

Test Procedure for the LB1846MCEVB Evaluation Board

01/08/2012

For stepping motor control

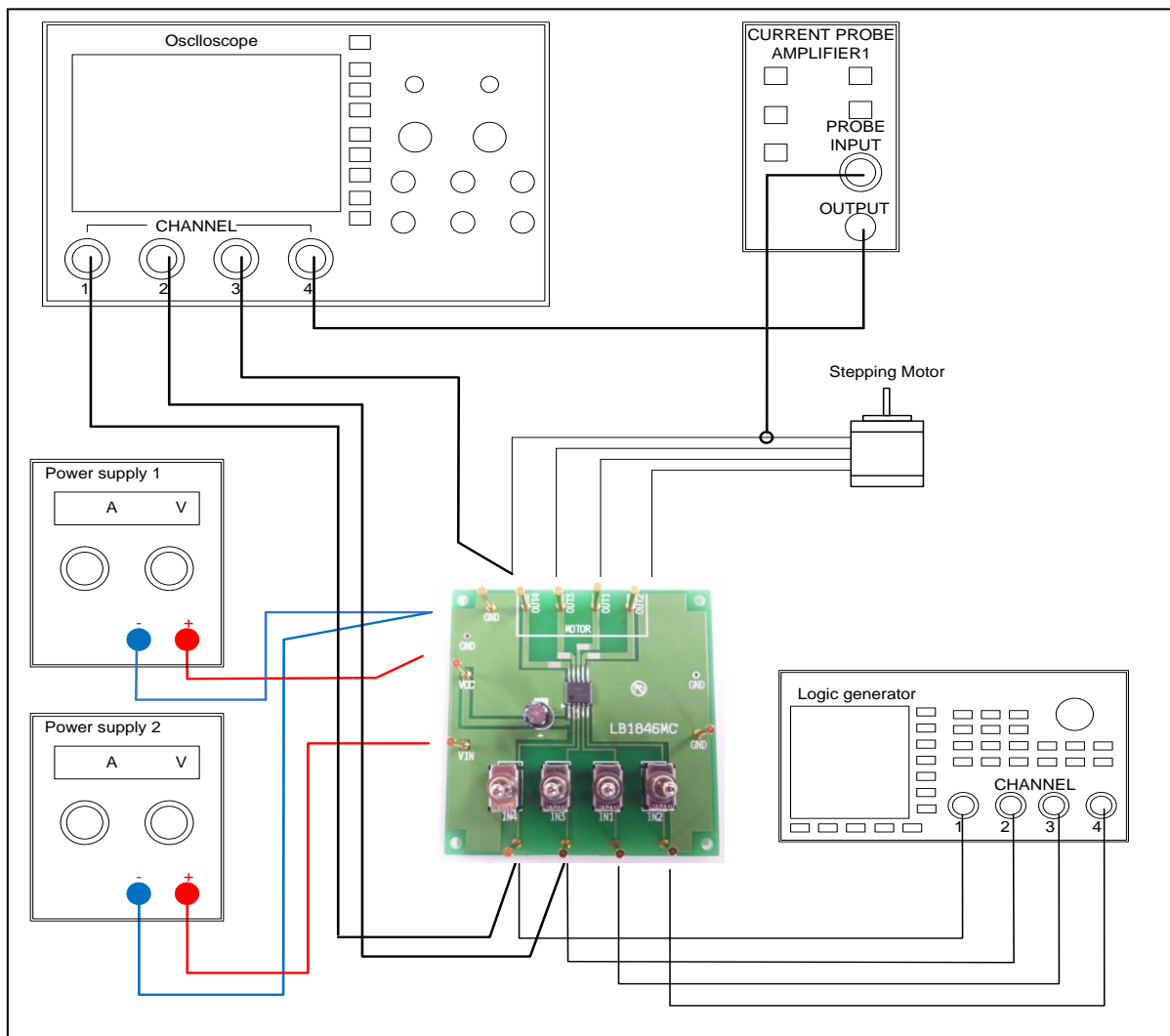


Table1: Required Equipment

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

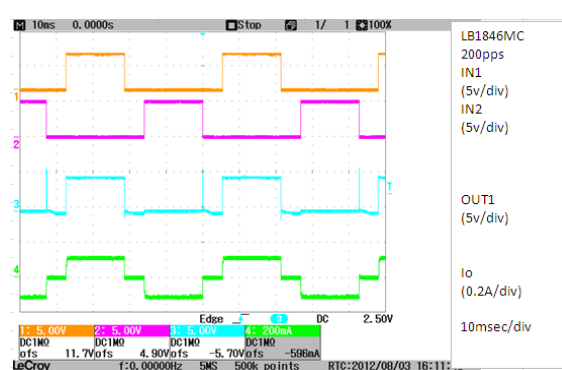
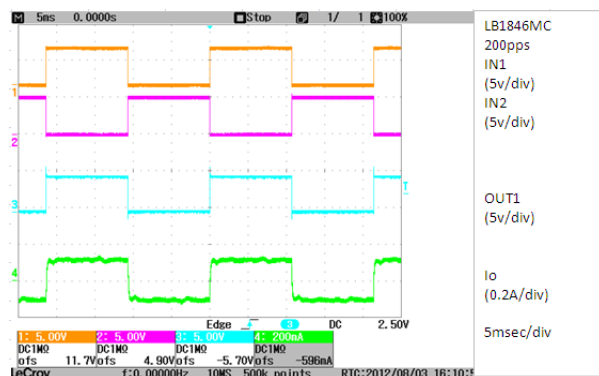
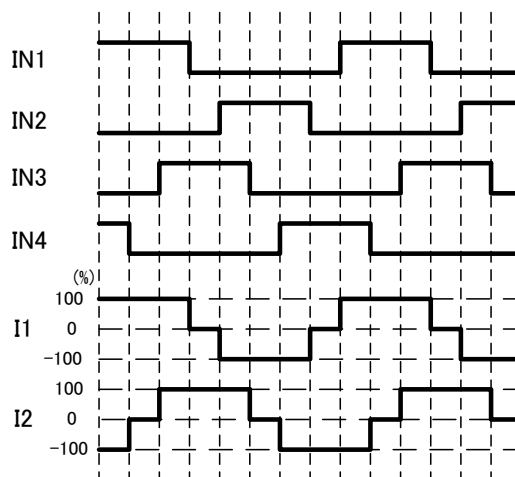
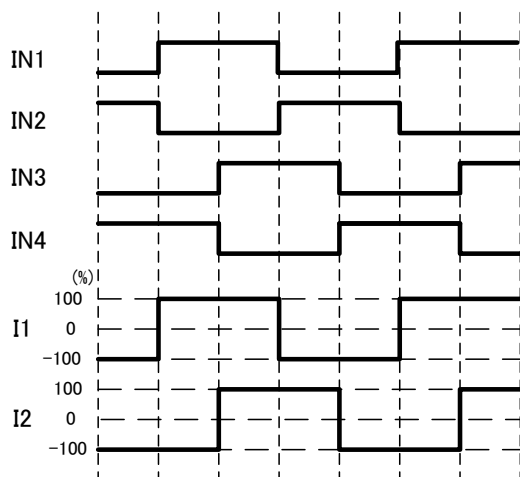




Fig full-step waveform

Fig half-step waveform

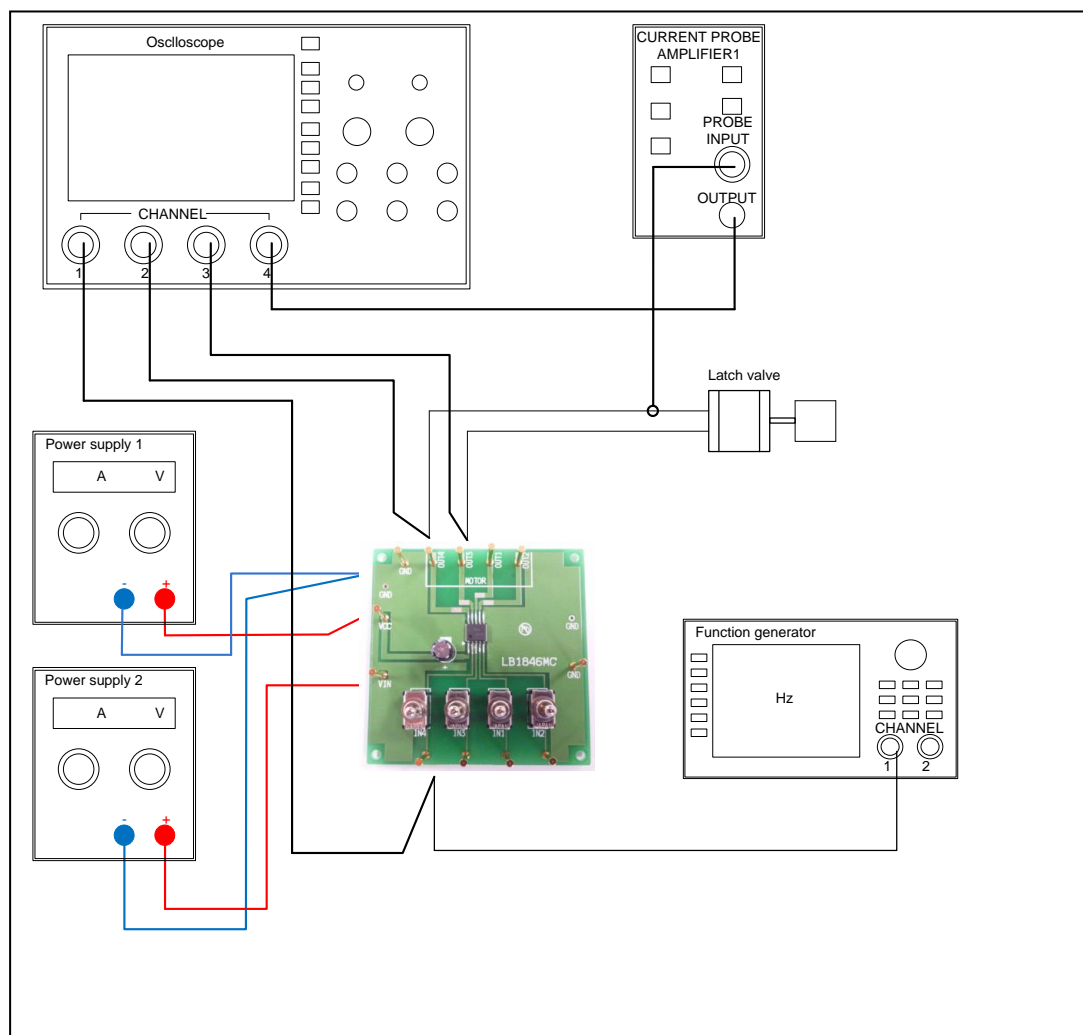
For Latch valve control

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.

[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

