

**Akom**

Akom Technology

***AK2005***  
***PCI Arbiter***

**Datasheet**

Rev. 1.0

Release Date: September 9, 2002

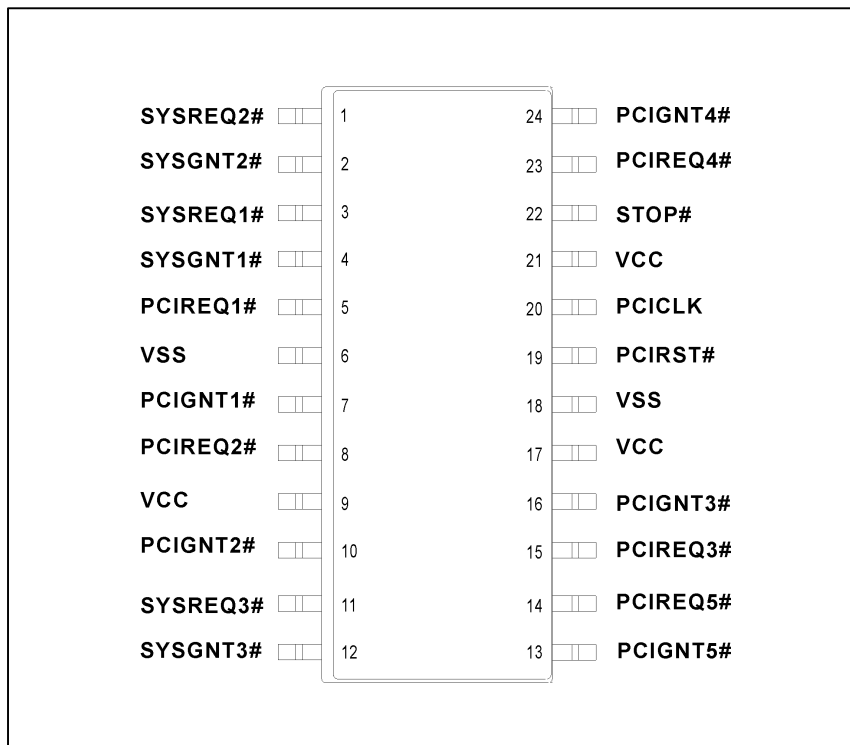
# 1 Introduction

## 1.1 General Description

The AK2005 is a PCI arbiter chip that extends one to three PCI request/grant signal pairs to a maximum of five signal pairs. With this arbiter chip, the number of bus master devices beyond that South Bridge originally supports is allowed and additional masters can be accommodated easily on the PCI bus without resource conflicts.

## 1.2 Features

- 3 to 5 PCI bus master arbitration expansion
- Supports PCI clock frequency ranging from 25MHz to 66MHz
- Available in a 24-pin SSOP package



**Note:**

1. For the used request/grant signals connected with the South Bridge or PCI devices, an external pull-up resistance of 4.7K ohm is required for each pin of them.
2. For the unused request/grant signals, it is recommended to leave them open.

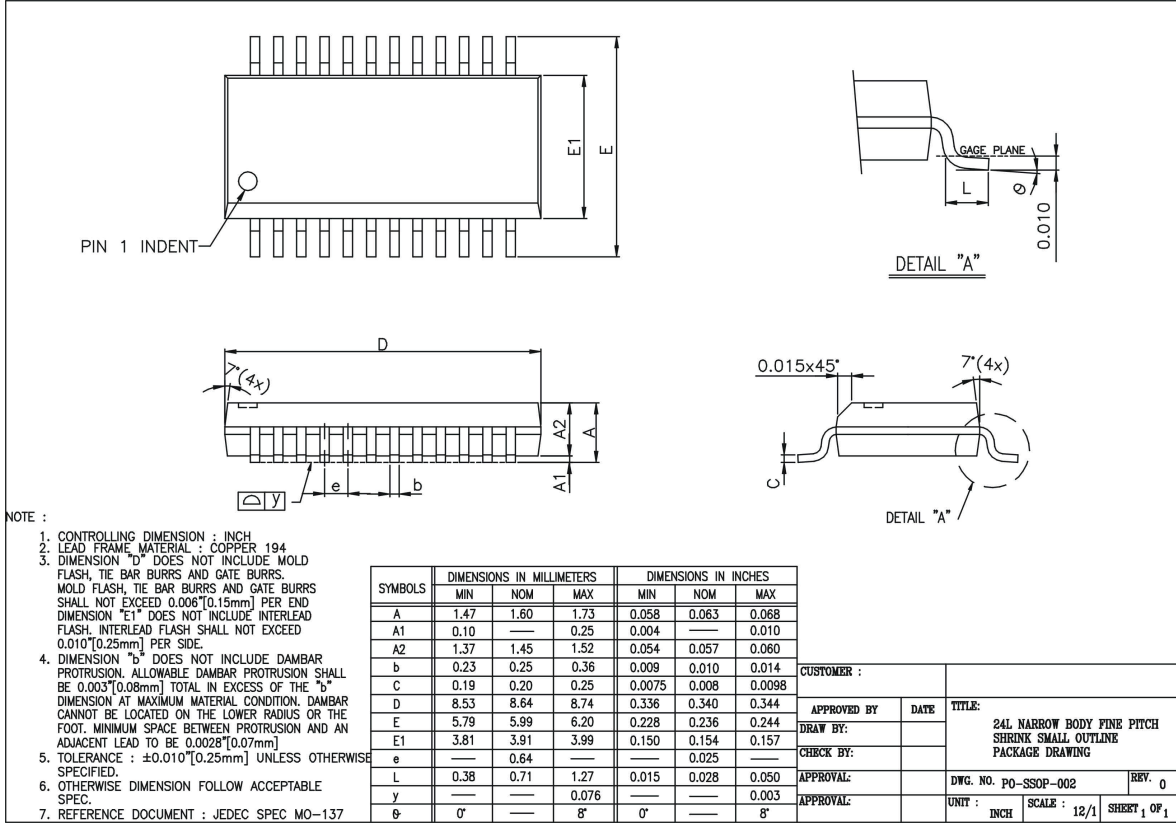
## 2 Signal Description

Name	Pin No.	Type	Description
SYSREQ1#	3	OUT	Request signal to chipset
SYSGNT1#	4	IN	Grant signal from chipset
SYSREQ2#	1	OUT	Request signal to chipset
SYSGNT2#	2	IN	Grant signal from chipset
SYSREQ3#	11	OUT	Request signal to chipset
SYSGNT3#	12	IN	Grant signal from chipset
PCIREQ1#	5	IN	Request signal from PCI bus
PCIGNT1#	7	OUT	Grant signal to PCI bus
PCIREQ2#	8	IN	Request signal from PCI bus
PCIGNT2#	10	OUT	Grant signal to PCI bus
PCIREQ3#	15	IN	Request signal from PCI bus
PCIGNT3#	16	OUT	Grant signal to PCI bus
PCIREQ4#	23	IN	Request signal from PCI bus
PCIGNT4#	24	OUT	Grant signal to PCI bus
PCIREQ5#	13	IN	Request signal from PCI bus
PCIGNT5#	14	OUT	Grant signal to PCI bus
PCIRST#	19	IN	PCI bus reset
PCICLK	20	IN	PCICLK input reference frequency
STOP#	22	IN	PCI bus stop
VSS	6, 18	PWR	Ground
VCC	9, 17, 21	PWR	3.3V power

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### 3 24-pin SSOP Package Dimensions



## 4 Circuit Diagram

