

## Product Overview

### NCP6924: 6 Channels Power Management IC (PMIC) with 2 DC-DC Converters and 4 LDOs

For complete documentation, see the data sheet



The NCP6924 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 converters with DVS (Dynamic Voltage Scaling) and four low dropout (LDO) voltage regulators in WLCSP-30 2.46 x 2.06mm package.

#### Features

- Very small package 2.46 x 2.06 mm
- Ultra low quiescent current (105 uA typ)
- $I^2C$  accessible prior enabling device allowing to change settings before powering up the system
- 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 1.0 V to 3.3 V by 50 mV steps, 2 x 150 mA and 2 x 300mA output current capability, 50 uVrms typical low output noise

#### Benefits

- Reduce PCB space
- Save battery life
- Offer design flexibility

#### Applications

- Battery powered applications power management
- Power supply for processors with low core voltage
- Camera modules
- Peripheral sub-systems
- USB powered devices

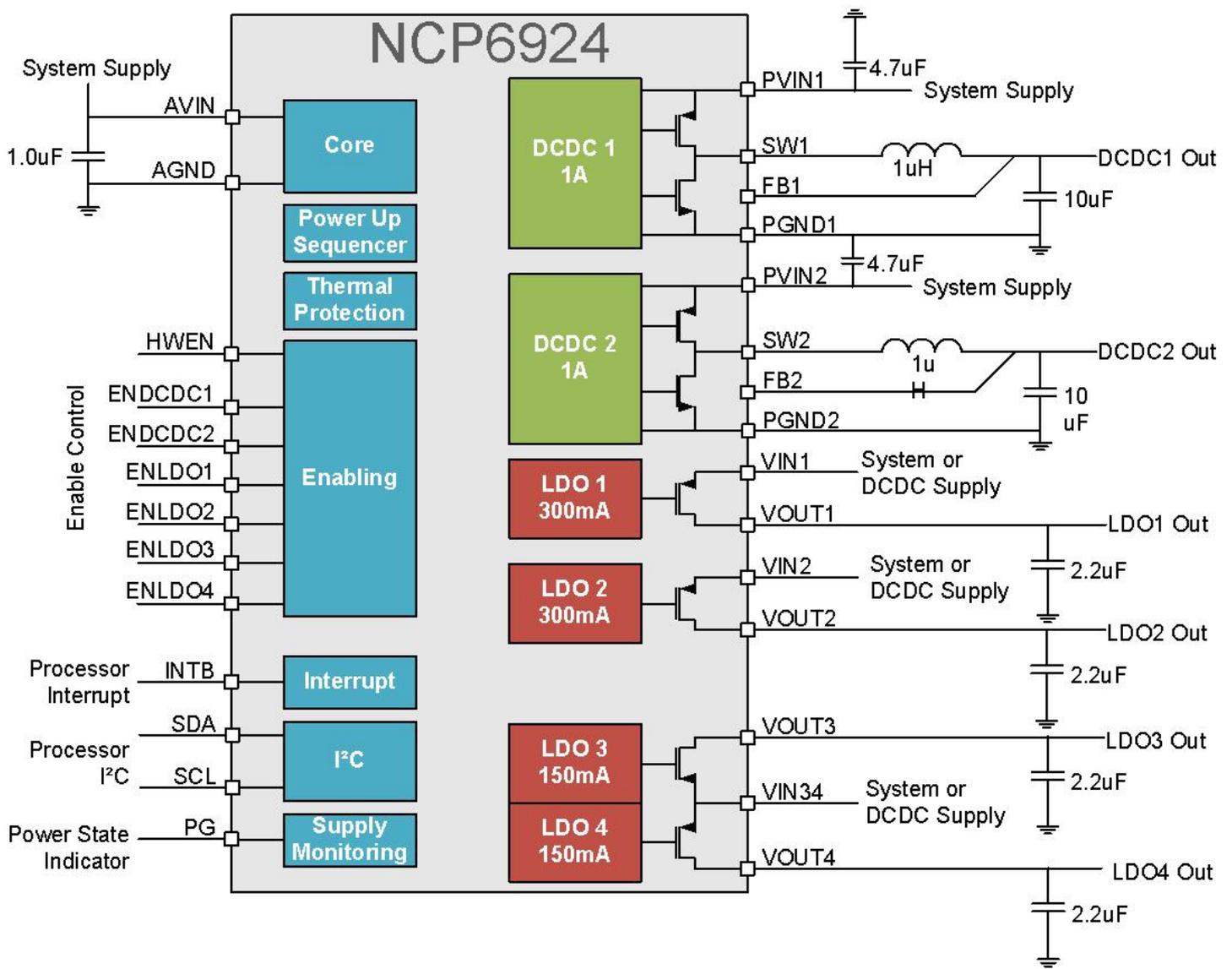
#### End Products

- 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
NCP6924AFCET1G	Pb-free Halide free	Active	Step-Down	Voltage Mode	2.3	5.5	1.2	0.8	95	3000	WLCSP-30
NCP6924AFCHT1G	Pb-free Halide free	Active	Step-Down	Voltage Mode	2.3	5.5	1.2	0.8	95	3000	WLCSP-30
NCP6924BFCHT1G	Pb-free Halide free	Active	Step-Down	Voltage Mode	2.3	5.5	1.2	0.8	95	3000	WLCSP-30
NCP6924CFCHT1G	Pb-free Halide free	Active	Step-Down	Voltage Mode	2.3	5.5	1.8	1	95	3000	WLCSP-30
NCP6924FFCHT1G	Pb-free Halide free	Active	Step-Down	Voltage Mode	2.3	5.5	1.8	0.85	95	3000	WLCSP-30

# Application Diagram



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

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