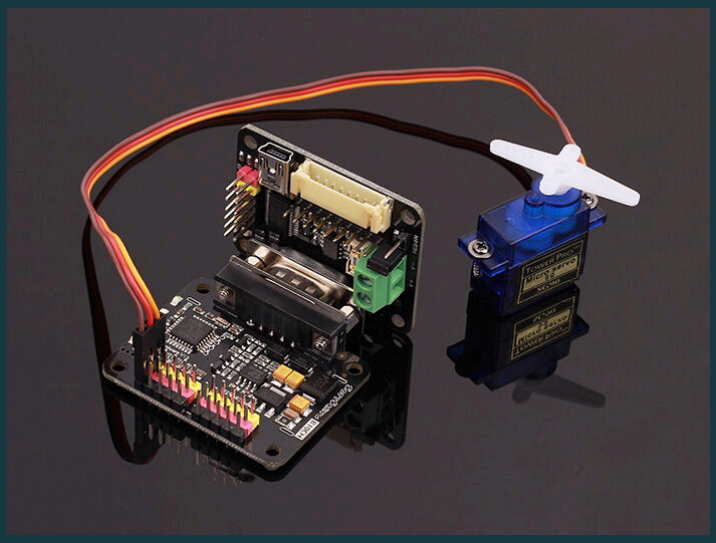
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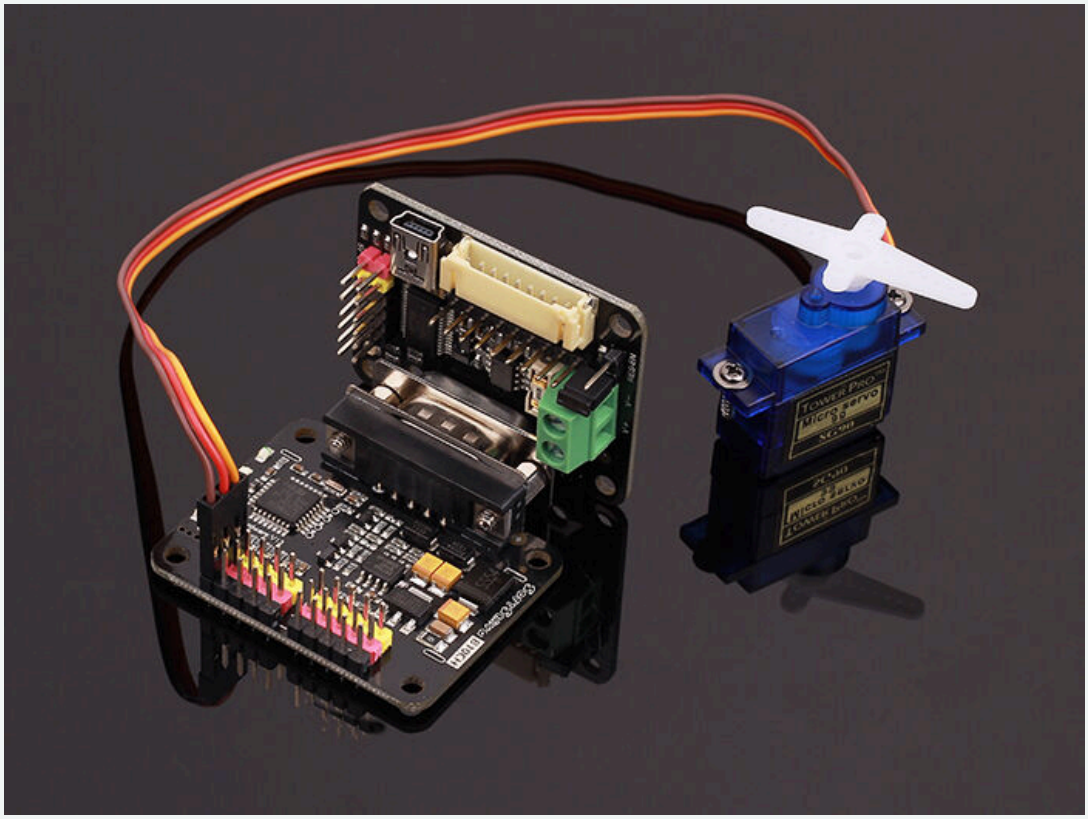
SoftServo-B10CH (Servo Controller& RC Signal Generator)

SoftServo-B10CH: 10-channel servo controller and RC signal generator with RS485/I2C, 1μs resolution, soft-start, and servo protection.

SKU	UPDATED	PRICE
105990022	2024-08-09 02:02:38	$16.00(Excl. VAT)



Overview



The SoftServo-B10CH is a 10-channel PWM signal generator designed primarily for controlling PWM-style servos, with simultaneous output, 1μs resolution, and flexible cycle and effective-width settings. It integrates RS485 and I2C interfaces sharing a user register, supports soft-start, independent per-channel speed/position control, and a termination function for servo protection.

Key Features

Strictly speaking, SoftServo-B10CH is a 10-channel PWM signals generator, which can be applied to most of the devices that integrate RC interface, but the original intention of the design is to control the PWM-Style servo. It integrates RS485 and I2C into one connector, and they share the same user register, so the servo controller can be used via any one of the two interfaces at any time. All functions can be performed by reading or writing the user register, except for a few special operations(please refer to the corresponding communication protocols for details), which is similar to the MCU operation. In addition, the high-level width of the PWM signal is simplified as PWM-Effective-Width which is typically from 500μs to 2500μs.

Features：

- All the PWM signals output at the same time(in other words, they almost have the same rising edge), and the actual resolution is up to 1μs(the hardware version must be higher than V12).
- The signal coupling is so low that it is difficult to detect visually, just like all the PWM signals are generated by separate hardware.
- It integrates the Soft-Start function. As we all know, the initial position of the PWM-Style servo is typically unknown. Conventional-Start mode makes servo rotate to the goal position with full speed, which is unsatisfactory in most robotic applications. Soft-Start mode can make servo rotate slowly when the current position is unknown, but need more current in a short time. It is suggested that all the servos should be started in time-sharing mode to reduce the electric current when you need to control several servos.
- The cycle, the minimum PWM-Effective-Width and the maximum PWM-Effective-Width can be set flexibly, which makes all the PWM-Style servos compatible.
- It is based on a subdivision algorithm, the maximum subdivision value is up to 250. The position and the speed of each channel can be controlled separately, which is conductive to robot dynamic control. The speed depends on the subdivision(see below).
- All the PWM signals can be terminated by setting the equivalent position value to 251 at any time, which is extremely useful for protecting the servo.
- It integrates a stable and high-efficiency RS485, and the baud rate can be detected automatically. There is no instruction packet loss when the baud rate is not higher than 28800bps, otherwise the first instruction packet will be discarded. Furthermore, it is recommended to send the sync bytes(0xff 0xff 0xff 0xff) first when the baud rate is higher than 28800bps.
- It integrates a stable and high-efficiency I2C.

Specification：

Supply Voltage : DC 5 ~ 12V

Baudrate Range : 1200 ~ 115200bps

I2C Speed : 100KHz

Size : 44mm * 47mm * 13mm (L*W*H)

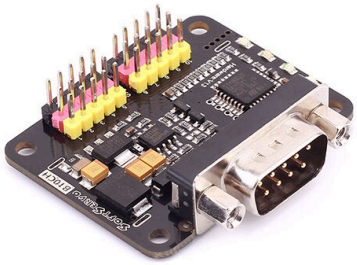
We have adapters for this controller:**GDA-HLB1**，**GDA-HLU1** and **GDD-FAN**.

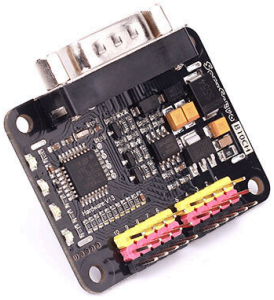
For more information,please click **here** to download.

Visit **here** for updated documents of Gicren's products

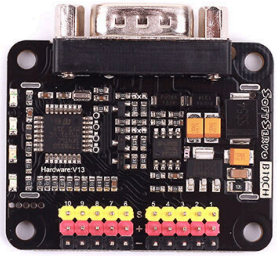
Technical support：**gicren(at)outlook.com**

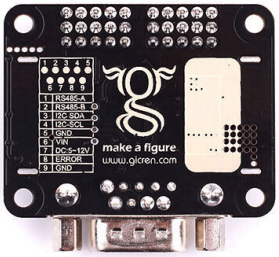
Product Gallery

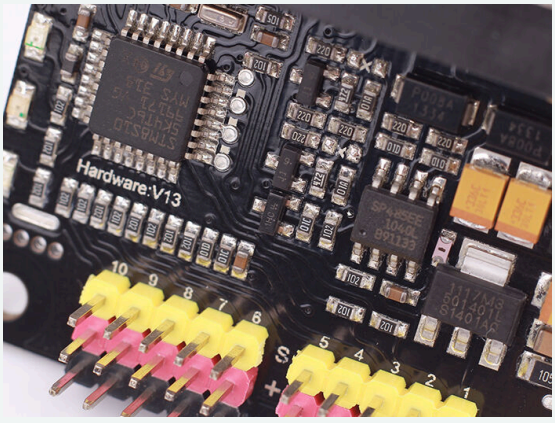












Compliance & Logistics

HSCODE	8543902100

Resource Links

- https://www.seeedstudio.com/SoftServo-B10CH-Servo-Controller-RC-Signal-Generato-p-2242.html

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