Q: Does S1 have a purpose during the write cycle?

A: S1 Has no Purpose during the write cycle so there is no difference with 1/0.

Q: What voltage should be supplied to the Vref Pin for proper operation?

A: The Vref pin is for ADC reference voltage, so 20k to 30k is acceptable.

Q: What is the recommended input audio level for optimum performance?

A: The HM2007 AGC (Automatic Gain Control) specification is 0dB to 40dB. For example, and acceptable input level range is 20mV and 0.2V.

Q: Can any one of the crystal connection pins (X1, X2) be used as clock inputs or outputs?

A: X1 can be used for input and X2 can be used for output.

Q: What is the required SRAM speed?

A: The SRAM access speed should be less than 200ns.

Q: Are K1-K4 in hugh impedance state in all cases except for a read cycle?

A: In write cycle K1-K4 are inputs, and in all otter cases they are outputs.

Q: What is the response time after the read/write command?

A: The response time is about 5us.

Q: Would loading "null data" perform a Clear function and what form would null data take?

A: You can get the format from the upload command and null equals zero.

Q: What are typical word patterns that are uploaded and are they fixed or variable length?

A: The pattern is fixed at 0.92 of a second or 1.92 seconds per word.

Q: What are the device input/output levels?

A: They are TTL compatible.

Q: What is the purpose of the AGND pin?

A: The purpose of the AGND pin is to support 1/2 VDD. It can also connect 0.1 uF to ground.

Q: Can the test pin be used for any purpose?

A: The test pin is for in house mass production testing only.

Q: Does the RDY have an internal current limiting resistor for an LED?

A: DC spec issue 3.35V Irdy=8mA (Define with LED voltage drop 5V-3.35V=1.65V).

Q: What is the sequence of the demo board when it is powered on?

A: The initial sequence is 1) check SRAM, 2) initial SRAM, 3) light LED with 00 and output RDY signal and 4) recognition mode.

Q: What do the score number returned by the RESULT command mean?

A: The score number is the different (distance) value between training and recognition. The lower the value the more accurate.

Q: What is the command procedure with the null write cycle?

A: this is only a defined protocol and has no meaning sometimes.

Q: Out prototype using 2007 has a tendency to power up in a random state, often from the CPU's perspective, in a "dead state". where it will not accept any commands. Is there a procedure to bring a device out of a dead state?

A: First check if the power pin (two pins) are connected or not. Then check the rise rate of the power pin. The faster the better.