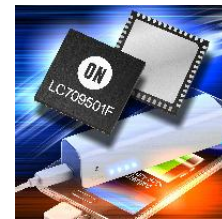


产品概览

LC709501F: 电源组控制器, USB Type-C 和 Quick Charge™ 3.0, 用于 1 个锂离子电池和锂聚合电池

欲看完整文档, 请参阅数据表。



LC709501F 是一款用于电源组的锂离子开关充电器控制器。此器件具有控制电源组应用的所有功能。它可以控制 Type-C 端口控制集成电路, 包括 Quick Charge 3.0 HVDCP。内置的开关控制器可输出 5 V 直至 12 V 电压用于快速充电。用于 USB Type-C 和快速充电的高功率输出可以结合使用恰当的外部 MOSFET。

特性

- Supports USB type-C DRP with Port control IC
- Supports Quick Charge 3.0 HVDCP Class A. 5 V up to 12 V
- Portable device communication Displays Power Bank battery information on smartphones (USB 2.0 Full Speed Host Controller) (Planning)
- Buck charge / Boost charge
- Low quiescent current : 15 μ A at Low power mode
- Supports 5 V up to 12 V operation
- Easy power scaling with external MOSFETs
- Automatic USB detection
- Prepared firmware supports various combination of USB port
- Supports USB BC1.2

For more features, see the data sheet

优势

- MCU to control Type-C Port control ICs can be eliminated. In addition customers don't need to develop the MCU software.
- HV Boost IC and QC communication IC can be eliminated. It reduces the set cost.
- Customer can enjoy the Power Bank detail information display on Smart Phone Screen
- Basic functions required in Power Bank Application is prepared
- Low Power consumption helps longer Battery life
- Supports general Smart Phone charging voltage
- Power scaling with external MOSFETs support 30 W application
- This function is prepared as Basic functions
- It can change firmware depend on customer models.
- Supports general adaptor

应用

- Lithium-ion Switching Charger Controller
- USB-related Charger

终端产品

- Power Bank

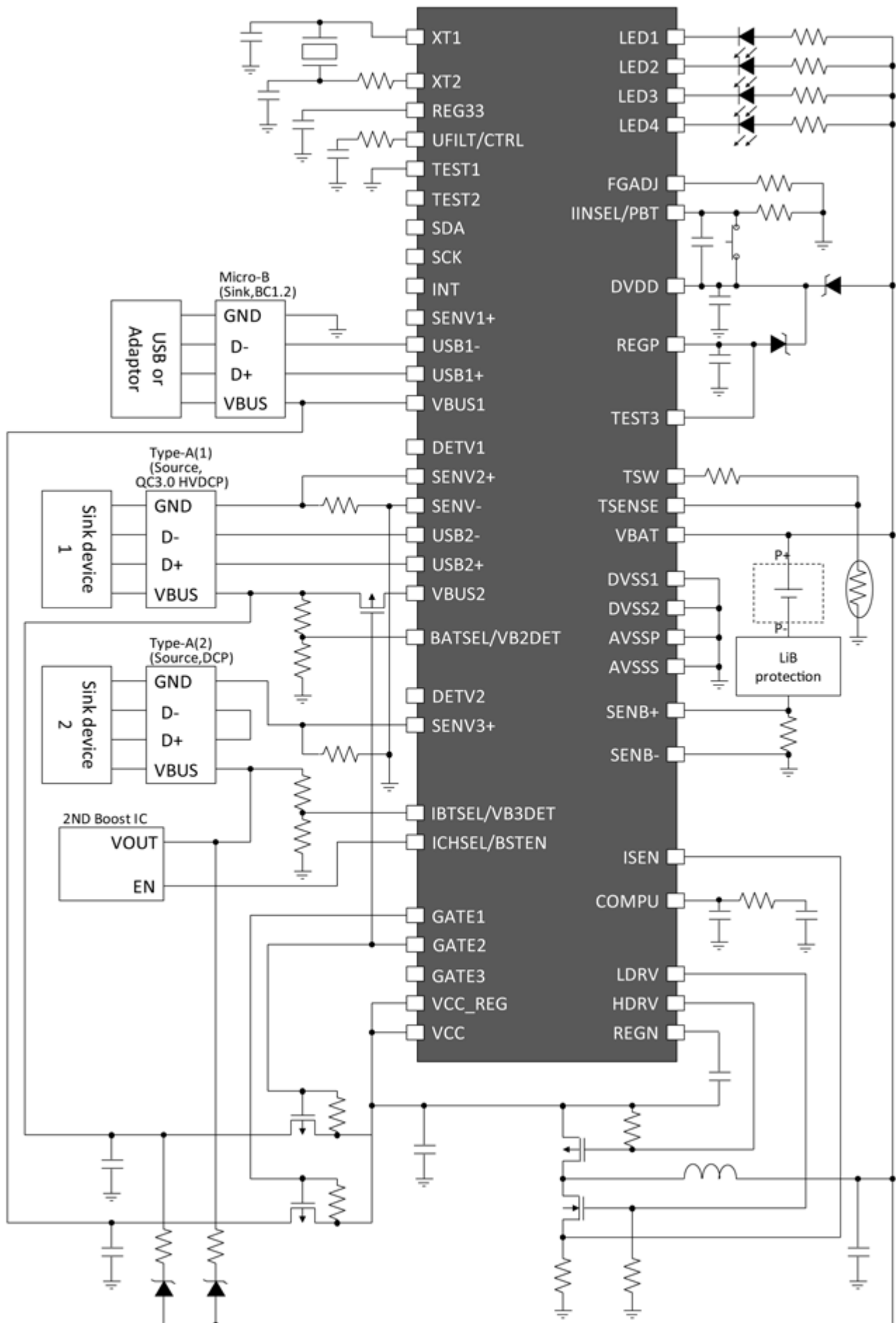
器件电气规格

产品	Pricing (\$/Unit)	Compliance	Status	Type	Number of Cells Charged	V _{CC} Min (V)	V _{CC} Max (V)	I _D Max (μ A)	Package Type
LC709501FQD-A00TXG	3.8479	Pb-free Halide free	Active	Li-Ion/Polymer	1	2.8	13.2	10	QFN-52

应用框图

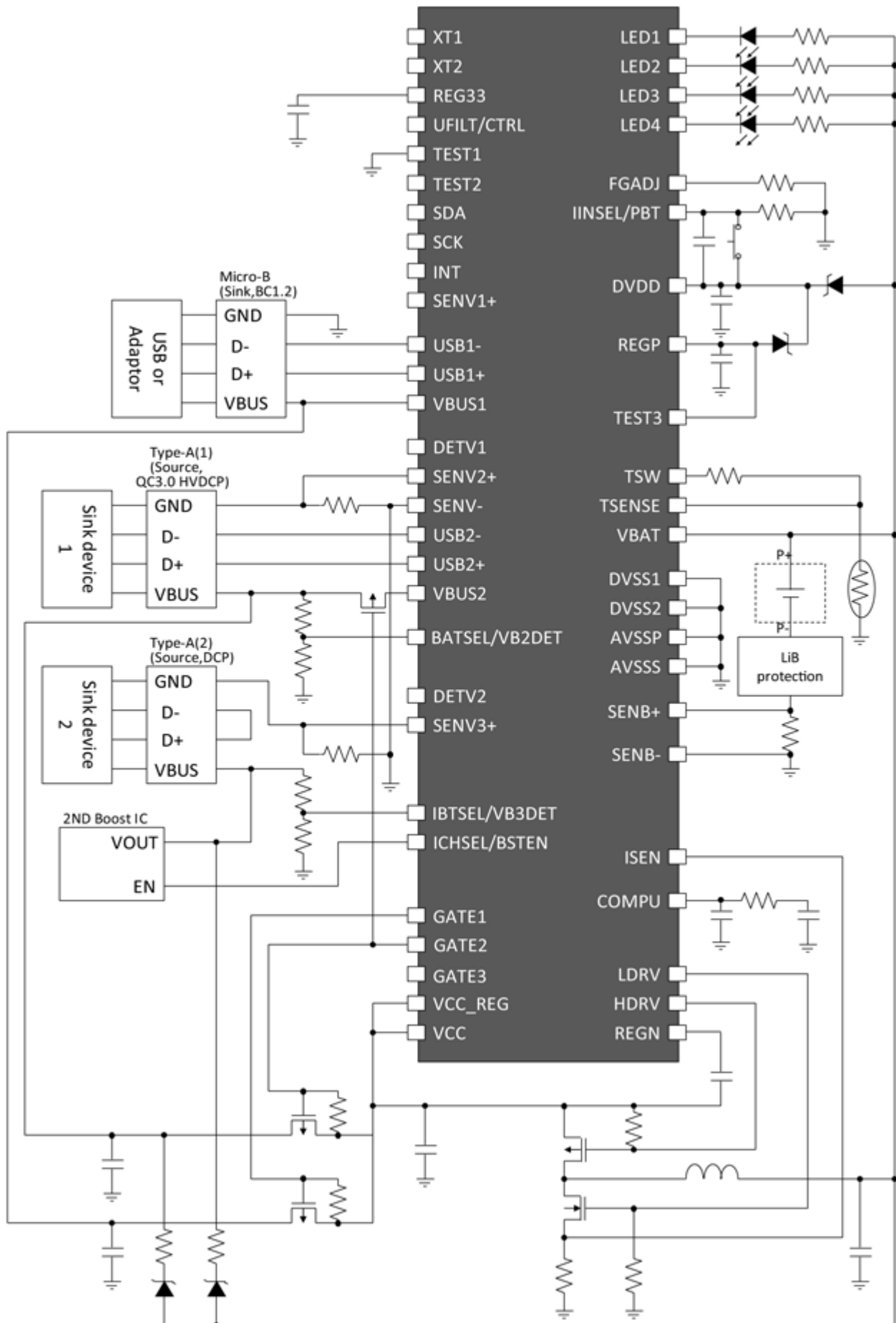
Power Bank Application (Reference Software: FW01)

Micro-B (Sink, BC1.2) + Type-A (1) (Source, Quick Charge 3.0 HVDCP) with Portable device communication + Type-A (2) (Source, DCP)



Power Bank Application (Reference Software: FW02)

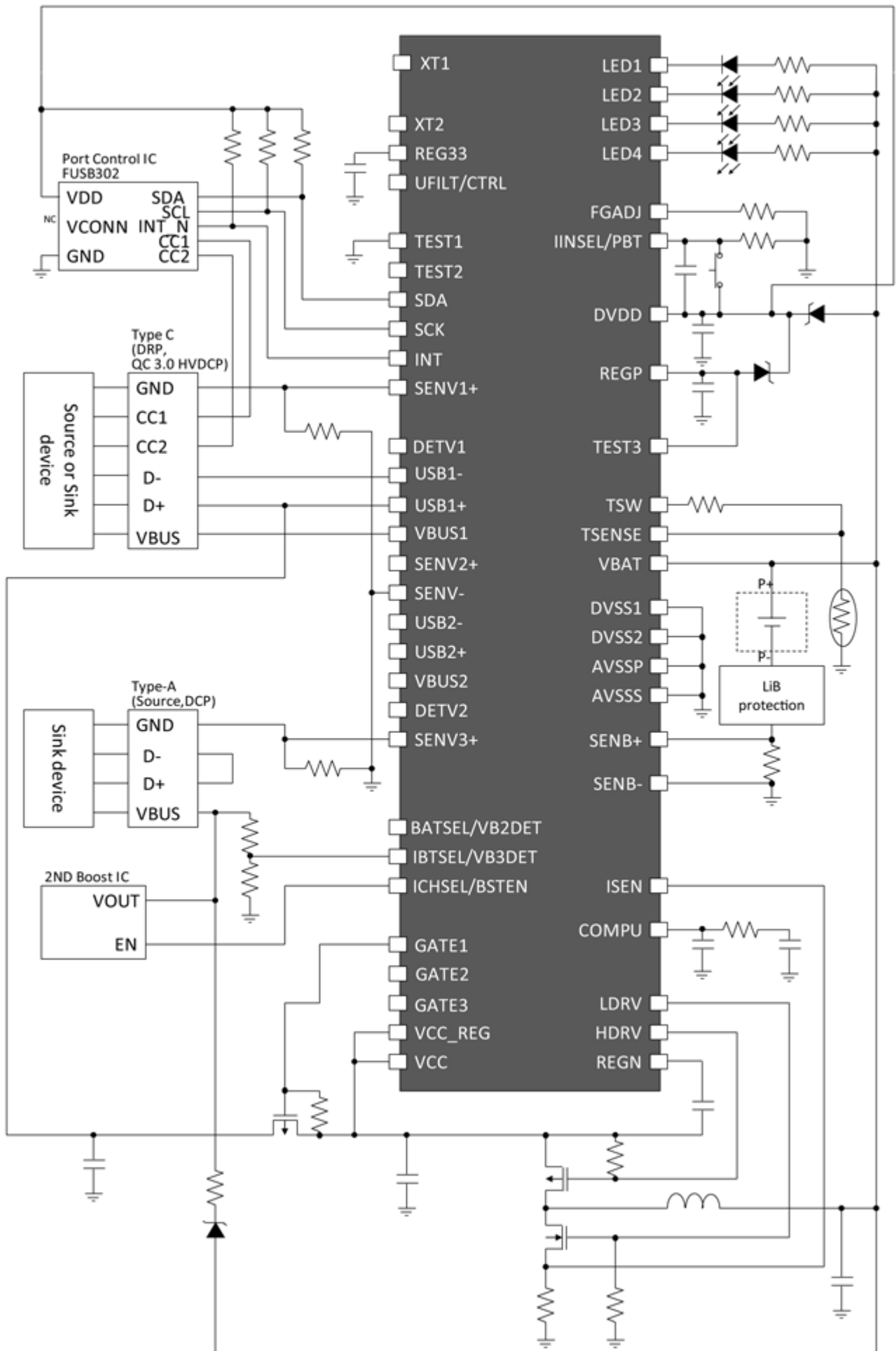
Micro-B (Sink, BC1.2) + Type-A (1) (Source, Quick Charge 3.0 HVDCP) without Portable device communication + Type-A (2) (Source, DCP)



Note) XT oscillator and passive components for Portable device communication can be omitted.

Power Bank Application (Reference Software: FW05)

Type-C (DRP, Quick Charge 3.0 HVDCP) + Type-A (Source, DCP)



欲了解更多信息，请联系您当地的销售支援 www.onsemi.cn。

创建于：7/11/2020