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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Test Procedure for the NCP729FC28GEVB Evaluation Board

10-MAY-2012

Test Setup 1:

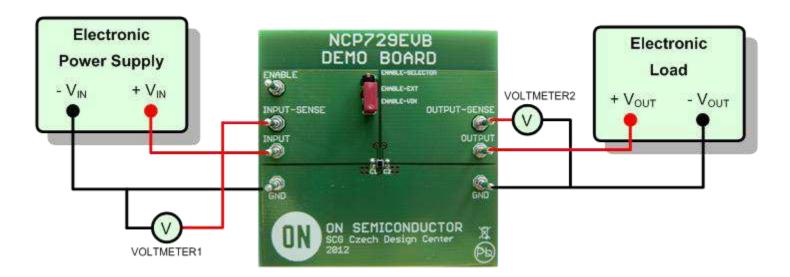


Figure 1. Test setup for the measurements of basic regulation characteristics

Required Equipment:

2 x Voltmeters

2 x Ampere meters

DC Power Supply - Max. 5.5V

Electronic Load

Test Procedure for the Measurement of Line Regulation parameter using Test Setup 1:

- 1. Connect the test setup as shown on Figure 1
- 2. Set the electronic load for the required load current e.g. $I_{OUT} = 10 \text{mA}$
- 3. Apply the required minimum input voltage e.g. $V_{IN_MIN} = V_{OUT_NOM} + 0.3V^{(1)}$

- 4. Note the output voltage reading V_{OUT1} indicated by VOTLMETER2
- 5. Apply the required maximum input voltage e.g. $V_{IN\ MAX} = V_{OUT\ NOM} + 1.3V^{(1)}$
- 6. Note the output voltage reading V_{OUT2} indicated by VOTLMETER2,
- 7. Calculate the Line Regulation parameter as: $Reg_{LINE} = \left(V_{OUT2} V_{OUT1}\right) / \left(V_{IN~MAX} V_{IN~MIN}\right) \left[V/V\right]$
- 8. Turn off the electronic load. Turn off the input power supply
- 9. End of the test

Test Procedure for the Measurement of Load Regulation parameter using Test Setup 1:

- 1. Connect the test setup as shown on Figure 1
- 2. Set the electronic load for the required minimum output current e.g. $I_{OUT_MIN} = 1mA$
- 3. Apply the desired input voltage e.g. $V_{IN} = V_{OUT\ NOM} + 0.3V^{(1)}$
- 4. Note the output voltage reading V_{OUT1} indicated by VOTLMETER2
- 5. Set the electronic load for the required maximum output current e.g. $I_{OUT_MAX} = 150mA$
- 6. Note the output voltage reading V_{OUT2} indicated by VOTLMETER2
- 7. Calculate the Load Regulation parameter as: $Reg_{LOAD} = (V_{OUT2} V_{OUT1}) / (I_{OUT\ MAX} I_{OUT\ MIN}) [V/A]$
- 8. Turn off the electronic load. Turn off the input power supply
- 9. End of the test
- (1) V_{OUT_NOM} is the nominal output voltage level of the regulator. NCP729 operating V_{IN} must be in the range $2.0V \le V_{IN} \le 5.5V$

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