

NCP 349

Over Voltage Protection Controller with Internal Low Ron NMOS FETs

Demo board



ON Semiconductor

Revision 1.2
November - 2009

Abstract

This document contains the technical specifications. It supply information with define internal specification for development team.

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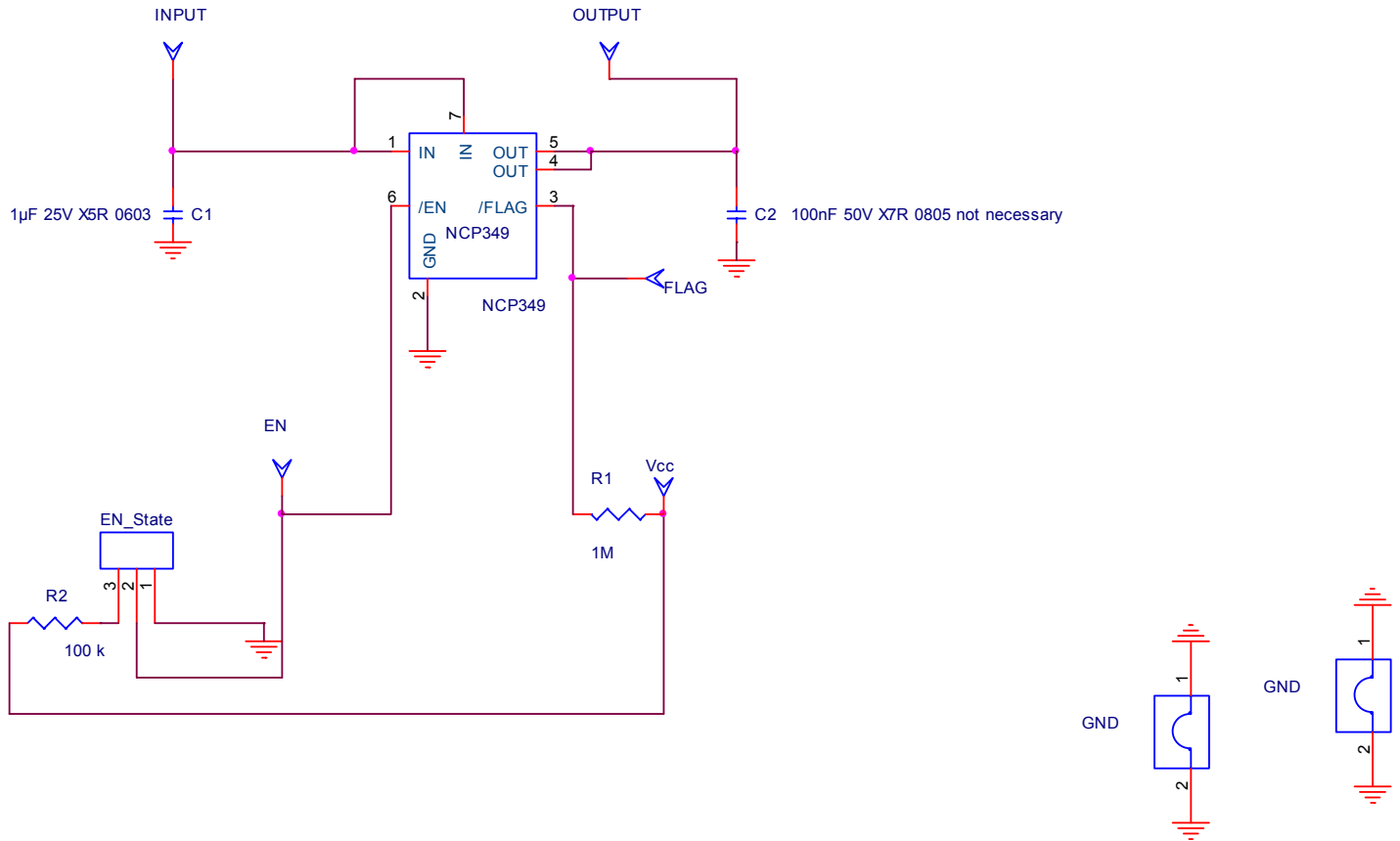
**ON Semiconductor Engineering Application – Confidential Proprietary
Demo board NCP349 Rev 1.2.**

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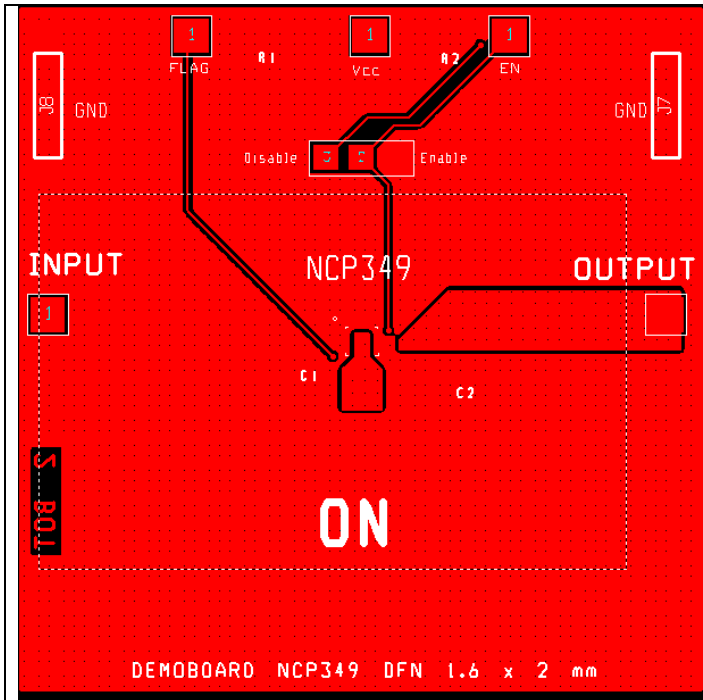
1 – Schematic:



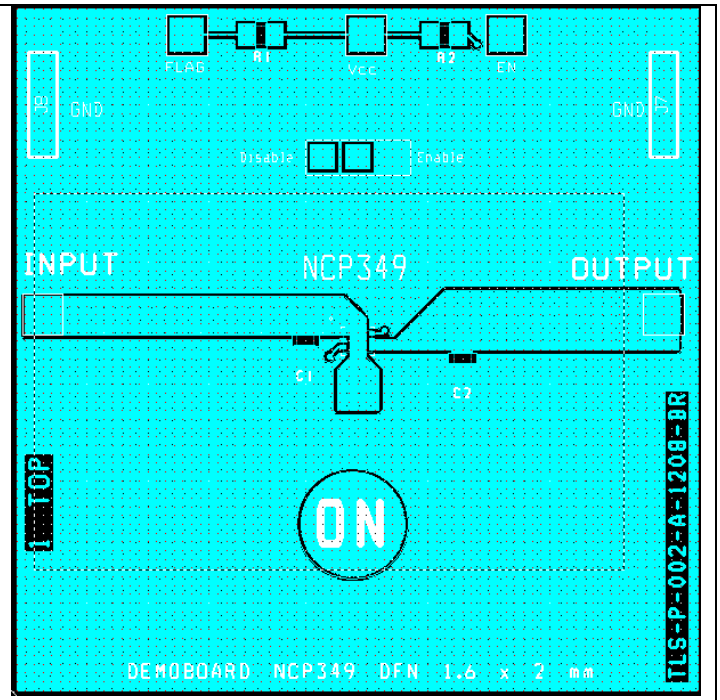
2 - BOM:

| Quantity | Designation | Manufacturer | Digi key | Specifications |
|----------|--|------------------------------|--------------------|----------------------------------|
| 1 | NCP349 LLGA3x3 | ON Semiconductor | | Over voltage protection |
| 1 | C1 (Cin) | Murata – GRM188R61E105KA12 D | 490-3897-1-ND | 1µF 25V X5R CMS0805 |
| 2 | INPUT and OUTPUT connectors. | Kontec Comatel | 5001K-ND | 1 pin. 2.54 PCB Single ligne |
| 3 | Test points: FLAG, EN, Vcc | Kontec Comatel | 5001K-ND | 1 pin. 2.54 PCB Single ligne |
| 1 | EN_state. \overline{EN} connection to GND pull down or to +5V pull up. | Kontec Comatel | 5001K-ND | 3 pins. 2.54 PCB Single ligne |
| 2 | R1, R2 | susumu | Rr08p(value)dct-nd | 100 kΩ. CMS0603 0.5% |
| 2 | GND jumper | | WM8083-ND | Jumper Ground 1mm pitch 10.16 mm |

3 - PCB:



Bottom View



Top View

4 – Connecting Process

Turn On.

1. Connect a supply (5 V typical, Maximum rating, 7V) on Vcc test point.
2. Let EN_STATE strap on right side if you want to Enable the device. (Pull down to GND).
3. Connect Vin on INPUT test point. Typical UVLO current consumption is 70µA. Typical current consumption UVLO<Vin<OVLO without load is 170µA.
4. Connect the system on OUTPUT test point.
5. Increase Vin level above UVLO to see Vin on Vout pin.
6. Connect strap on left side to disable the part (disconnect Vout from Vin)

Turn Off.

1. Disconnect system connected on Vout connector.
2. Disconnect Vin or adapter connected on Vin connector.
3. Disconnect Vcc supply.

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