

# HN25168S, HN25169S

—Preliminary—

## 2048-word × 8-bit Programmable Read Only Memories

The HITACHI HN25168S and HN25169S are high speed electrically programmable, fully decoded TTL Bipolar 16384 bit read only memories organized as 2048 words by 8 bits with on-chip address decoding and three chip enable inputs. The HN25168S and HN25166S are fabricated with logic level "zeros" (low); logic level "ones" (high) can be electrically programmed in the selected bit locations. The same address inputs are used for both programming and reading.

### ■ FEATURES

- 2048 words x 8 bits organization (fully decoded)
- DTL/TTL compatible inputs and outputs
- Fast read access time: 40 ns typ. (60 ns max)
- Medium power consumption: 600 mW typ.
- Three chip enable inputs for memory expansion.
- Open collector outputs (HN25168S)/Three-state outputs (HN25169S)
- Standard cerdip 24-pin dual in-line package

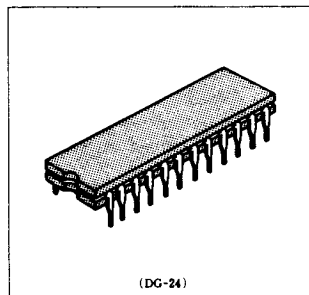
### ■ OPERATION

#### ● Programming

A logic one can be permanently programmed into a selected bit location by using programming equipment. First, the desired word is selected by the eleven address inputs in TTL level. The device is disabled by bringing  $\overline{CE1}$  to a logic "one" or CE2 and/or CE3 to a logic "zero". Then a train of high current programming pulses is applied to the desired output. After the sensed voltage indicates that the selected bit is in the logic one state, an additional pulse is applied, then is stopped.

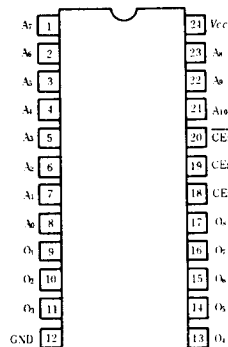
#### ● Reading

To read the memory the device is enabled by bringing  $\overline{CE1}$  to a logic "zero", CE2 and CE3 to a logic "one". The outputs then corresponded to the data programmed in the selected word.



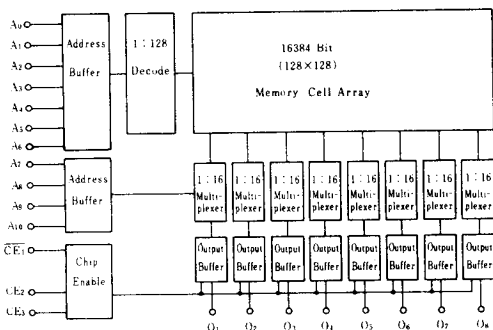
(DG-24)

### ■ PIN ARRANGEMENT



(Top View)

### ■ LOGIC DIAGRAM



Note) The specifications of this device are subject to change without notice. Please contact your nearest Hitachi's Sales Dept. regarding specifications.