

Chips used to drive spindle motor (3 phase brushless DC) are Philips TDA5247HT or Panasonic AN8428GAK.

TDA5247HT, Philips, spindle motor + VCM controller
possible replacement for TDA5247HT = Panasonic AN8428NGAR

TDA5247 Datasheet

Reference Datasheet : AN8428GAK, Driver for 3.5inch HDD motor

AN8428GAK is motor comb IC for 3.5inch HDD. By new retract circuit ,reduce external components and shorten the brake time of the disk to improve reliability of HDD. Spindle motor sensor less linear drive. VCM linear drive , PWM-DAC control. Built-in Retract , 12 V/5 V/3.3 V power monitor, 3.3 V-Regulator. 80-pin TQFP package with exposed heat sink.

◆ Features

? By new retract circuit ,reduce external components and shorten the brake time 1/2 of the disk to improve reliability of HDD.

? Built-in shock sensor amplifier for mechanical shock protection and 3.3 V regulator for logic semiconductor.

? 10 dB acoustic noise reduction by trapezoidal current on spindle motor drive .

? 80- pin TQFP package with the smallest thermal resistance in the industry. Meet to increase speed of HDD higher 30 % than previous.