

7+6 Channels PMIC for DSC

Features

- 1.5V ~ 5.5V Input Voltage Operation.
- 95% Efficient DC/DC Converter
- Highly Integrated 7-CH DC/DC with integrated Power MOSFETs
- Main Channel Selectable Buck or Boost for 2*AA or Li-lon Application
- Built-in 6 Channel Synchronous Rectified Current-Mode PWM/PSM Converter, 1 Channel Non-Synchronous Rectified Current-Mode PWM Converter.
- Boost Type with LED open protection LED Driver
- 32-steps brightness control by I²C for LED Driver
- Built-in HV LDO and RTC LDO
- Built-in 4 LDO regulators
- Low Power Consumption (Sleep Mode) < 10μA.
- Built-In Selectable Power ON/OFF Sequence for 4 Channel Synchronous Rectified Converter.
- Built-In Power ON/OFF Sequence by I2C for CCD+,CCD- power, and HVLDO.
- Built-In Short Circuit Protection (SCP) & Under Voltage Protection (UVP)
- Cycle-by-Cycle current limit for DC/DC Converter
- Built-In Thermal Shutdown Function.

- Built-In Battery OVP Function.
- Built-In Soft-Start Function.
- Built-In True Shutdown in Boost Converter.
- Fixed 1.5MHz/750KHz Operating Frequency.
- TQFN40 Package (5mmx5mm).

Applications

DSC and **DV** Power Supply

General Description

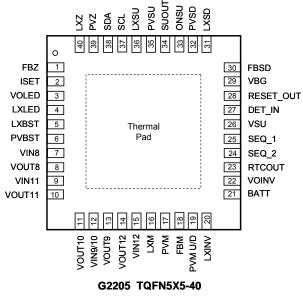
The G2205 provide a complete power supply solution for digital cameras. They improve performance, component count, and size compared to other multi-channel controllers in 2-cell AA, 1-cell Li-lon, and multi-battery designs. On-chip MOSFETs provide up to 92~95% efficiency for critical power supplies. 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..

Ordering Information

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Green)
G2205RG1U	2205	-35°C~+85°C	TQFN5X5-40

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

Pin Configuration



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

SU
Synchronous Rectified
Current Mode Step-Up

MAIN
Current Mode
Selectable Step-Up/Step-Down

SD
Synchronous Rectified
Current Mode Step-Down

DDRZ
Synchronous Rectified
Current Mode Step-Down

CCD INV
Current Mode Inverting

CCD BST
Synchronous Rectified
Current Mode Step-Up

LED Driver
Synchronous Rectified
Current Mode Step-Up

HV LDO/RTC LDO

 Ver: 0.2
 TEL: 886-3-5788833

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 http://www.gmt.com.tw