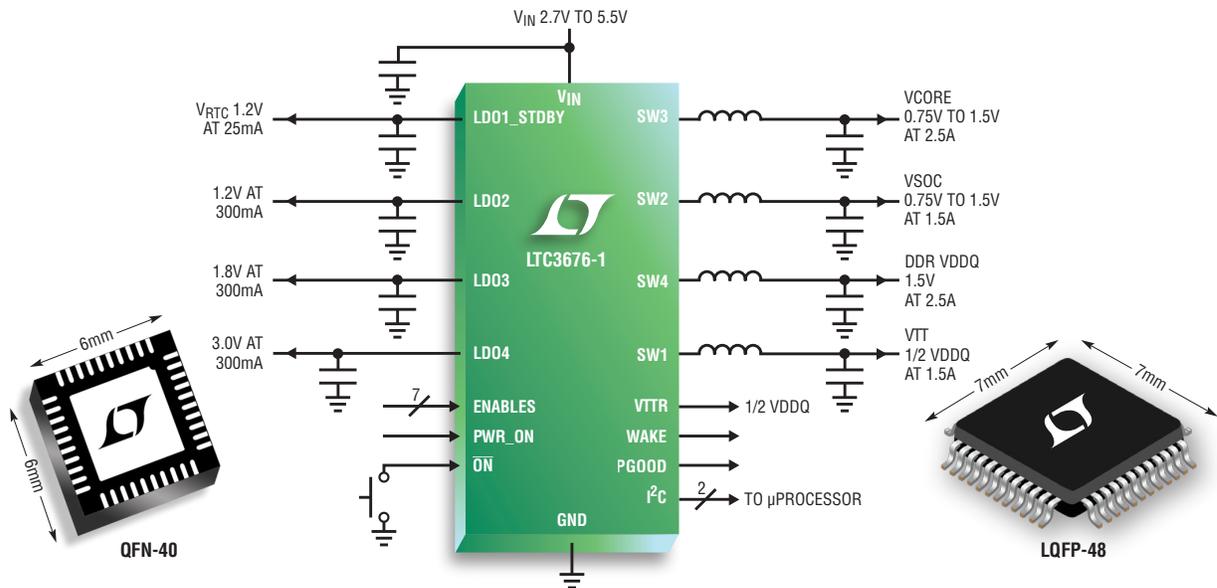


New PMIC for Advanced Application Processors



4 High Current High Efficiency Bucks + 4 LDOs + DDR Solution with VTTR + I²C Control + Sequencing + Dynamic Voltage Scaling = Complete Power Management Solution for Advanced Application Processor-Based Systems

The LTC[®]3676 and LTC3676-1 are complete power management solutions for NXP i.MX 6 series, ARM Cortex and other advanced portable application processor systems. The LTC3676/LTC3676-1 feature eight independent resistor-programmable voltage rails, with dynamic voltage scaling and sequencing, in compact QFN and thermally enhanced QFP packages. These rails supply power to the processor core, SDRAM, I/O, system memory, PC cards, always-on real-time clock (RTC) and a variety of other functions.

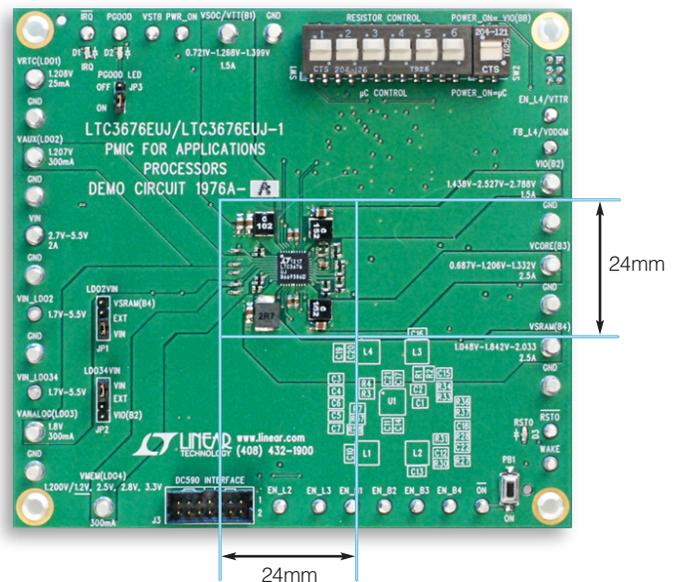
Features

- Quad I²C Adjustable High Efficiency Step-Down DC/DC Converters: 2.5A, 2.5A, 1.5A, 1.5A
- Triple 300mA LDO Regulators (2 Adjustable)
- DDR Power Solution with VTT and VTTR Reference (LTC3676-1 Version)
- Pushbutton On/Off Control with System Reset
- Independent Enable Pin-Strap or I²C Sequencing
- Programmable Autonomous Power-Down Control
- Power Good and Reset Functions
- Dynamic Voltage Scaling
- Selectable 2.25MHz or 1.12MHz Switching Frequency
- Always Alive 25mA LDO Regulator
- 12µA Standby Current
- 40-Pin 6mm × 6mm × 0.75mm QFN Package
- 48-Pin 7mm × 7mm LQFP Package

Applications

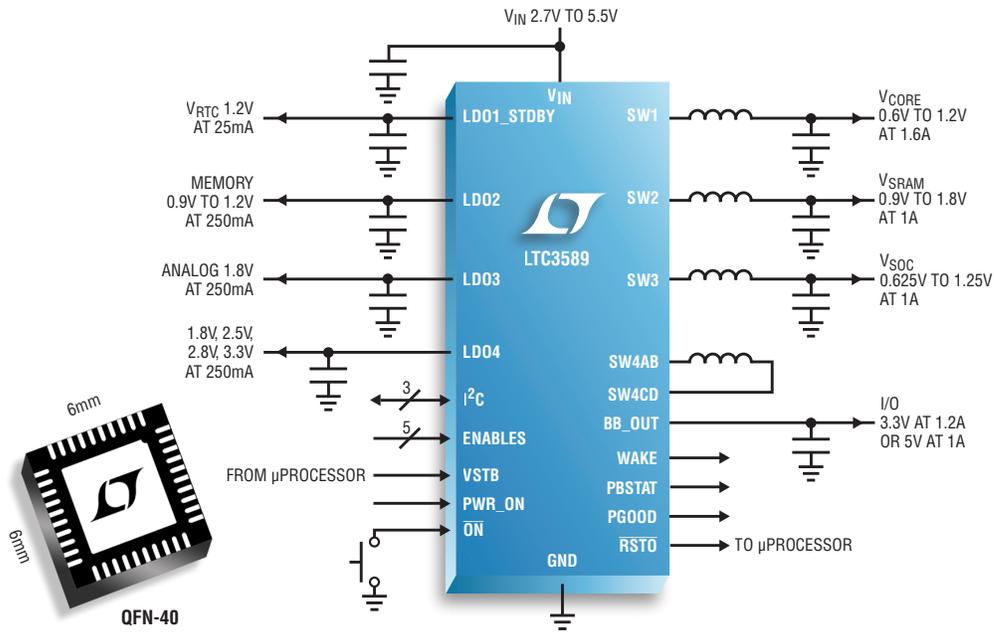
- Supports NXP i.MX 6, Altera ARM-Based SoC FPGAs, ARM Cortex and other Application Processors
- Handheld Instruments and Scanners
- Portable Industrial and Medical Devices
- Automotive Infotainment
- High End Consumer Devices
- Multirail Systems

LTC3676 Demo Board



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A PMIC for Modern Application Processors



3 Bucks + Buck-Boost + 4 LDOs + I²C Control + Sequencing + Dynamic Voltage Scaling = A Complete Power Management Solution for Advanced Application Processor-Based Systems

The LTC[®]3589/-1/-2 is a complete power management solution for portable processors such as NXP i.MX, PXA, ARM, OMAP and other advanced portable microprocessor systems. The device features eight independent rails, with dynamic control and sequencing, in a compact QFN package. These rails supply power to the processor core, SDRAM, system memory, PC cards, always-on real-time clock (RTC) and a variety of other functions.

Features

- Triple I²C Adjustable High Efficiency Step-Down DC/DC Converters: 1.6A, 1A, 1A (1.6A, 1.2A, 1.2A on LTC3589-1/-2)
- High Efficiency 1.2A Buck-Boost DC/DC Converter
- Triple 250mA LDO Regulators
- Pushbutton On/Off Control with System Reset
- Flexible Pin-Strap Sequencing Operation
- I²C and Independent Enable Control Pins
- Power Good and Power-On Reset Outputs
- Dynamic Voltage Scaling and Slew Rate Control
- Selectable 2.25MHz or 1.12MHz Switching Frequency
- Always Alive 25mA LDO Regulator
- 8μA Standby Current
- 40-Pin 6mm × 6mm × 0.75mm QFN Package

Applications

- Supports NXP i.MX, Marvell PXA and Other Application Processors
- Handheld Instruments and Scanners
- Portable Industrial and Medical Devices
- Automotive Infotainment
- High End Consumer Devices
- Multirail Systems

LTC3589 Demo Board

