SGS-THOMSON
MICROELECTRONICS

ST27C1001

1024K (128K × 8) CMOS UV ERASABLE PROM

ADVANCED DATA

- 8 BITS OUTPUTS
- FAST ACCESS TIME 120ns.
- LOW "CMOS" CONSUMPTION 50mA (MAX.)
- PROGRAMMING VOLTAGE 12.5V
- ELECTRONIC SIGNATURE FOR AUTOMATED PROGRAMMING
- PROGRAMMING TIMES IN THE 20 SECONDS RANGE.

F
DIP-32
(Ceramic Bull's eye)

(Ordering Information at the end of the datasheet)
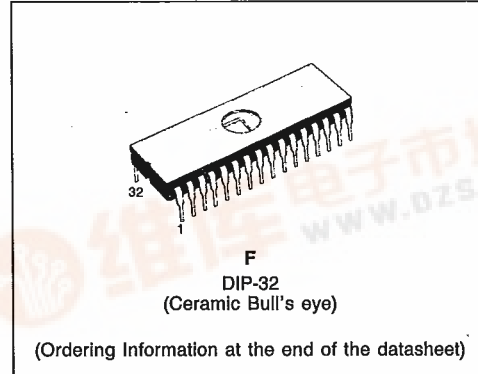
DESCRIPTION

The ST27C1001 is a high speed 1 Mbit UV erasable and electrically programmable EPROM ideally suited for 8-bit microprocessors systems requiring large programs.

It is organized as 131072 words by 8 bits, and packaged in a 32 pins Ceramic DIP Bull's eye package. ST will also introduce the following versions based on the same architecture but with different configurations. They are:
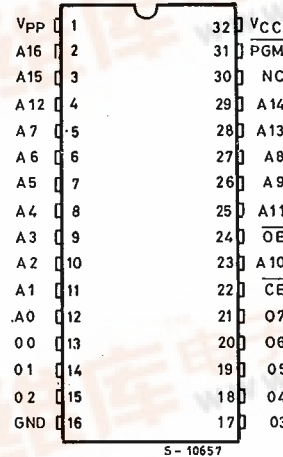
- ST27C1011 is a page addressed 1024K (8 × 16K × 8) device, packaged in a 28 pin DIP for easy replacement of 64K and 128K standard EPROM versions.
- ST87C1011 is the same device as the ST27C1011 with latched addresses for design optimization in multiplexed bus environment.
- ST27C1000 is organized as 128K × 8 bits with a ROM compatible pinout.
- ST87C1000 is the same device as the ST27C1000 with latched addresses for design optimization in multiplexed bus environment.

PIN CONNECTIONS

Pin	Name		Pin	Name
1	V_{PP}		32	V_{CC}
2	A16		31	PGM
3	A15		30	NC
4	A12		29	A14
5	A7		28	A13
6	A6		27	A8
7	A5		26	A9
8	A4		25	A11
9	A3		24	$\overline{OE}$
10	A2		23	A10
11	A1		22	$\overline{CE}$
12	A0		21	O7
13	O0		20	O6
14	O1		19	O5
15	O2		18	O4
16	GND		17	O3

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PIN NAMES

A0—A16	ADDRESS INPUT
$\overline{CE}$	CHIP ENABLE INPUT
$\overline{OE}$	OUTPUT ENABLE
$\overline{PGM}$	PROGRAM
$O_0\text{-}O_7$	DATA INPUT/OUTPUT
NC	NON CONNECTED

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VPP ○——▶
VCC ○——▶
GND ○——▶

DATA OUTPUTS
00-015

PGM ——▶
OE. ——▶
CE ——▶

OE, CE
AND PROGRAM
LOGIC

OUTPUT
BUFFERS

A0-A10
ADDRESS
INPUTS

Y
DECODER

Y
GATING

X
DECODER

1.048.576
CELL MATRIX

S-10656

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