

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 _{CC}	-0.5~7	V
Operating temperature range	T _{opr}	0~70	°C
Storage temperature range	T _{stg}	-55~125	°C

●Recommended operating conditions (Ta=25°C)

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

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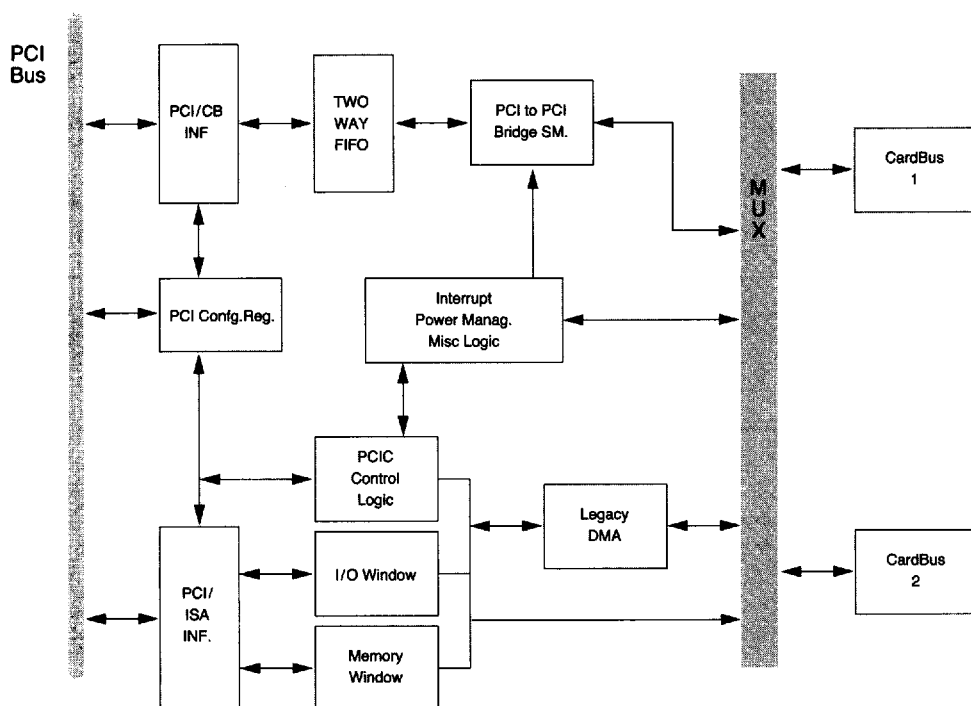
●Electrical characteristics (unless otherwise noted, Ta=25°C, V_{CC}=3.3V)

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

(Unless otherwise noted, Ta=25°C, V_{DDA}, V_{DDB}, V_{DDP}, V_{DDZ}=5.0V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power supply voltage	V _{DDA}	3.0	5.0	5.5	V	Power supply for SOCKET__A
Power supply voltage	V _{DDB}	3.0	5.0	5.5	V	Power supply for SOCKET__B
Power supply voltage	V _{DDP}	3.0	5.0	5.5	V	PCI power supply
Power supply voltage	V _{DDZ}	3.0	5.0	5.5	V	Power supply for zoomed video
Input leak current	I _{ILS}	-10	—	+10	μA	
Output leak current	I _{OLS}	-10	—	+10	μA	

●Block diagram



● Application circuit

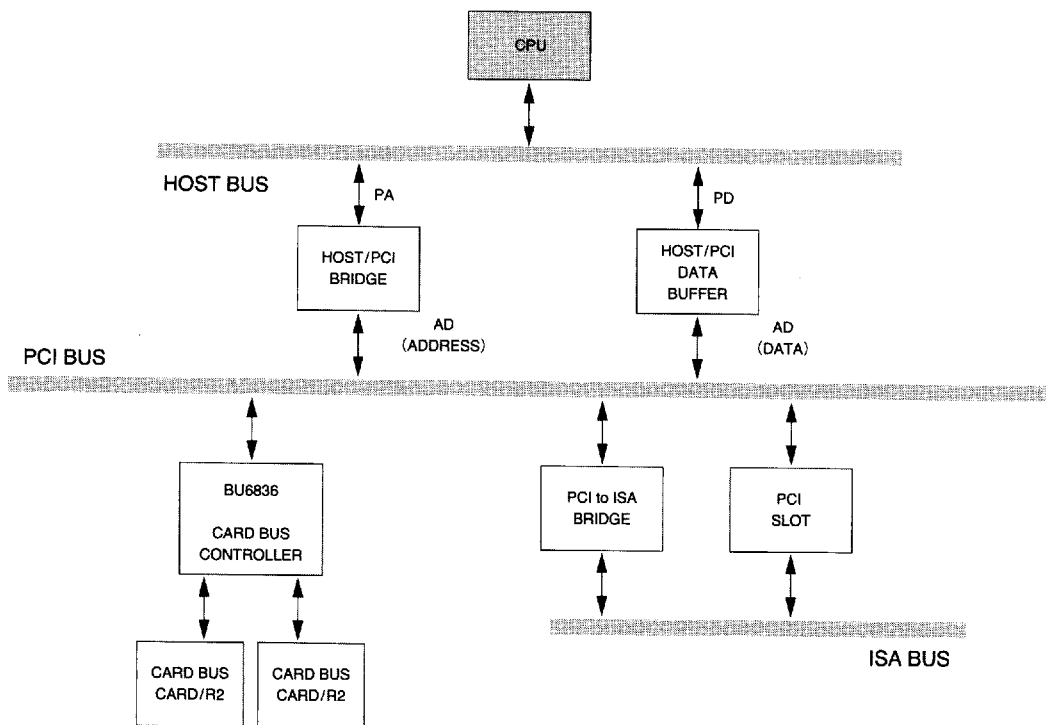
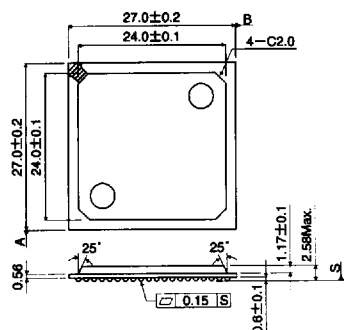
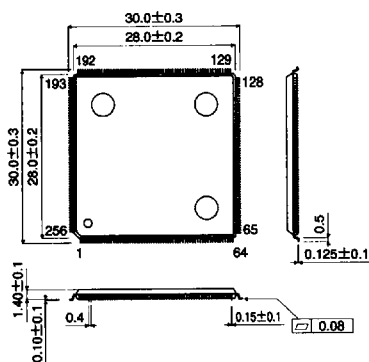
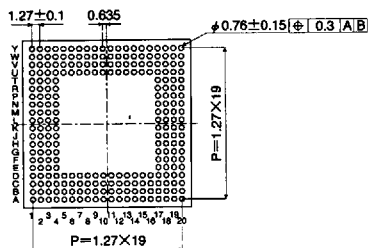


Fig.1

● External dimensions (Units: mm)



PBGA256



UQFP256