

DM7488AA(SN7488AA) 256-bit read only memory

general description

The DM5488AA/DM7488AA is a DM5488/DM7488 256-bit read-only memory programmed as a sine look-up table. The 5-bit address input code linearly divides 90° into 32 equal segments. The corresponding 8-bit output word is the sine value of the input angle in the form of a binary fraction. The output values are not rounded off, so that their accuracy may be extended by expanding the lookup table with additional ROMs.

Input/output functions of the lookup table are given by its truth table. For example, a binary

input of 26 (11010) represents $26/32$ of 90° , or about 73° . The corresponding output of 11110100 indicates $(1/2 + 1/4 + 1/8 + 1/16 + 1/64)$ or about 0.95.

Open-collector outputs are provided to facilitate expansion by the methods indicated on the DM5488/DM7488 data sheet. Access time of 30 nanoseconds, typical, and other performance features are the same as those of the DM5488/DM7488.

connection diagram

