



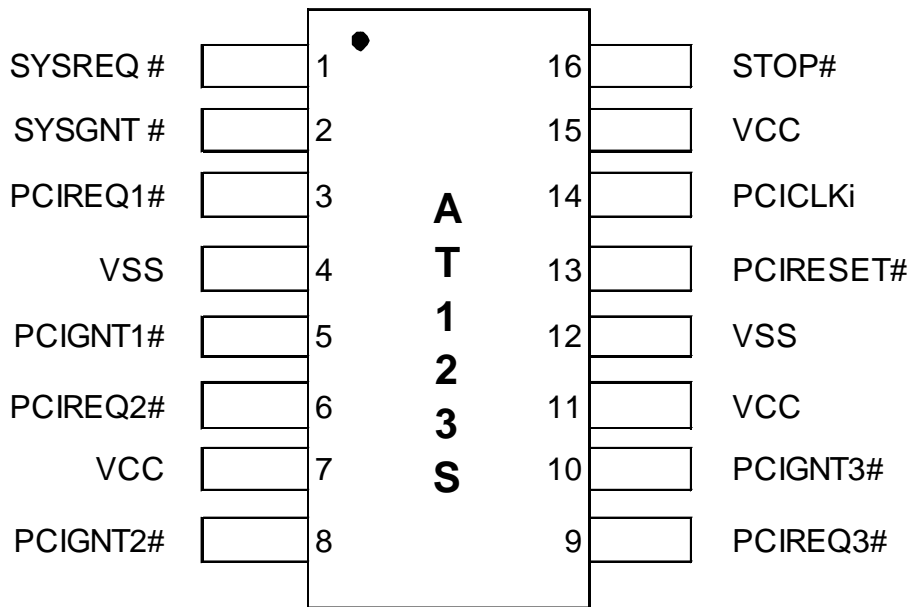
■ General Description

AT123S is a PCI arbiter. It allows users to extend system PCI devices or slots without piecing additional circuit to simply design complexity and increase system stability. AT123S also provides STOP# input pin with that extended PCI devices is able to instruct the PCI master to prematurely end the transaction on the current data phase same as one defined in PCI specification.

■ Features

- PCI Arbiter
Extend PCI Devices from One to Three
- PCI Clock Frequency
Support PCI Clock range from 25MHz to 66MHz
- All AME's Lead Free Products Meet RoHS Standards

■ Pin Configuration



° Ordering Information

AT123S- Commercial Standard

AT123SG- Green Device with Commercial Standard

■ Pin Description

I/O Type	Function
IN _t	TTL level input
PP ₁₂	Push pull output with 12mA sink current
PWR	Power Pin

Pin No.	Pin Name	I/O Type	Function
1	SYSREQ#	PP ₁₂	Request signal to chipset
2	SYSGNT#	IN _t	Grant signal from chipset
3	PCIREQ1#	IN _t	Request signal from PCI bus (Internal 5K pull-up resistor)
5	PCIGNT1#	PP ₁₂	Grant signal to PCI bus
6	PCIREQ2#	IN _t	Request signal from PCI bus (Internal 5K pull-up resistor)
8	PCIGNT2#	PP ₁₂	Grant signal to PCI bus
9	PCIREQ3#	IN _t	Request signal from PCI bus (Internal 5K pull-up resistor)
10	PCIGNT3#	PP ₁₂	Grant signal to PCI bus
13	PCIRESET#	IN _t	PCI bus reset#
14	PCICLK _i	IN _t	PCICLK input reference frequency
16	STOP#	IN _t	PCI bus stop#
4	VSS	PWR	Ground
7	VCC	PWR	3.3V Power
11	VCC	PWR	3.3V Power
12	VSS	PWR	Ground
15	VCC	PWR	3.3V Power

Table 1. PCI Arbiter FSM Group Signal



■ Quick Reference Data

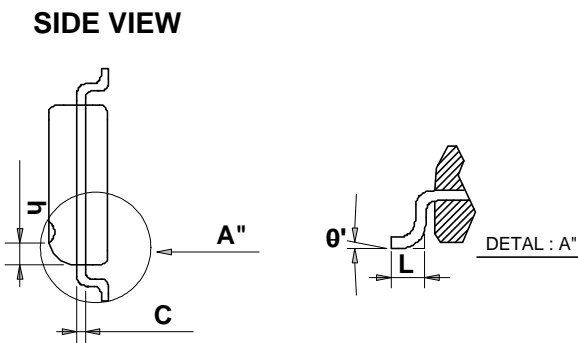
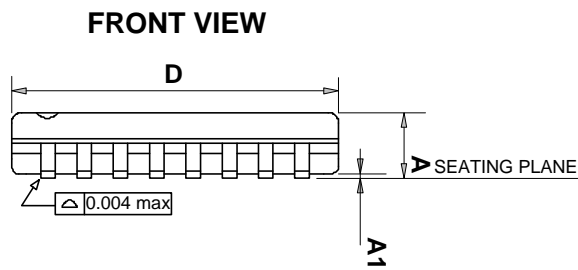
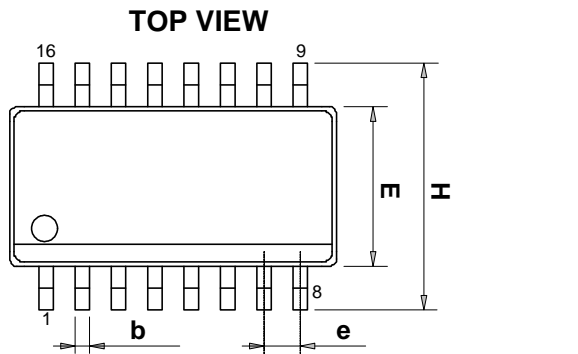
GND = 0V; VCC = 3.3V; 0°C < Temp. < 85°C

Symbol	Parameter	Test Conditions	Min	Typical	Max	Unit
VCC	Power pin		3.15	3.3		V
			3.45			
VSS	Ground pin			0		V

Table 2. Power/Ground Pin

Symbol	Parameter	Test Conditions	Min	Typical	Max	Unit
Vil	Input low voltage				0.8	V
Vih	Input high voltage		2			V
Vol	Output low voltage				0.4	V
Voh	Output high voltage		2.4			nS
Tdcko	Output delay from PCICLK rising edge to output valid			8	10	nS
PCICLK1	Buffer input frequency		25M		66M	Hz

Table 3. PCI Arbiter FSM

■ Package Dimension
SOP-16


SYMBOLS	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.35	1.75	0.053	0.069
A1	0.10	0.25	0.004	0.010
b	0.40TYP		0.018TYP	
C	0.20TYP		0.008TYP	
e	1.27TYP		0.050TYP	
E	3.81	4.00	0.150	0.157
D	9.80	10.00	0.386	0.394
h	0.38TYP		0.015TYP	
H	5.80	6.20	0.228	0.244
L	0.41	1.27	0.016	0.050
θ	0°	8°	0°	8°



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