

The logo for Akomi Technology is a horizontal bar with a dark blue section on the left containing the word "Akomi" in white, a white section in the middle containing the words "Akomi Technology" in dark blue, and an orange section on the right.

**Akomi**

Akomi Technology

***AK2003/J***  
***PCI Arbiter***

**Datasheet**

Rev. 1.0

Release Date: September 9, 2002

# 1 Introduction

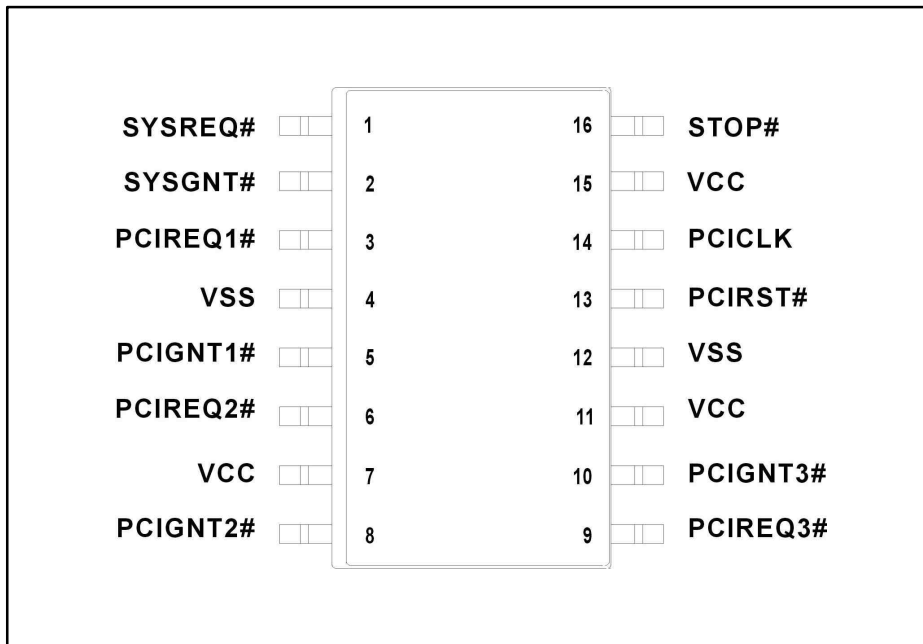
## 1.1 General Description

The AK2003 is a PCI arbiter chip that extends one PCI request/grant signal pair to three. 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

- 1 to 3 PCI bus master arbitration expansion
- Supports PCI clock frequency ranging from 25MHz to 66MHz
- Available packages
  - **AK2003J** : 16-pin SOP
  - **AK2003** : 16-pin SSOP

# 2 Pin Configuration



**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.

### 3 Signal Description

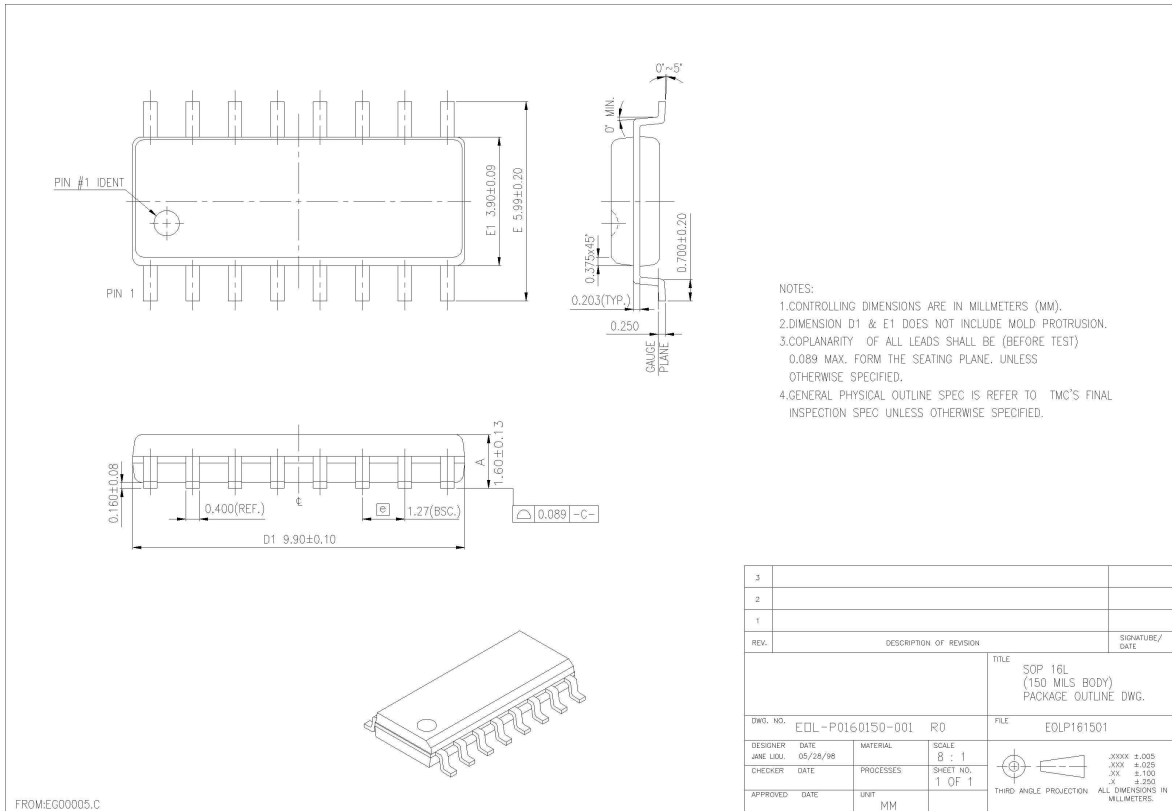
Name	Pin No.	Type	Description
SYSREQ#	1	OUT	Request signal to chipset
SYSGNT#	2	IN	Grant signal from chipset
PCIREQ1#	3	IN	Request signal from PCI bus
PCIGNT1#	5	OUT	Grant signal to PCI bus
PCIREQ2#	6	IN	Request signal from PCI bus
PCIGNT2#	8	OUT	Grant signal to PCI bus
PCIREQ3#	9	IN	Request signal from PCI bus
PCIGNT3#	10	OUT	Grant signal to PCI bus
PCIRST#	13	IN	PCI bus reset
PCICLK	14	IN	PCICLK input reference frequency
STOP#	16	IN	PCI bus stop
VSS	4, 12	PWR	Ground
VCC	7, 11, 15	PWR	3.3V power

**Note:**

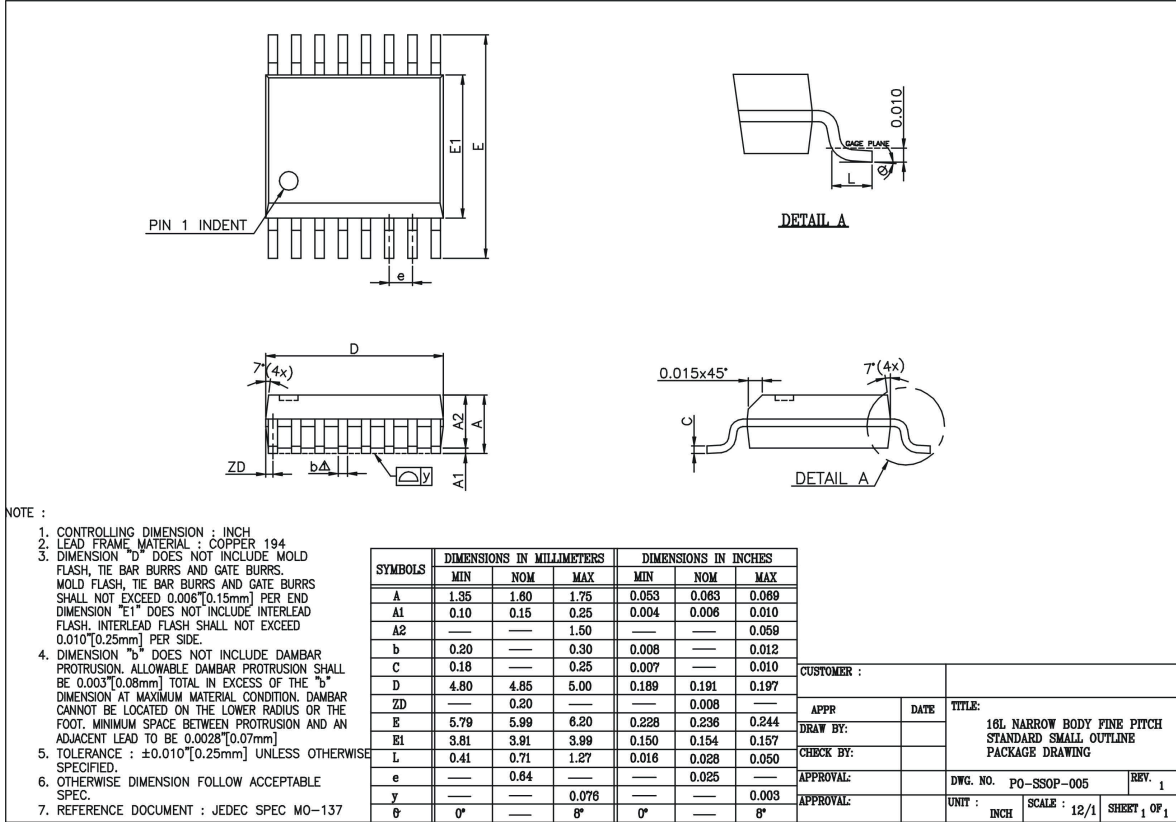
1. For the used request/grant signals connected with the South Bridge or PCI devices, an external pull-up resistance of 4.7K ohm is required for each pin of them.
2. For the unused request/grant signals, it is recommended to leave them open.

## 4 Package Dimensions

### 4.1 AK2003J (16-pin SOP Package)



4.2 AK2003 (16-pin SSOP Package)



5 Circuit Diagram

