## SGS-THOMSON MICROELECTRONICS

# M23C4000

ADVANCE DATA

### 4096K (512K x 8 - 256K x 16) CMOS ROM

#### BY 8 / BY 16 SOFTWARE CONFIGURATION.

- VERY FAST ACCESS TIME : 120 ns. (Chip select or address access time)
- LOW POWER "CMOS" CONSUMPTION :
  - Operating current 50 mA
  - Stand by current 20 µA
- SINGLE + 5V ± 10 % POWER SUPPLY.
- STATIC OPERATION.
- INPUTS AND OUTPUTS TTL COMPATIBLE.
- THREE STATE OUTPUTS.
- MASK PROGRAMMABLE ACTIVE LOW/HIGH CE.
- AUTOMATIC POWER DOWN.

#### DESCRIPTION

The M23C4000 is a 4,194,304 CMOS Masked Read Only Memory (ROM), organized as 524.288 x 8 (BHE low, A-1/O15 is least significant address bit) or 262, 144 x 16 bits (BHE high, A-1/O15 is most significant data bit). It is manufactured in 0.8 micron CMOS technology : Very fast access time of 120 ns makes it ideal for EPROM replacement on high performance, high volume running applications. Chip select line (CE) is active low or active high by mask programmation, as per user's choice. When not active, it brings the device in stand by mode, suitable on battery operated systems. Output Enable is to be used for Outputs control. After cycle completion and 50 ns without input change, the M23C4000 automatically goes in power-down (Icc1 = 1 mA), the data remaining latched on the outputs.

#### PIN NAMES

A0-A17	ADDRESS INPUTS
A-1/O15	ADDRESS/DATA
00-014	DATA OUTPUTS
BHE	WORD/BYTE INPUT
CE/CE	CHIP ENABLE INPUT
ŌE	OUTPUT ENABLE
Vcc	+ 5V POWER SUPPLY
GND	GROUND

# 40 1 PDIP40

#### **PIN CONNECTION**



August 1990