

## 6+3 Channels PMU and Li-ion Battery Charger for DSC

### Features

- 2.5V ~ 5.5V Input Voltage Operation.
- 95% Efficient DC/DC Converter
- Built-in 1-ch synchronous boost converter, 1-ch auto buck-boost converter, 3-ch synchronous buck converter, 1-ch WLED driver, 2-ch LDOs for CMOS image sensor, and 1-ch low quiescent current LDO for RTC.
- 31-steps brightness control by I<sup>2</sup>C for WLED Driver
- Low Power consumption (Sleep Mode) < 10µA.
- Built-In Selectable Power ON/OFF Sequence for 4 Channels Synchronous Rectified Converter.
- Built-In Short Circuit Protection (SCP), Under Voltage Protection (UVP), and cycle-by cycle current limit for DC/DC Converters.
- Integrated Li-ion linear charger with dynamic power path function.
- Charge voltage and current control with JEITA compliant.
- USB charger with Auto Power Source Detection which is compliant to USB Battery Charging Revision 1.2.
- Built-In Thermal Shutdown Function.
- Built-In Battery OVP Function.
- TQFN40 Package (5mmx5mm).

### Applications

DSC and DV Power Supply

### General Description

The G2206 provide a complete power supply solution for digital cameras. 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/750KHz 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.

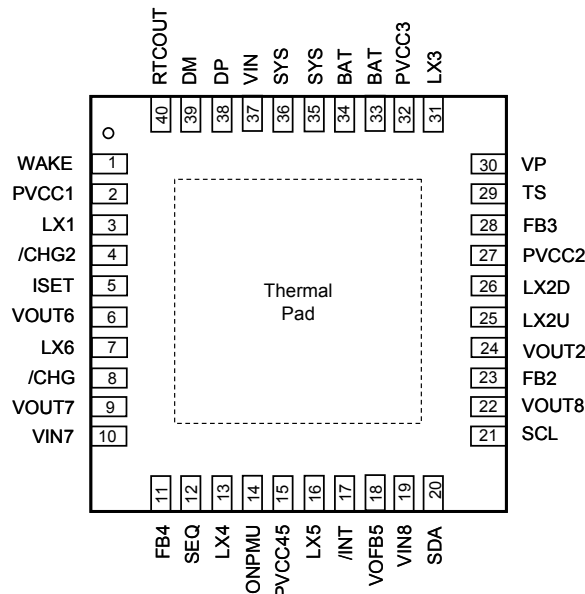
The G2206 also provide Li-ion linear charger with dynamic power path control. G2206 has USB power source detection and JEITA compliant. G2206 also has auto NTC-R 100kΩ/10kΩ detection circuit.

### Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G2206RG1U	2206	-35°C~+85°C	TQFN5X5-40

Note: RG:TQFN5x5-40  
 1: Bonding code  
 U: Tape & Reel

### Pin Configuration



**G2206 TQFN5X5-40**

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