

# BE643

## µp Display Embedded System



### Features

- High performance, PIC32 32-bit microprocessor
- Built-in 512KB ISP flash memory, 64KB SRAM
- Support micro SD
- 1xRS232, 1xSPI, 1xI<sup>2</sup>C
- 1xRS232/422/485/USB port (selected one from four)
- 1xADC, 12xGPIO
- 4.3" TFT-LCD with 480X272 (WQVGA) resolution
- Comprehensive set of device library and programming guide for self programming
- RS232/422/485/USB driver, SPI driver, I<sup>2</sup>C driver, touch panel driver, TFT driver are supported
- Dimension (WxHxD): 125.8x71.5x14.25mm
- Weight: 130g

### Hardware Specifications

#### Processor

- Microchip PIC32 32-bit microprocessor

#### Memory

- 512KB in-system programmable flash
- 64KB internal SRAM
- 16KB EEPROM

#### Display

- 4.3" TFT panel 480X272 WQVGA
- With LED Backlight

#### Serial interface

- One full-duplex, four-wired synchronous data transfer SPI port
- One two-wired serial interface (I<sup>2</sup>C) up to 400KHz data transfer speed

#### RS232/422/485/USB port

- RS232 (standard)
- RS232/422/485/USB Port (selected one from four)
- Support dual serial port, one is three-wired RS232, the other is selected from RS232/422/485/USB port

#### External I/O

- Support ADC (1 x channel, 10 bits resolution)
- Support GPIO (12 x GPIO)

#### Touch Panel Interface

- Support four-wired resistive touch panel interface

#### Software Utilities

- Support RS232/422/485/USB driver, SPI driver, I<sup>2</sup>C driver, touch panel driver, and TFT driver for free

#### DC Requirement

- DC 5V

