Functional Block Diagram
Figure 1

IA8251
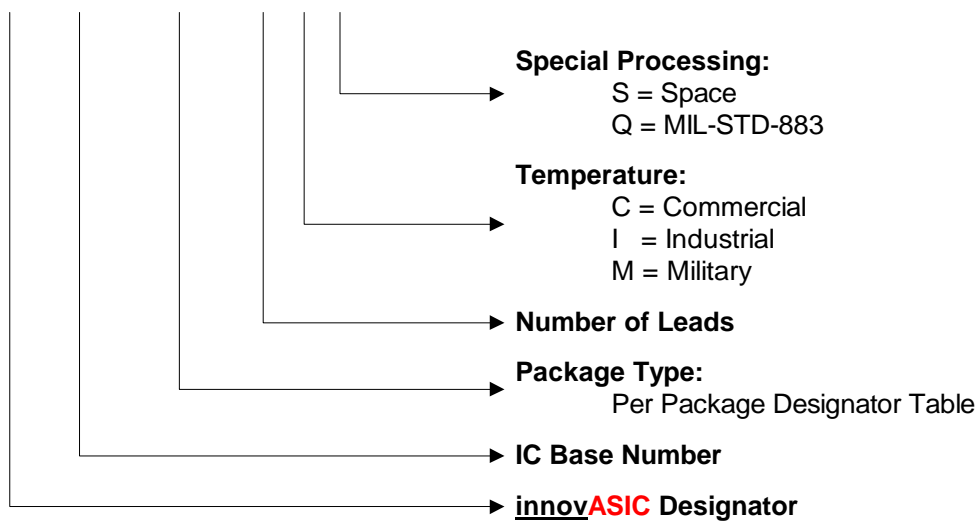**Advanced Information Sheet**
Programmable Communication Interface

Qualification Levels

Table 1

Part Number	Environmental/ Qual Level
IA8251-PDW28C	Commercial
IA8251-PLC28C	Commercial
IA8251-PDW28I	Industrial
IA8251-PLC28I	Industrial

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

IAXXXXX-PPPPNNNT/SP

Special Processing:
　　S = Space
　　Q = MIL-STD-883

Temperature:
　　C = Commercial
　　I = Industrial
　　M = Military

Number of Leads

Package Type:
　　Per Package Designator Table

IC Base Number

innovASIC Designator

IA8251
Programmable Communication Interface

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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