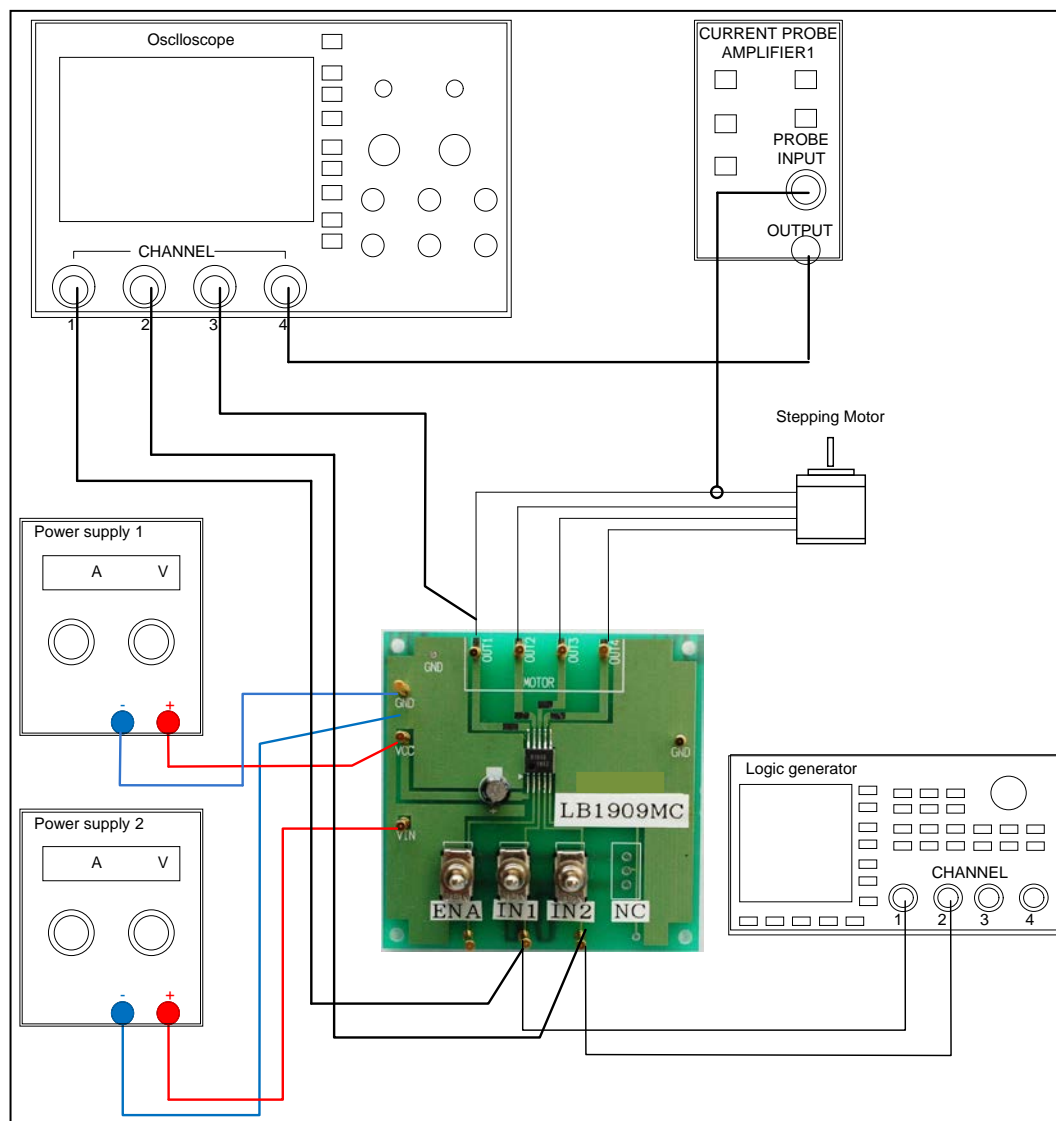# Test Procedure for the LB1909MCGEVB Evaluation Board

For stepper motor control

Table1: Required Equipment

Equipment	Efficiency
Power supply1	25V-3A
Power supply2	10V-0.5A
Logic generator	200kHz
Oscilloscope	4 channel
Current probe1	-
LB1909MC Evaluation Board	-
Stepper Motor	25V-2A

Test Procedure:

1. Connect the test setup as shown above.

2. Set it according to the following guide.

   [Supply Voltage]   VCC (2.5 to 16V) : Power Supply for LSI
                             VIN (1.8 to 10V) : Logic "High" voltage for toggle switch

   [Toggle Switch State] Upper Side: High (VIN)
                         Middle: Open, enable to external logic input
                         Lower Side: Low (GND)

   [Operation Guide]
        1. Initial Condition Setting: Set "Open" the toggle switches ENA , IN1 and IN2.
        2. Power Supply: Supply DC voltage to VCC and VIN.
        3. Ready for Operation from Standby State: Turn "High" the ENA terminal toggle switch.
        4. Motor Operation: Input the signal which is in condition to want to operate into IN1 and IN2.

3. Check the IN1 , IN2 and OUT1 terminal voltage at scope CH1 , CH2 and CH3, and the output current waveform at scope CH4.

Table2: Desired Results

INPUT	OUTPUT
VCC=12V VIN=5V ENA=H IN1 , IN2=Full-step signal	* Refer to the following waveform

Typical current waveform
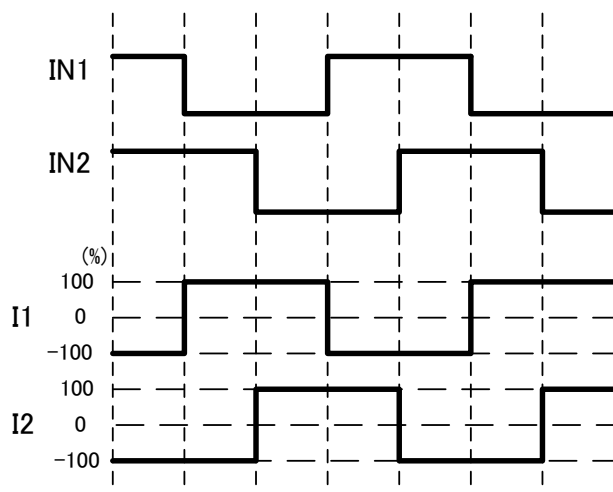
LB1909MC Full-Step(VCC=12V, 200pps)