

General purpose system power IC : TC7739FTG

TC7739FTG is a system power IC equipped with 2-ch step-down DCDC converter, 4-ch LDO, and 1-ch load switch. Each output voltage can be configured through I²C bus, realizing multi outputs. Mass production will start in autumn, 2017.



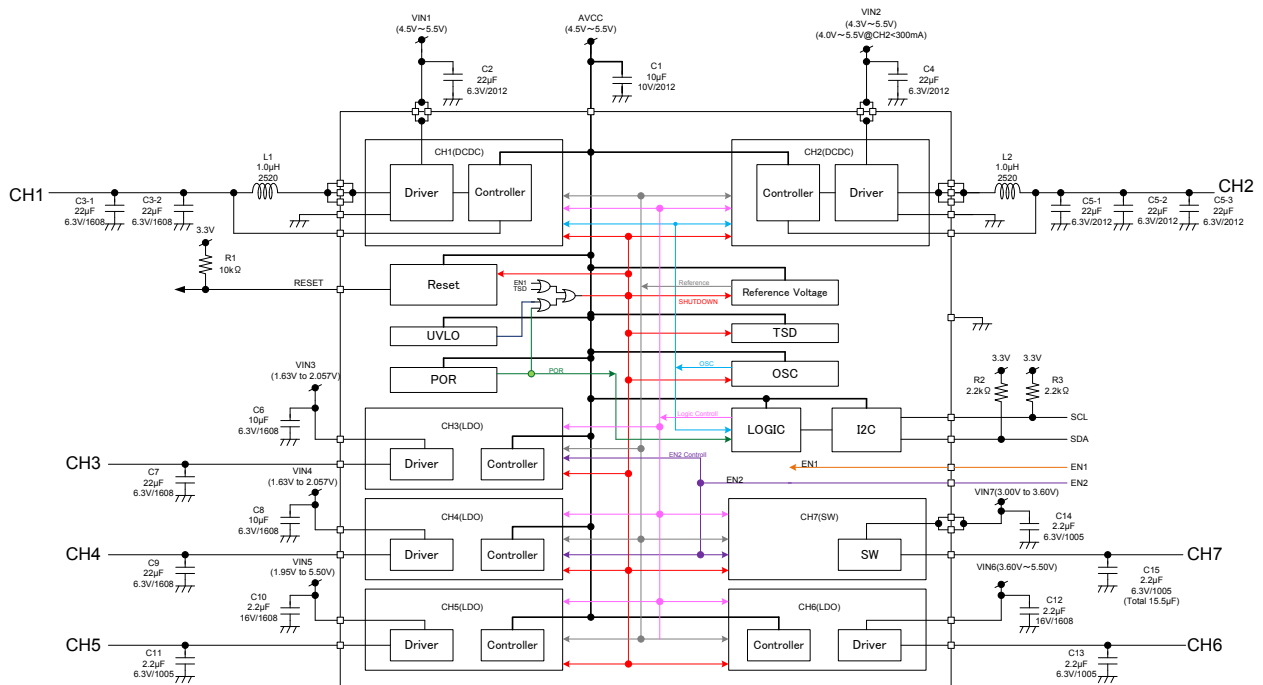
Three Features

- Step-down DCDC converter (2ch) + LDO (4ch) + Load SW (1ch)
- Configurations of output voltage and sequence through I²C bus
- Small package (QFN32, Size: 5 mm × 5 mm)

Applications

Information devices such as smartphones and tablets

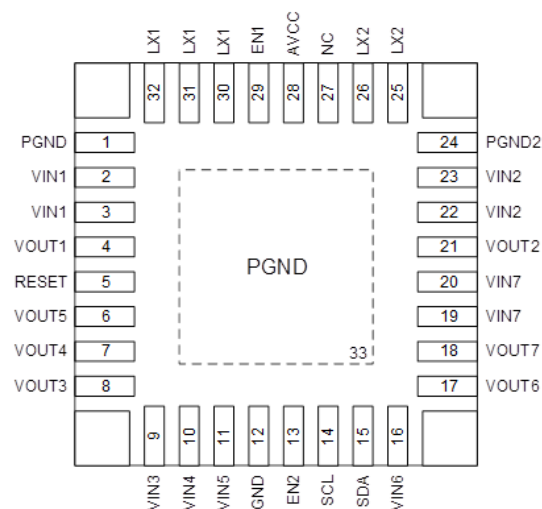
Block Diagram



Note: Some of the functional blocks, circuits, or constants in the block diagram may be omitted or simplified for explanatory purposes.

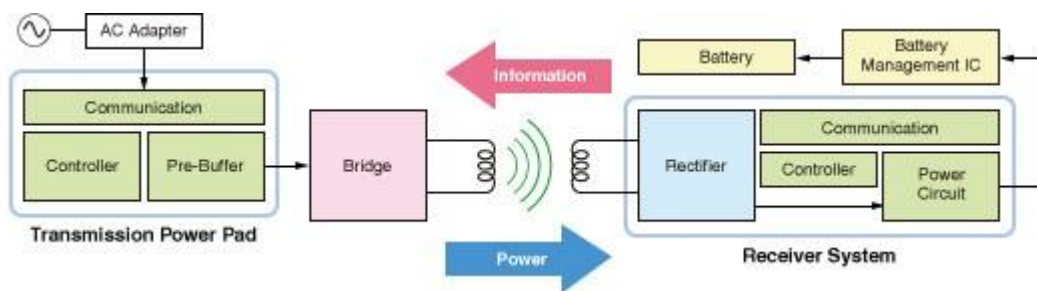
Main specifications

Item	Specifications
Product name	TC7739FTG
Control I/F	I ² C
Input voltage	4.5V to 5.5V
Package	QFN32 (Size: 5mm × 5mm, Pin pitch: 0.5mm)
DC-DC	ch1: 1.05V (initial value), 2MHz, 2A (max) ch2: 3.30V (initial value), 1.5MHz, 2A (max)
Serialized regulators	ch3: 1.15V (initial value), 0.7A (max) ch4: 1.50V (initial value), 0.6A (max) ch5: 1.80V (initial value), 0.2A (max) ch6: 3.30V (initial value), 0.06A (max)
Load SW	Input voltage range: 3.0V to 3.6V ON resistance: 62mΩ (typ.)
Abnormality detections	Over voltage protection, under voltage protection, over current limitation, under voltage protection for power supply, and thermal shutdown



Pin assignment (Top View)

System configuration example



Transmission and Reception System

Note: The system configuration example shown above is provided for reference purposes only. Thorough evaluation is required, especially at the mass production design stage. Any license to any industrial property rights is not granted.

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Before creating and producing designs and using, customers must also refer to and comply with the latest versions of all relevant information of this document and the instructions for the application that Product will be used with or for.

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