8-Bit micro-controller with 660 dots LCD Driver

Features

- Single chip 8-bit micro-controller

- Operating voltage: 2.4V to 5.5V

- Memory :
  - Program ROM: 48*1024 Bytes
  - Data RAM (stack RAM included) : 3072 Bytes
  - LCD RAM : 88 Bytes

- 10 input/output pins:
  - Dedicated I/O pins: P0[5:0]
  - Share pin I/O:
    - P0[7:6]/(UART TX, RX)
    - P1[0:1]/(SCLK, SDIO)

- Half duplex UART function

- Build-in Megawin E-flash interface

- Dedicated SPK pin for tone output

- LCD driver output:
  - Max 60 segment × 11 common
  - 1/11, 1/10, 1/9 duty and 1/4, 1/5 bias driving mode

- Internal R-type VLCD divider

- 10 level programmable frame rate from 56.7Hz to 113.8Hz

- Two re-loadable 8-bit timers

- Two dividers
  One 14-bit divider with the clock source from sub-oscillator to generate a 2-Hz interrupt
  One 7-bit divider with the clock source from main oscillator

- Build-in dual oscillation circuit:
  - Ring oscillator up to
    5MHz at 3.6V – 5.5V
    4MHZ at 2.4V – 3.4V
    for main oscillator (Fosc)
  - 32768Hz crystal oscillator for
    sub-oscillator (F_{x32})

- Build-in 8-level battery-low detector circuit

MEGAWIN

General Description

MLC822A is a cost effective, high performance 8-bit micro-controller of MEGAWIN. It integrates an 8-bit pipeline CPU core, 48KB ROM, 3072B RAM, two 8-bit timers, 660 dots LCD driver, 10 I/O pins and other system control circuits into a single chip. MLC822A build in an UART interface circuit, which could be used to system link with other devices. An e-flash interface is useful for the external memory application. The MLC822A provides a build-in oscillator as clock source. It is suitable for data bank product, hand-held game, toy controllers and other products' applications.