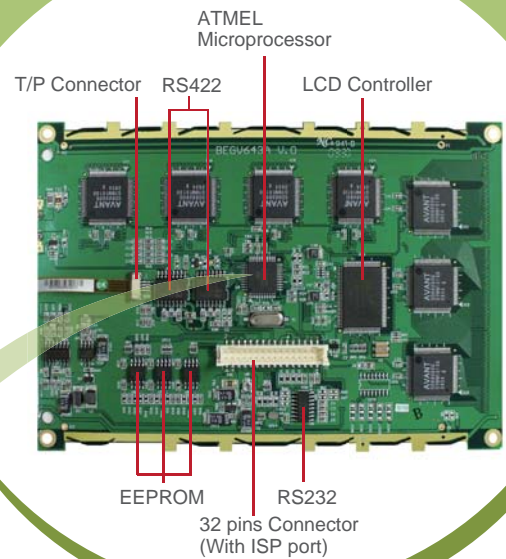


# BEGV643A

## µp Display Embedded System



Your 64KB/128KB(option) application program here!

### Features

- High performance, Low power AVR 8-bit microprocessor
- Built-in 64KB/128KB ISP Flash Memory, 4KB/16KB SRAM
- On board updateable 128KB EEPROM (plus 64KB option)
- One RS485 / 422 / 232, 1 x RS232
- High speed SPI and I<sup>2</sup>C
- 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, I<sup>2</sup>C driver, touch panel driver, LCM driver and utility are supported
- Dimension (W x H x D): 160 x 109 x 16.5mm

### Hardware Specifications

#### Processor

- ATMEL ATmega644P/ATmega1284P AVR 8-bit microprocessor

#### Memory

- 64KB/128KB in-system programmable flash
- 2KB/4KB internal EEPROM
- 4KB/16KB internal SRAM
- 64KB x 2 external I<sup>2</sup>C CMOS EEPROM (option: 64KBx3)

#### Display Interface

- Support 8-bit single scan 320 x 240 monochrome STN LCD (edge LED white backlight)

#### RS232 / 422 / 485 Port

- Support dual serial port, one is three-wired RS232, another is shared in among RS232 / isolated RS422 / isolated RS485 port by option

#### Serial Peripheral Interface

- One full-duplex, three-wired synchronous data transfer SPI port
- One two-wired serial interface(I<sup>2</sup>C) up to 250KHz data transfer speed

#### Touch Panel Interface

- Support four-wired resistive touch panel interface

#### Software Utilities

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

#### DC Requirement

- DC4.5V~5.5V

#### Operation Temperature

- -20°C ~ 70°C

#### Certifications

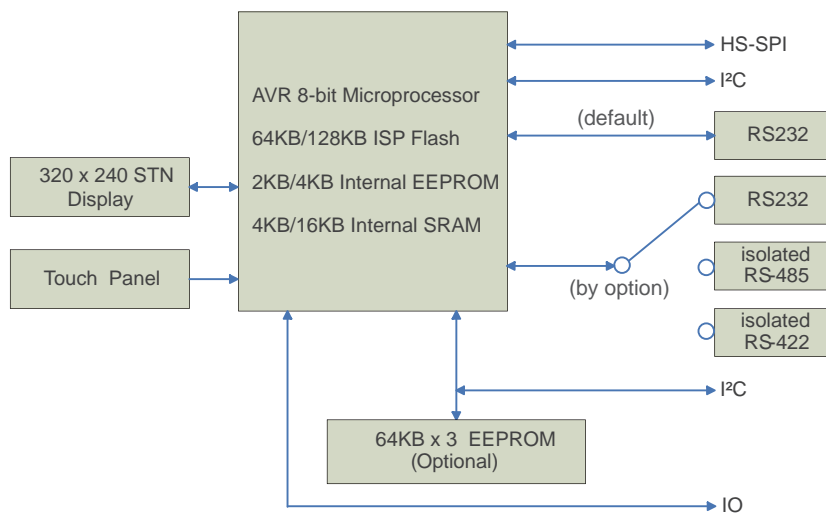
- CE Class B (NO.CB10101101)



### Packing List

- BEGV643A Embedded System
- User Manual
- Software Utility Disc
- MKII and ISP Cable (option)

### BEGV643A BLOCK DIAGRAM



### Pin Mapping Table

PIN NO.	Signal	PIN NO.	Signal	PIN NO.	Signal
1	GND	12	422RP	23	RX1
2	EEPSDA	13	MOSI	24	GND2
3	VDD	14	422RN	25	TX1
4	EEPSCCL	15	MISO	26	GND2
5	Vadj	16	422TP/485P	27	SDA
6	EEPWP	17	SCK	28	EN485
7	Vout	18	422TN/485N	29	SCL
8	IOB	19	RX0	30	A
9	/Reset	20	VDD2	31	IOA
10	NC	21	TX0	32	K
11	/SS	22	VDD2		

### Order Information

Parts NO.	Description	RS232-A	RS232-B	RS422	RS485
BEGV643A	Dual RS232	☆	☆		
BEGV643A1	One RS232	☆			
BEGV643A2	One RS232/One RS422	☆		☆	
BEGV643A3	One RS232/One RS485	☆			☆

Display: FSTN/Gray LCD,LED/White Backlight(Default)

