

## Product Overview

## NCP6925: Power Management IC (PMIC), 7 Channels, with 2 DC-DC Converters and 5 LDOs

For complete documentation, see the data sheet.

The NCP6925 is part of the ON Semiconductor mini-power management IC family. It is optimized to supply battery powered portable application subsystems such as camera modules, microprocessors or any peripherals. This device integrates two high efficiency 1000 mA step-down DC to DC converter with DVS (Dynamic Voltage Scaling) and five low dropout (LDO) voltage regulators in WLCSP-36 2.36 x 2.36 mm package.

## Features

- 2.36 x 2.36 mm WLCSP 0.4 mm pitch
- Ultra low quiescent current (140  $\mu$ A typ)
- Id detection capability
- 2 general purpose I/O pins
- Two DC-DC converters, efficiency 95%, programmable output voltage from 0.6 V to 3.3 V by 12.5 mV steps, 1000 mA output current capability
- Four low noise, low dropout regulators, programmable output voltage from 0.8 V to 3.5 V by 25 mV steps, 300 mA output current capability, 50  $\mu$ Vrms typical low output noise
- Flexible power up and down sequences programmable by I<sup>2</sup>C
- Triple inputs 10 bits ADC
- 2 DC-DC converters, 95 % efficiency, 1 A output current capability, programmable output voltage from 0.6 V to 3.3 V by 12.5 mV steps
- 5 low dropout regulators, 300 mA output current capability, programmable output voltage from 0.8 V to 3.5 V by 25 mV steps, 50  $\mu$ Vrms typical low output noise

For more features, see the data sheet

## Applications

- Cellular Phones
- Battery powered applications power management
- Tablets
- Power supply for processor with low core voltage
- Digital Cameras

## Benefits

- Small Space Applications
- Save battery life
- Accessory detection
- Can control internal or external regulators, or can be used as internal sequences triggered inputs

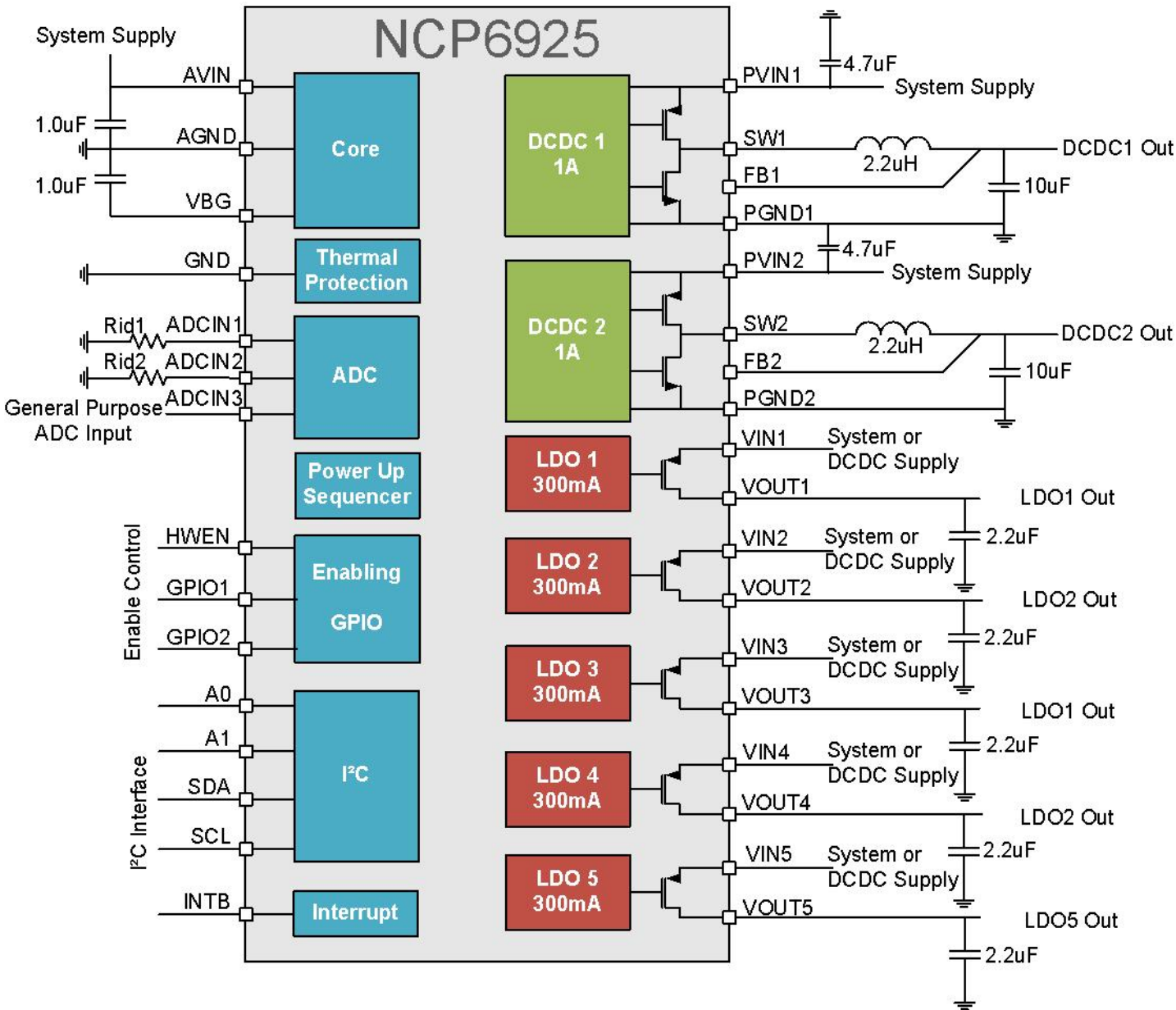
Applications	End Products
<ul style="list-style-type: none"> <li>• <b>Construction:</b> Used in concrete, mortar, and grout.</li> <li>• <b>Automotive:</b> Used in engine components and exhaust systems.</li> <li>• <b>Marine:</b> Used in boat hulls and propellers.</li> <li>• <b>Industrial:</b> Used in machinery and tools.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Concrete:</b> Used in building foundations, walls, and floors.</li> <li>• <b>Mortar:</b> Used in bricklaying and masonry.</li> <li>• <b>Grout:</b> Used in filling gaps and joints.</li> <li>• <b>Engine Components:</b> Used in pistons, valves, and other parts.</li> <li>• <b>Exhaust Systems:</b> Used in automotive exhaust pipes and manifolds.</li> <li>• <b>Boat Hulls:</b> Used in the construction of boat bodies.</li> <li>• <b>Propellers:</b> Used in marine propulsion systems.</li> <li>• <b>Machinery:</b> Used in various industrial machines and tools.</li> </ul>

- Smartphones
- Tablets
- Wearable devices
- MP3 players

## Part Electrical Specifications

Product	Compliance	Status	Topology	Control Mode	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	V <sub>O</sub> Typ (V)	I <sub>O</sub> Typ (A)	Efficiency (%)	f <sub>sw</sub> Typ (kHz)	Package Type
NCP6925BFCCT2G	Pb-free	Active	Step-Down	Voltage Mode	2.5	5.5	1.2	1	95	3000	WLCSP-36
	Halide free										

Application Diagram



For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).  
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