

**SONY****CXK1005P****512-Bit (32 Word × 16 Bit) Non-Volatile Memory****Description**

The CXK1005P is an electrically erasable and programmable E<sup>2</sup>PROM of 32 word × 16 bit structure, employing the non-volatile memory transistors of the MNOS type.

As the sequence controller is built-in the IC and the control signals necessary for operations are generated within the IC, the chip can be controlled with fewer program steps.

The IC built-in a charge pump circuit and all the operations can be performed with only the 5V power supply. It requires no high voltage, and it is so designed as to require low power consumption (20 mW Typ.). It has a non-volatile channel memory for the electronic tuner and a most suitable read-only memory system that can be rewritten immediately any time when necessary in the field.

**Features**

- Single 5V power supply
- 32 word × 16 bit structure of full decoding
- Rewritable in 1-word unit
- Memory retention time of more than 10 years with no power supply
- Number of erasures and writings of more than 10<sup>5</sup> times
- Built-in sequence controller
- Built-in timing circuit for erasure of writing
- 4-bit I/O control
- Low power consumption design (20 mW Typ.)

**Structure**

P-channel MNOS IC

**Absolute Maximum Ratings (Ta=25°C)**

|                         |                  |                                |    |
|-------------------------|------------------|--------------------------------|----|
| • Supply voltage        | V <sub>CC</sub>  | -0.3 to +7.0                   | V  |
| • Input voltage         | V <sub>IN</sub>  | -0.3* to V <sub>CC</sub> +0.3* | V  |
| • Operating temperature | T <sub>opr</sub> | -20 to +75                     | °C |
| • Storage temperature   | T <sub>stg</sub> | -55 to +150                    | °C |

**\*Note)** This value is at normal condition; it may be 0.5V at the transient time (20 to 30 ms).

Package Outline

Unit: mm

