

## BEGV643A

# Display Embedded System



#### **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 I<sup>2</sup>C
- 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, 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

• 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 shard 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 resisitive touch panel interface

#### **Software Utilities**

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

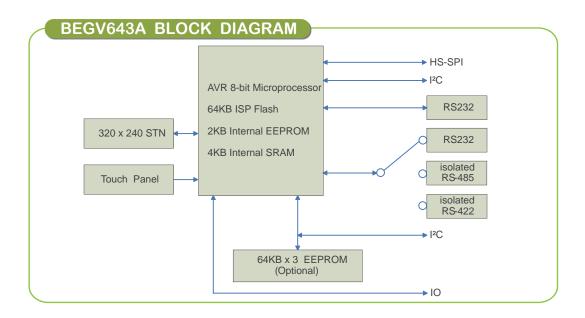
#### **DC** Requirement

DC3.3V~5.5V



### Accessories

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



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	EEPSCL	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	А		
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	$\stackrel{\sim}{\sim}$	☆				
BEGV643A1	One RS232	☆					
BEGV643A2	One RS232/One RS422	$\stackrel{\wedge}{\simeq}$		☆			
BEGV643A3	One RS232/One RS485	$\stackrel{\wedge}{\simeq}$			☆		

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

