



A.HE83134 Introduction

HE83134 is a member of 8-bit Micro-controller series that is developed by King Billion. Users can chose any one of combination among 【640 dots LCD Driver + 12 Bit I/O Port】...【320 dots LCD Driver + 32 Bit I/O Port】 etc. (Decide by Mask Option). This IC has built-in one OP comparator. The built-in OP comparator can be used with (light, voice, temperature, humidity) sensor. The 7-bit current-type D/A converter and PWM device provide the complete speech output mechanism. The 256K ROM Size can storage around 80 second's speech. This IC is applicable to the medium systems such as LCD Games and Educational Toy etc. Use external SRAM or Flash RAM to have recording function. This IC is applicable to the medium systems such as LCD Games, Education Toy etc. This IC is very easy to learn and use. Most of instructions take only 3 oscillator clocks (machine cycles). As a result this IC is suitable for the applications that require higher performance system.

B.HE83134 Features

- Operation Voltage : 2.2V – 5.5V
- System Clock : DC ~ 8MHz @ 5.0V
DC ~ 4MHz @ 2.2V
- Internal ROM : 256K Bytes(64K Program ROM +192K Data ROM)
- Internal RAM : 256 Bytes
- Dual Clock System : Normal (Fast) clock : 32.768K ~ 8MHz
Slow clock : 32.768KHz
- Operation Mode : DUAL、FAST、SLOW、IDLE、SLEEP Mode.
- With WDT (WATCH DOG TIMER) to prevent deadlock condition.
- 12-bit ~ 32-bit Bi-directional I/O port. Mask Option can select PUSH-PULL or OPEN DRAIN output mode for each I/O pin.
- One built-in OP comparator.
- 640 ~320 dots LCD driver (A、 B TYPE selectable).
- One 7-bit current-type DAC output.
- PWM device.
- Two external interrupts and two internal timers interrupts.
- Two 16-bit timers.
- Instruction set : 32 instructions, 4 addressing mode. 8-bit DATA POINTER for RAM and 18-bit TABLE POINTER for ROM.

