



BL-589-D

**Constant current source that can store current values
Current pattern generator / High current lighting source driver
Synchronous pulse type constant current source**

http://www.BoardFree.kr/custom_products

1.Features

- Absolute Maximum Ratings
 - Up to 48V current source input voltage
 - Up to 12V internal amplifier voltage
- Output Current Source : 1000mA
- Output Current Resolutions : 4000 step
- Output Voltage : Up to 5V
- Saveable Current Settings : 200 point
- Delayable pulse count : 200 count
- Maximum configurable address : 8bit(255)
- Internal current pattern storage memory
- Driven by external synchronization pulse
- Maximum output current trimming
- Fault Detection
 - Output over current
 - Thermal Shutdown
- Core: Arm® 32-bit Cortex®-M3 CPU
72 MHz maximum frequency, 1.25 DMIPS/MHz (Dhrystone 2.1) performance at 0 wait state memory access
Single-cycle multiplication and hardware division
- Memories
 - 256 to 512 Kbytes of Flash memory
 - up to 64 Kbytes of SRAM
 - Flexible static memory controller with 4 Chip Select. Supports Compact Flash, SRAM, PSRAM, NOR and NAND memories
- Clock, reset and supply management
 - 2.0 to 3.6 V application supply and I/Os
 - 4-to-16 MHz crystal oscillator
 - Internal 8 MHz factory-trimmed RC
 - Internal 40 kHz RC with calibration
 - 32 kHz oscillator for RTC with calibration
- 2 × 12-bit D/A converters
- DMA: 12-channel DMA controller

2.Applications

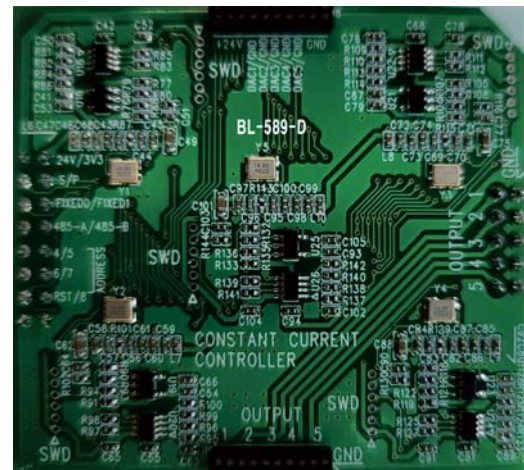
- Constant current source, LED light source driver
- Current pattern generator
- Multi-channel light source
- Synchronous current source

3.Description

It operates by receiving synchronization pulses from the outside. In multi-channel operation, it operates in accordance with the synchronization pulse.

Channels can have any desired delay count operation.

Three power sources are required for operation. There is a 24V power supply for the constant current source, 12V for the internal amplifier, and 3.3V for MCU operation.



Use a PC program to edit and save the current pattern. Additionally, the design of the current pattern is edited using an Excel sheet.

The vertical axis represents the size of the current and 4000 levels of data can be used, and the horizontal axis represents the time axis, and a pattern on one page is 200 points horizontally.

The input terminals are synchronous pulse, start and stop, and intuitive output control.

The control signal and synchronization pulse are at 3.3V level.

There is a communication terminal where you can edit and save current patterns. The communication method is RS-485.