

# 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 ) < 10µA.
- 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-lon. 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  $100k\Omega/10k\Omega$  detection circuit.

### **Applications**

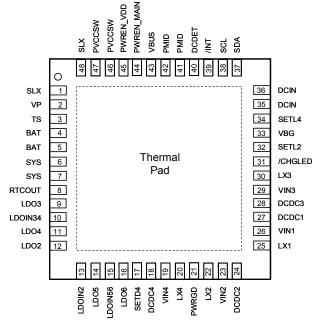
■ Tablet PC

#### **Ordering Information**

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Green)
G2241BRP1U	2241B	-35°C~+85°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.