Содержание

Rockchip RK809

RK809:

- Input range: 2.7V - 5.5V
- Low standby current of 35uA
- Power channels:
  - BUCK1: 0.5V~2.4V, 2.5A max, very fast transient response
  - BUCK2: 0.5V~2.4V, 2.5A max, very fast transient response
  - BUCK3: 0.5V~2.4V (or resistor divider), 1.5A max, very fast transient response
  - BUCK4: 0.5V~3.4V, 1.5A max, very fast transient response
  - BUCK5: 1.5V~3.6V, 2.5 A max, fast transient response
  - LDO1~LDO2,LDO4~LDO9: 0.6V~3.4V, 400mA max
  - LDO3: high PSRR (75dB @ 1KHz), 0.6V~3.4V, 100mA max
  - Switch1: 2.1 A max, Rdson=90mΩ
  - Switch2: 2.1 A max, Rdson=100mΩ
  - OTP Programmable power up/down sequences and voltage
- Accurate battery fuel gauge with two separate battery voltage and current ADC
  - 16 bits ADC for battery voltage, battery temperature, USB/SYS voltage sense
  - 16 bits ADC for battery current sense
  - OCV algorithm combine with Coulom-counter algorithm
- Real time clock（RTC）
- Audio System
  - Audio codec: 24bits for both ADC and DAC
  - Support single end or differential mode Micro-phone input
  - Support real ground class-AB PA to drive Head-phone, 32Ohm Load
  - Support class-D PA to drive speaker, 1.3W
  - Support I2S as the digital signal interface for both DAC and ADC
  - Support programmable digital and analog gains
  - Sample rate: 48KHz~192KHz
  - Integrates internal PLL
  - Support PDM mode(external input PCLK)
- Package:7mmx7mm QFN68

Different power sequences:

- RK809-1
- RK809-2
- RK809-3
- RK809-5

link	ext	description	version	date	lang
RK809 datasheet V1.01.pdf	pdf	PMIC Datasheet	V1.01	2018	EN
Rockchip RK809 Datasheet V1.5 20191009.pdf	pdf	PMIC Datasheet	V1.5	2019	EN
Rockchip RK809 Datasheet V1.7 20201014.pdf	pdf	PMIC Datasheet	V1.7	2020	EN