SGS-THOMSON MICROELECTRONICS

ST27C1001

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

- 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.

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DIP-32
(Ceramic Bull's eye)

(Ordering Information at the end of the datasheet)
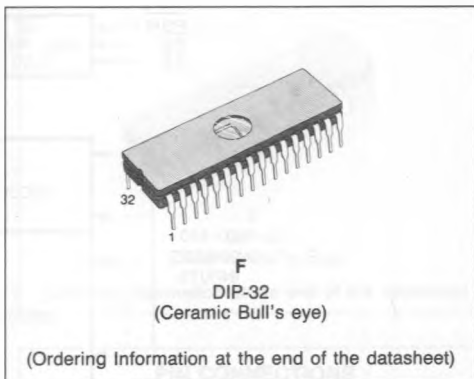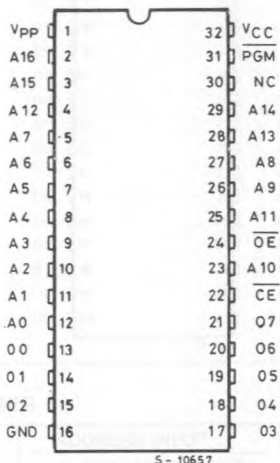
DESCRIPTION

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

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

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PIN NAMES

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

BLOCK DIAGRAM

Block diagram showing V_{PP}, V_{CC}, GND inputs; DATA OUTPUTS 00–015; PGM, OE, CE inputs to OE, CE AND PROGRAM LOGIC connected to OUTPUT BUFFERS; A0-A10 ADDRESS INPUTS to Y DECODER and X DECODER; Y GATING; 1.048.576 CELL MATRIX. S-10656