

## Test Procedure for the LB1846MCGEVB Evaluation Board

01/08/2012

### For stepping motor control

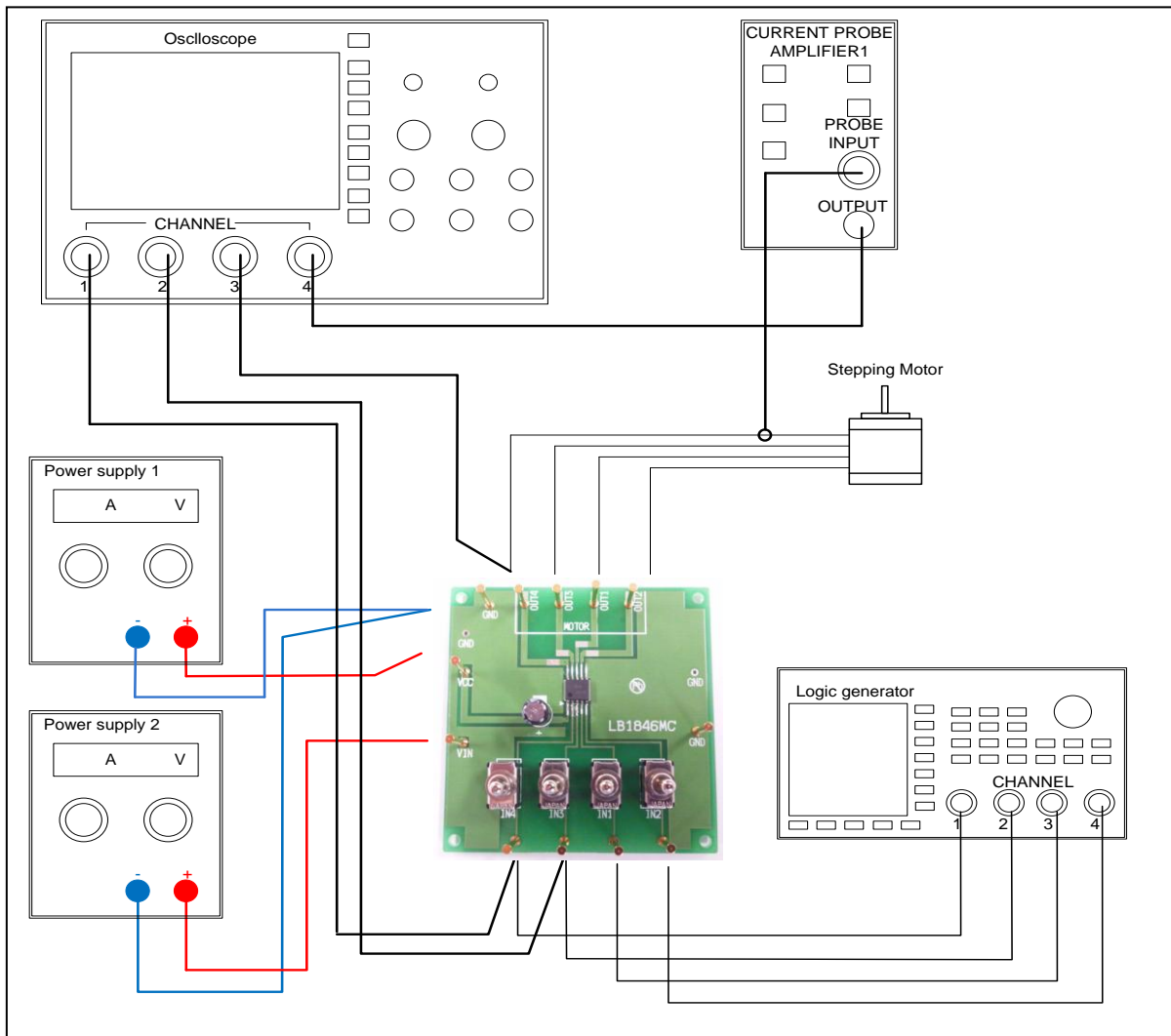


Table1: Required Equipment

Equipment	Efficiency
Power supply1	12V-1A
Power supply2	5V-0.5A
Logic generator	
Oscilloscope	4 channel
Current probe1	
LB1846MC Evaluation Board	
Stepping Motor	5V-0.2A

**Test Procedure:**

1. Connect the test setup as shown above.
2. Set it according to the following guide.

[Supply Voltage]            VCC (2.5 to 7.5V) : Power Supply for LSI  
 VIN (2.5 to 7.5V) : 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 IN1-IN4.
2. Power Supply: Supply DC voltage to VCC and VIN.
3. Motor Operation: Input the signal which is in condition to want to operate Full-step , Half-step into IN1-IN4.

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=5V VIN=5V IN1-IN4=Full-step or Half-step signal	* Refer to the following waveform

Typical current waveform

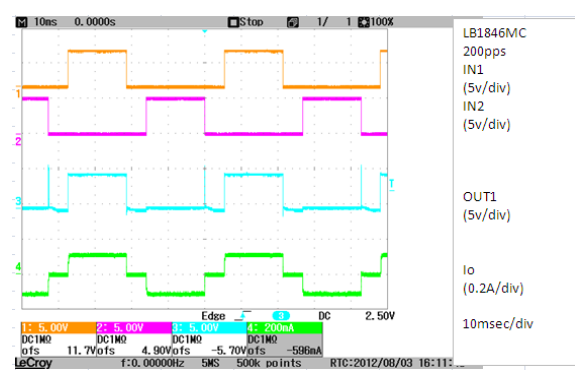
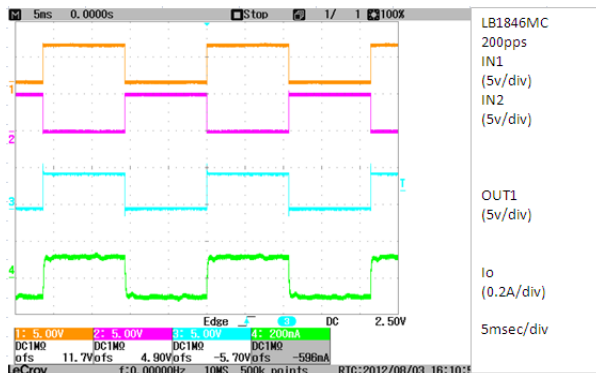
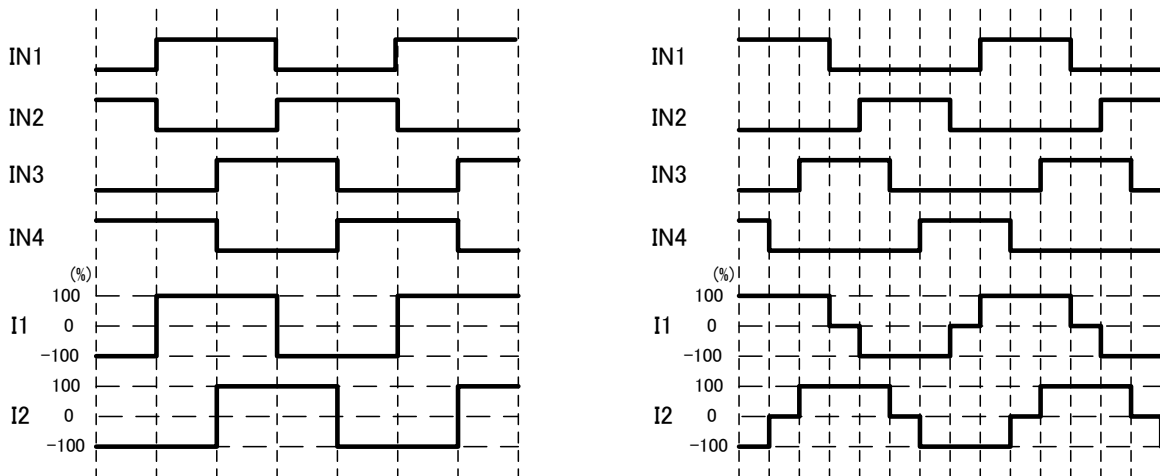


Fig full-step waveform

Fig half-step waveform

**For Latch valve control**

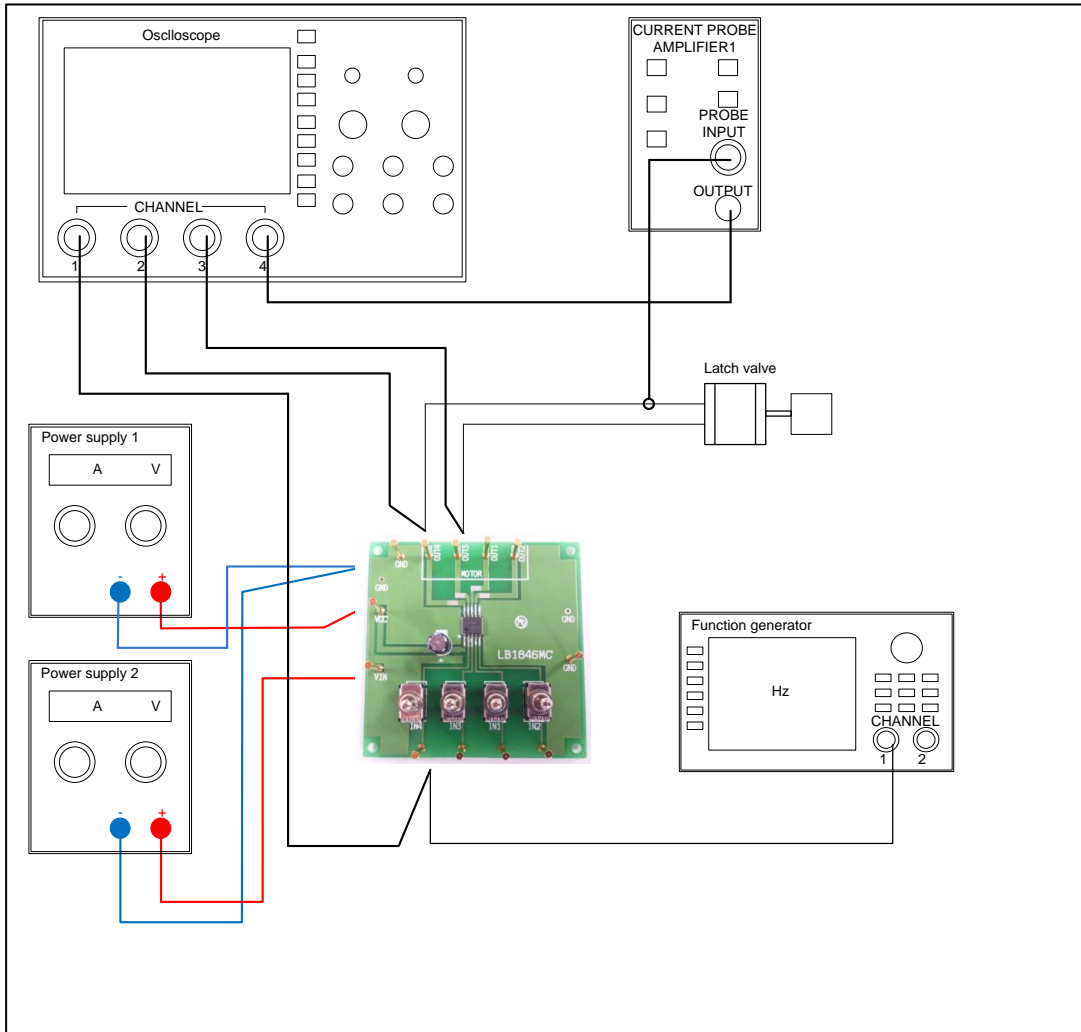


Table1: Required Equipment

Equipment	Efficiency
Power supply1	12V-1A
Power supply2	5V-0.5A
Logic generator	
Oscilloscope	4 channel
Current probe1	
LB1846MC Evaluation Board	
	3.6V-0.3A



**Test Procedure:**

1. Connect the test setup as shown above.
2. Set it according to the following guide.

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 VIN (2.5 to 7.5V) : Logic “High” voltage for toggle switch

[Toggle Switch State]            Upper Side: High (VIN)  
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Table2: Desired Results

INPUT	OUTPUT
VCC=5V VIN=5V IN1-IN4=Full-step or Half-step signal	* Refer to the following waveform



Typical current waveform

