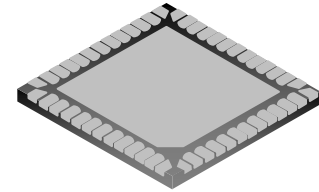


# USB POWER DELIVERY (PD) CONTROLLER FOR TRAVEL CHARGER

## 1. DESCRIPTION

SD59D15 is a protocol and power control IC applied to travel multi-port charger. It integrates three USB ports (up to two C ports) and is compatible with fast charging protocols such as PD3.0, PPS, QC4.0+, FCP, SCP, SFCP, AFC, BC1.2, APPLE, VOOC. Two BUCK circuits are integrated to realize CCCV control of two independent power supplies. Built-in TL431 can flexibly adjust the output bus voltage of ACDC, which can greatly improve the power conversion efficiency.



QFN-52-6X6X0.75-0.4

## 2. FEATURES

- ◆ Operating voltage range: 3.3V~40V
- ◆ Protocol support PD3.0, PPS, QC4.0+, FCP, SCP, SFCP, AFC, BC1.2, APPLE, VOOC
- ◆ Support protocol parsing of 2 pairs of CC ports and 3 pairs of DD ports
- ◆ 4-channel PWM Drive Control with Controllable Dead Zone, Support 100~500KHz PWM switching frequency settable
- ◆ Two-way current sampling and voltage sampling
- ◆ Built-in CV and CC control
- ◆ 3-way load switch control
- ◆ I2C/UART communication
- ◆ Mobile phone access detection and removal detection
- ◆ Support IDLE low power dissipation mode
- ◆ Built-in over voltage protection, over current protection and over temperature protection

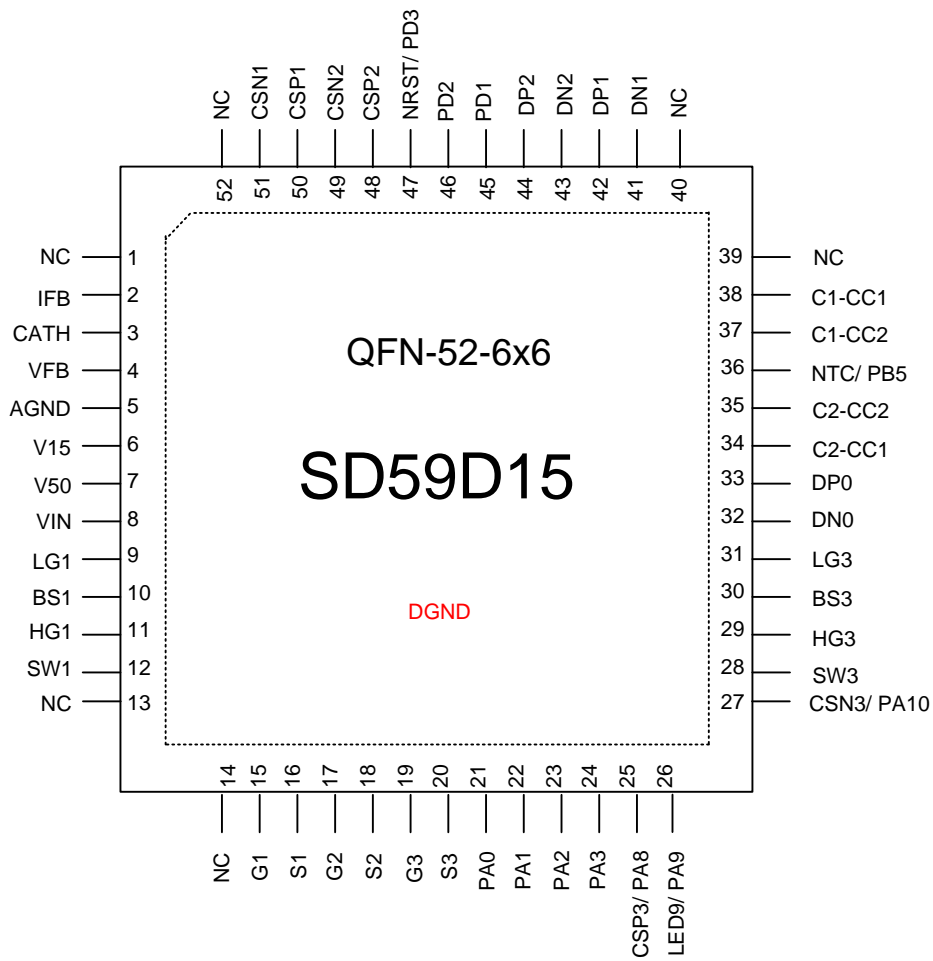
## 3. APPLICATIONS

- ◆ Travel multi-port charger
- ◆ Power strip

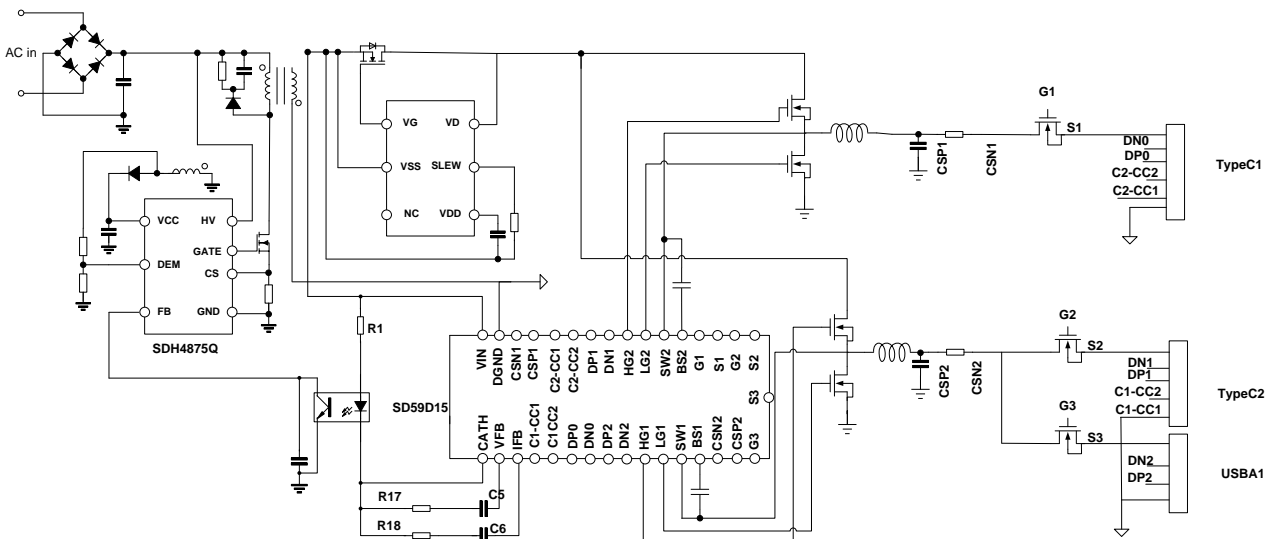
## 4. ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SD59D15	QFN-52-6X6X0.75-0.4	SD59D15	Halogen free	Tray
SD59D15TR	QFN-52-6X6X0.75-0.4	SD59D15	Halogen free	Tape&Reel

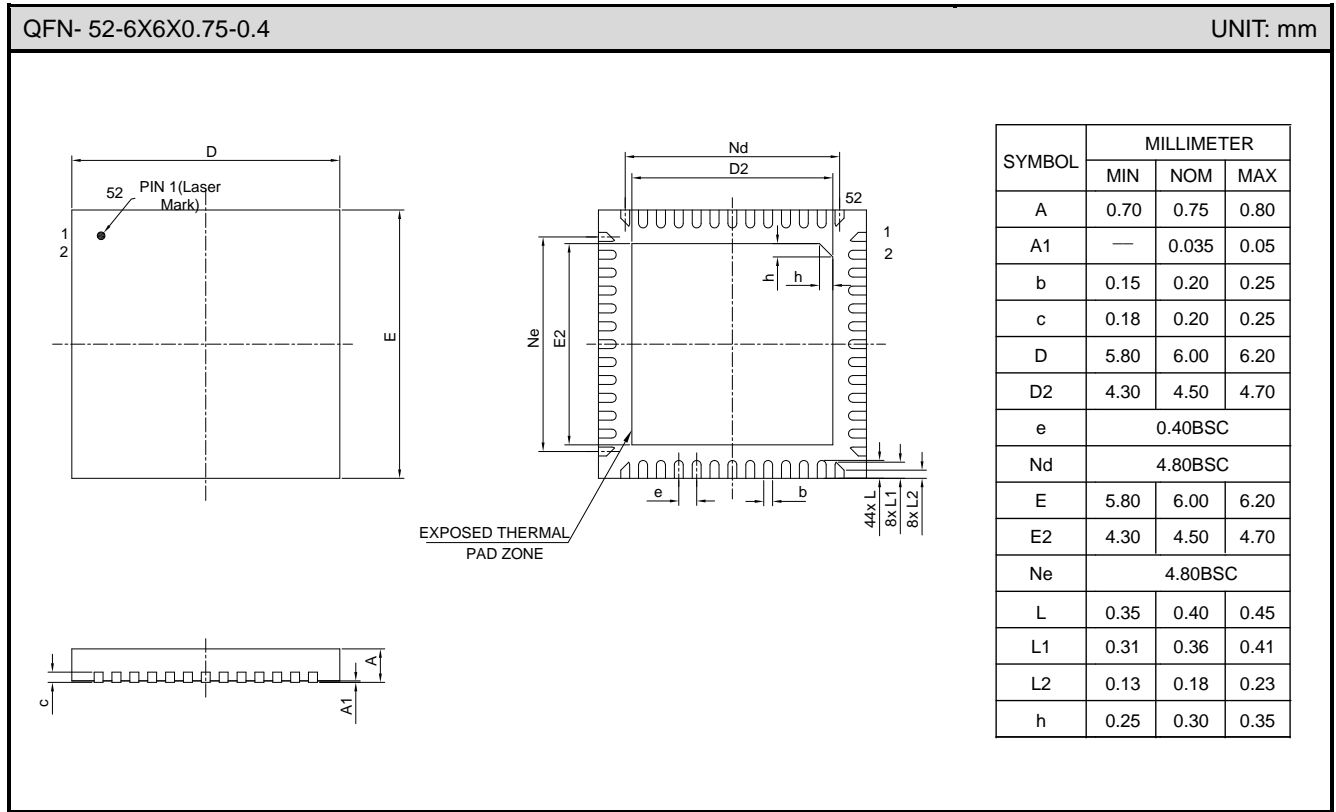
5. PIN CONFIGURATION



6. TYPICAL APPLICATION CIRCUIT



7.PACKAGE OUTLINE



**Important notice :**

1. Silan reserves the right to make changes of this instruction without notice.
2. Customers should obtain the latest relevant information when purchasing and should verify whether such information is latest and complete. Please read this instruction and application manual and related materials carefully before using products, including the circuit operation precautions, etc.
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