

# About

## General Description

Tiny self-sufficient stepper motor controller **SCF4-M** module is designed for high integration customer products and can drive FIZ+ lens with 3 stepper motors (for example Focus/Zoom/P-Iris with micro-stepping up to 1/1024 steps for inaudible operation) and IR filter simultaneously. Also has 3 limit switch inputs and 4 GPIO (IN/OUT/ADC) pins for custom application control. The controller expects industry-standard G-code formatted commands for fastest and easiest integration. Designed to be connected over single USB cable (USART and I2C can be supported in custom firmware). Firmware modifications can be tailored to suit customer requirements. SCF4 - is a one in a series of Kurokesu stepper motor controllers and stands for Stepper Controller Model F, 4'th modification.

## Features

- Small footprint 16 x 23 x 2.3 mm [0.63 x 0.91 x 0.09 in]
- 3x stepper motor controller with up to 1/1024 micro-stepping support for each motor
- 1x H-bridge for coil control (day/night filter switch)
- 3x limit switch processing for precise lens homing/referencing
- Direct USB Full-speed (12 Mbit/s) connectivity
- 4x GPIO's with Input/Output/Analog functionality
- Industry standard G-code command set
- Can drive most lenses with bipolar stepper motors with minor or none tuning
- Certificates: REACH, RoHS, CE

## Applications

- Motorized zoom lenses
- Small test fixtures
- Micro mechanism control

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