

4+6 Channels PMU and Dual-input, Switch mode Li-ion Battery Charger

Features

- 2.5V ~ 5.5V Input Voltage Operation.
- 95% Efficient DC/DC Converter
- Built-in 4-ch synchronous buck converter, 5-ch LDOs, and 1-ch low quiescent current LDO for RTC.
- Low Power consumption (Sleep Mode) < 10 μ A.
- Built-In Power ON/OFF Sequence for PMU.
- Built-In Short Circuit Protection (SCP), Under Voltage Protection (UVP), and cycle-by cycle current limit for DC/DC Converters.
- Integrated switched mode Li-ion charger with dynamic power path function.
- Charge voltage and current control with JEITA compliant.
- Built-In Thermal Shutdown Function.
- Built-In Battery OVP Function.
- Boost Mode Operation for USB OTG.
- TQFN48 Package (6mmx6mm).

General Description

The G2241B provide a complete power supply solution. They improve performance, component count, and size compared to other multi-channel controllers in 1-cell Li-Ion. On-chip MOSFETs provide up to 92~95% efficiency for critical power supplies. All channels DC/DC operate at one fixed frequency of 1.5MHz to optimize size, cost, and efficiency. All Synchronous converters operate at pulse skipping mode at light load. They also feature True-Shutdown as well as internal compensation to minimize external component count.

The G2241B also provide switched mode Li-ion charger with dynamic power path control. G2241B also has auto NTC-R 100k Ω /10k Ω detection circuit.

Applications

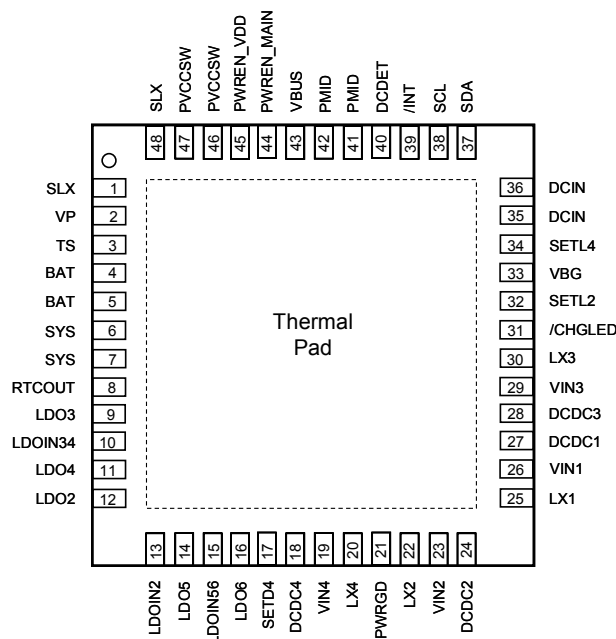
- Tablet PC

Ordering Information

| ORDER NUMBER | MARKING | TEMP. RANGE | PACKAGE (Green) |
|--------------|---------|-----------------------------------|-----------------|
| G2241BRP1U | 2241B | -35 $^{\circ}$ C~+85 $^{\circ}$ C | TQFN6X6-48 |

Note: RP:TQFN6x6-48
 1: Bonding code
 U: Tape & Reel

Pin Configuration



G2241B TQFN6X6-48

Note: Recommend connecting the Thermal Pad to the Ground for excellent power dissipation.