BOLYMIN, INC.

Hardware Specifications

Processor
- High performance, Low power AVR 8-bit microprocessor

Memory
- 64KB In-system programmable flash
- 2KB Internal EEPROM
- 4KB Internal SRAM
- 64KB x 2 External I²C CMOS EEPROM (option: 64KBx3)

Display Interface
- Support 8-bit single scan with resolution 320 x 240
  Monochrome STN LCD, edge LED white backlight only

Serial Port
- Support dual serial port, one is three-wired RS232, another is shared with RS422 and RS485 port

RS232 / 422 / 485 Port
- Support one port shared between with RS232 isolated RS422 and isolated RS485

Serial Peripheral Interface
- One full-duplex, three-wired synchronous data transfer SPI port
- One two-wired serial interface(I²C) to 250KHz data transfer speed

Touch Panel Interface
- Support four-wired resistive touch panel interface

Software Utilities
- Support RS232 / 422 / 485 driver, SPI driver
  I²C driver, Touch panel and LCM driver

DC Requirement
- DC3.3V~5.5V

Features
- High performance, Low power AVR 8-bit microprocessor
- Built-in 64KB Flash memory / 4KB SRAM
- On board updateable 128KB EEPROM
- One isolated RS485 / 422 / 232, 1 x RS232
- High speed SPI and I²C
- Lower voltage operation to 3.3V
- Built-in 4-wired resistive touch panel
- Current consumption 180mA

- 320 x 240 monochrome STN LCD
- On-chip power-on reset(POR) and programmable watchdog reset
- Comprehensive set of development tools and application notes for self programming
- RS485 / 422 / 232 driver, SPI driver, I²C driver, Touch panel driver, LCM driver and Utility are supported
- Dimension (W x H x D): 160 x 109 x 16.5mm
Accessories

- BEGV643A Embedded LCD module
- User Manual
- Software Utility Disc
- ISP Cable (option)

**BEGV643A BLOCK DIAGRAM**

Pin Mapping Table

<table>
<thead>
<tr>
<th>PIN NO.</th>
<th>Signal</th>
<th>PIN NO.</th>
<th>Signal</th>
<th>PIN NO.</th>
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<td>RX1</td>
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Order Information

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<th>RS422</th>
<th>RS485</th>
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Display: FSTN/Gray LCD, LED/White Backlight (Default)