

# Card Bus Controller for Notebook Computers and PDAs.

## BU6836

The BU6836 is a 1-chip card bus controller designed for notebook computers and PDAs (personal digital assistants). The BU6836 supports two types of CardBus slots : 32-bit CardBus cards and 16-bit PC cards (PCMCIA). Because it can operate at 3.3V, the BU6836 reduces power consumption and prolongs battery life.

### ●Applications

Notebook computers and PDAs

### ●Features

- 1) 2 internal interface slots for PCMCIA 2.1 / JEIDA 4.2 R2 cards and CardBus cards.
- 2) 3 types of ZV port interface (including the 2 card slots), and an internal multiplexer that outputs to a dedicated ZV port.
- 3) Supports Intel 82365SL PC ICs.
- 4) Internal 3V card protection system.
- 5) Supports DMA.
- 6) BGA256/UQFP256 packages.

### ●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power supply voltage	V <sub>CC</sub>	-0.5~7	V
Operating temperature range	T <sub>opr</sub>	0~70	°C
Storage temperature range	T <sub>stg</sub>	-55~125	°C

### ●Recommended operating conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Power supply voltage	V <sub>CC (core)</sub>	3.0	3.3	3.6	V
	V <sub>DDA (SKTA)</sub>	3.0	3.3	5.5	V
	V <sub>ddb (SKTB)</sub>	3.0	3.3	5.5	V
	V <sub>DDP (PCI)</sub>	3.0	5.0	5.5	V
	V <sub>DDZ (ZV)</sub>	3.0	5.0	5.5	V

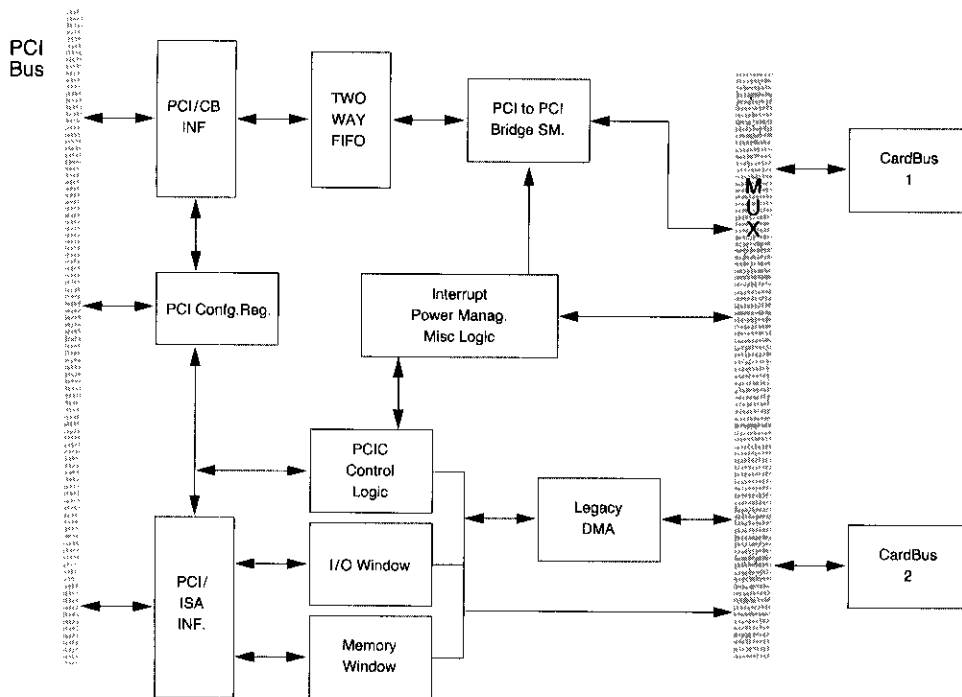
● Electrical characteristics (unless otherwise noted, Ta=25°C, Vcc=3.3V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power supply voltage	V <sub>CC (core)</sub>	3.0	3.3	3.6	V	Power supply for the internal core logic
Current consumption	I <sub>CC3</sub>	—	—	10	mA	

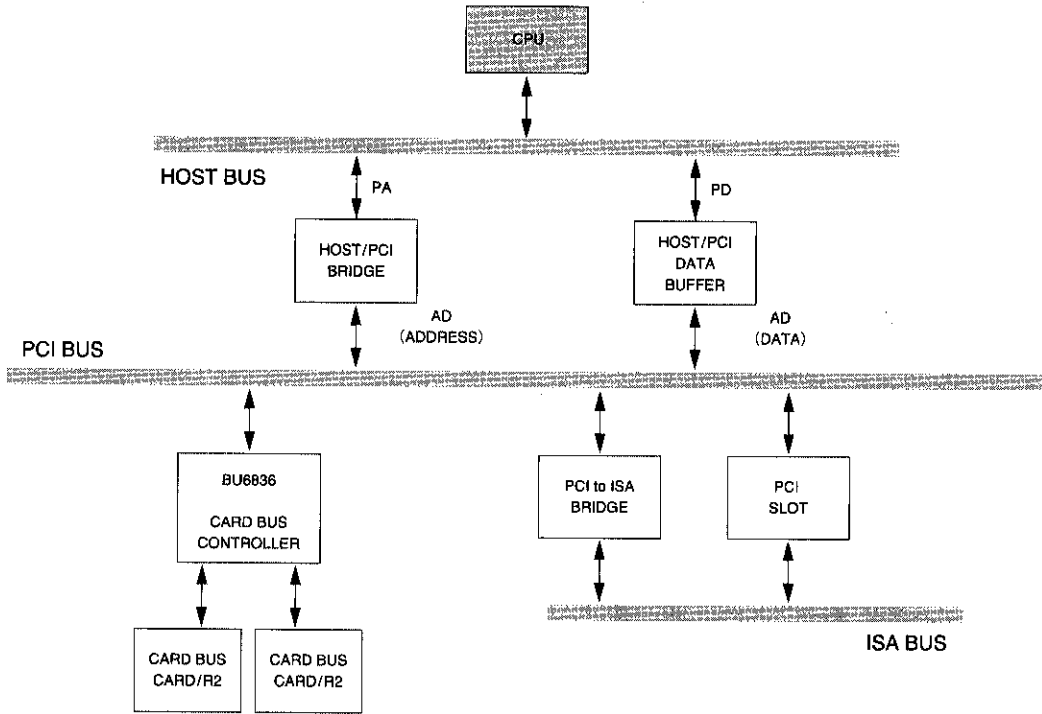
(Unless otherwise noted, Ta=25°C, V<sub>DDA</sub>, V<sub>DDB</sub>, V<sub>DDP</sub>, V<sub>DDZ</sub>=5.0V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power supply voltage	V <sub>DDA</sub>	3.0	5.0	5.5	V	Power supply for SOCKET_A
Power supply voltage	V <sub>DDB</sub>	3.0	5.0	5.5	V	Power supply for SOCKET_B
Power supply voltage	V <sub>DDP</sub>	3.0	5.0	5.5	V	PCI power supply
Power supply voltage	V <sub>DDZ</sub>	3.0	5.0	5.5	V	Power supply for zoomed video
Input leak current	I <sub>IL5</sub>	-10	—	+10	μA	
Output leak current	I <sub>OL5</sub>	-10	—	+10	μA	

● Block diagram



● Application circuit

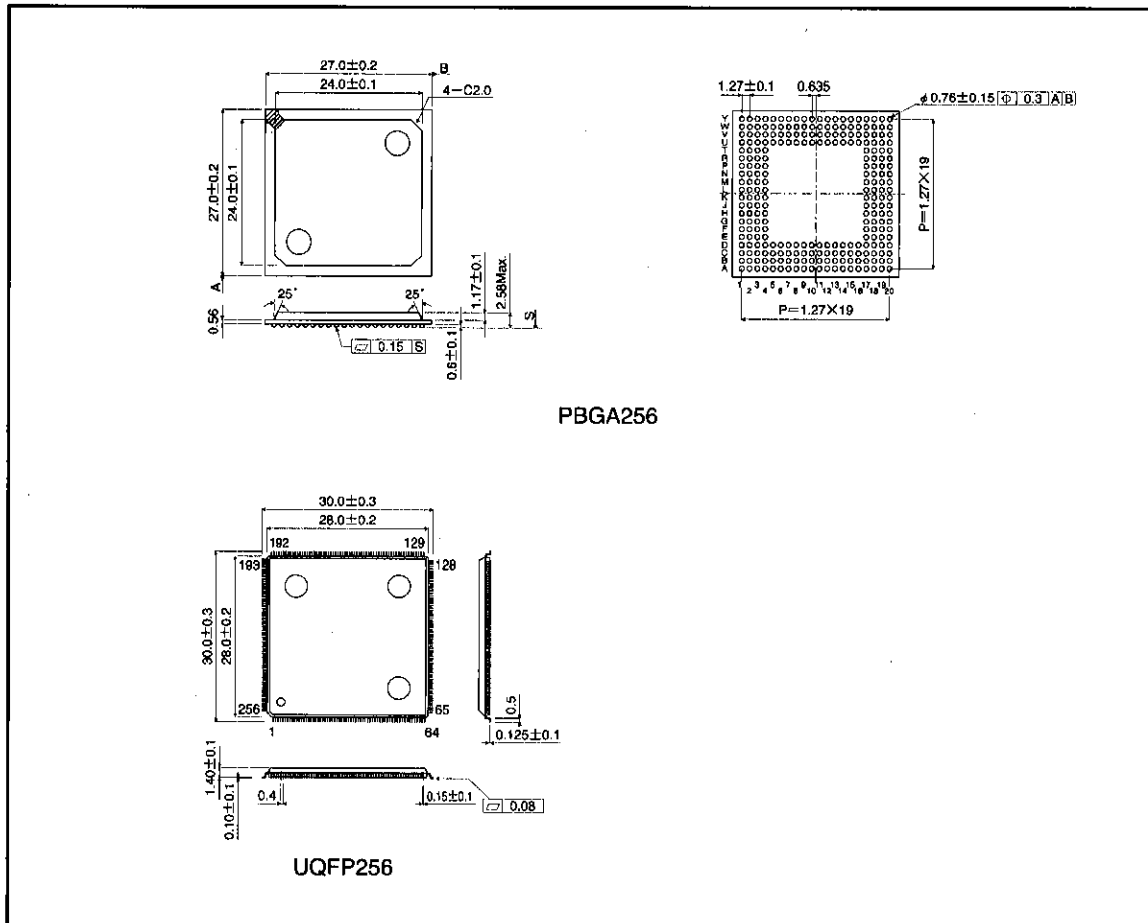


Card Bus controller for PCs and PDAs

Personal computers

Fig.1

● External dimensions (Units: mm)



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