

Test Procedure for the LV8772GEVB Evaluation Board

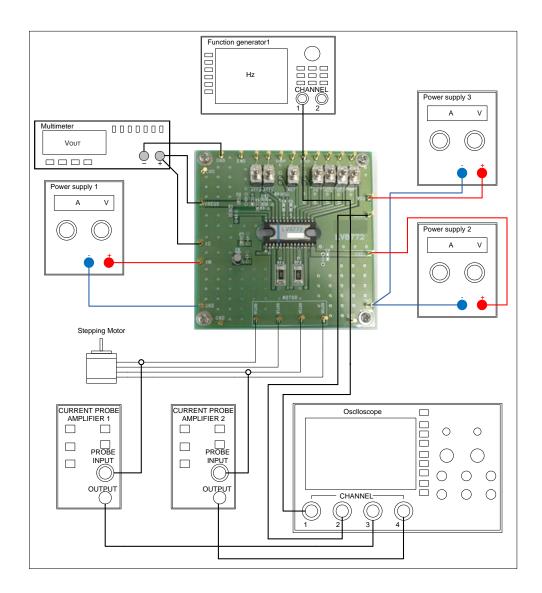


Table1: Required Equipment

Equipment	Efficiency
Power supply1	35V-5A
Power supply2	5V-0.5A
Power supply3	10V-1A
Function generator	200kHz
Multimeter	
Oscilloscope	4 channel
Current probe1	
Current probe2	
LV8772 Evaluation Board	
Stepper Motor	35V-3A

Testing Procedure:

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

[Supply Voltage] VM (9 to 32V): Power Supply for LSI

VREF (0 to 3V): Const. Current Control for Reference Voltage

VDD (2 to 5V): Logic "High" voltage for toggle switch

[Toggle Switch State] Upper Side: High (VDD)

Middle: Open, enable to external logic input

Lower Side: Low (GND)

[Operation Guide]

1. <u>Initial Condition Setting:</u> Set "Open" the toggle switch STEP, and "Open or Low" the other switches.

- 2. Power Supply: Supply DC voltage to VM, VREF and VDD.
- 3. Ready for Operation from Standby State: Turn "High" the ST terminal toggle switch. Channel 1 and 2 are into 2-phase excitement initial position (100%, -100%).
- 4. Motor Operation: Input the clock signal into the terminal STEP.
- 5. Other Setting
 - i. ATT1, ATT2: Motor current attenuation.
 - ii. RST: Initial Mode.
 - iii. FR: Motor rotation direction (CW / CCW) setting.
 - iv. MD1, MD2: Excitation mode.
- 3. Check VREG5 and VG terminal voltage at multimeter.
- 4. Check the STEP and MONI terminal voltage at scope CH1 and CH2, and the output current waveform at scope CH3 and CH4.

Table2: Desired Results

INPUT	OUTPUT
VM=24V	VREG5=4.5V to 5.5V
VREF=1.5V	VG=28V to 29.8V
VDD=5V	
ST=High	
RST =Low	
ATT1=ATT2=Low	
FR =Low	
MD1 =MD2 =High	
STEP =500Hz (Duty50%)	

