FAN53730

3.0A, 2.7MHz, Digitally Programmable COT Buck Regulator

Product Overview

For complete documentation, see the data sheet.

The FAN53730 is a constant on time (COT) buck converter that supports a minimum of 3 A load current. The device's constant on time topology provides the fastest transient recovery and optimal efficiency vs load due to its variable frequency operation. Two options are available: a fully programmable I2C version, and a logic controlled fixed output voltage version (refer to Ordering Information for voltage options). Both versions provide automatic DCM/CCM mode operation with Forced CCM control.

Features

- Constant On-Time (COT) Architecture
- Low Quiescent current: 12µA
- 1.2V and 1.8V Logic compatible
- Audio Reduction Mode
- Power Good Output
- Fault protections (Input under voltage, Short circuit, and Thermal)
- Programmable output voltage from 0.3-2V

Applications

- LPDDR Memory
- RF Modules
- Application, Graphic, and DSP Processors
- ISP Power

End Products

- Smart Phones
- AR/VR Devices
- Gaming Devices
- Tablets, Netbooks, Ultra-Mobile PCs

Part Electrical Specifications

Product	Status	Compilance	Topology	Control Mode	V_{CC} Min (V)	V_{CC} Max (V)	V_O Typ (V)	I_O Typ (A)	Efficiency (%)	f_{SW} Typ (kHz)	Package Type	Case Outline	MSL Type	MSL Temp (°C)	Container Type	Container Qty.
FAN53730UCX	Active		Step-Down	COT	2.3	5.5	Adjustable	3	83	2700	WLCSP12 1.07x1.36x0.432, 0.35P	567GK.PDF	1	260	REEL	3000
FAN53730UC02X	Active		Step-Down	COT	2.3	5.5	Adjustable	3	83	2700	WLCSP12 1.07x1.36x0.432, 0.35P	567GK.PDF	1	260	REEL	3000
FAN53730UC01X	Active		Step-Down	COT	2.3	5.5	Adjustable	3	83	2700	WLCSP12 1.07x1.36x0.432, 0.35P	567GK.PDF	1	260	REEL	3000