

## LTC3605IUF#PBF

Data Sheet

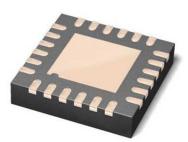
Conv DC-DC 4V to 20V Synchronous Step Down Single-Out 20V 5A 24-Pin QFN EP Tube

Manufacturers Analog Devices, Inc

Package/Case QFN24

Product Type Power Management ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LTC3605IUF#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

Lifecycle

The LTC3605 is a high efficiency, monolithic synchronous buck regulator using a phase lockable controlled on-time constant frequency, current mode architecture. PolyPhase operation allows multiple LTC3605 regulators to run out of phase while using minimal input and output capacitance. The operating supply voltage range is from 15V down to 4V, making it suitable for dual lithium-ion battery inputs as well as point of load power supply applications from a 12V or 5V rail.

The operating frequency is programmable from 800kHz to 4MHz with an external resistor. The high frequency capability allows the use of small surface mount inductors. For switching noise sensitive applications, it can be externally synchronized from 800kHz to 4MHz. The PHMODE pin allows user control of the phase of the outgoing clock signal. The unique constant frequency/controlled on-time architecture is ideal for high step-down ratio applications that are operating at high frequency while demanding fast transient response. Two internal phase-lock loops synchronize the internal oscillator to the external clock and also servos the regulator on-time to lock on to either the internal clock or the external clock if it's present.

Input Voltage Range LTC36054V to 15VLTC3605A4V to 20V

**Features** 

High Efficiency: Up to 96%

5A Output Current

4V to 15V VIN Range

Integrated Power N-Channel MOSFETs ( $70m\Omega$  Top and  $35m\Omega$  Bottom)

Adjustable Frequency 800kHz to 4MHz

PolyPhase® Operation (Up to 12 Phases)

Output Tracking

0.6V ±1% Reference Accuracy

Current Mode Operation for Excellent Line and Load Transient Response

Shutdown Mode Draws Less Than 15µA Supply Current

Available in 24-Pin (4mm × 4mm) QFN Package

## **Related Products**



**LT3763EFE** 

Analog Devices, Inc TSSOP28



**LTC4417IUF** 

Analog Devices, Inc QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc MSOP-8P



LTM8045EY#PBF

Analog Devices, Inc

BGA40



Point of Load Power Supply

Portable Instruments

Distributed Power Systems

Battery-Powered Equipment



LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN