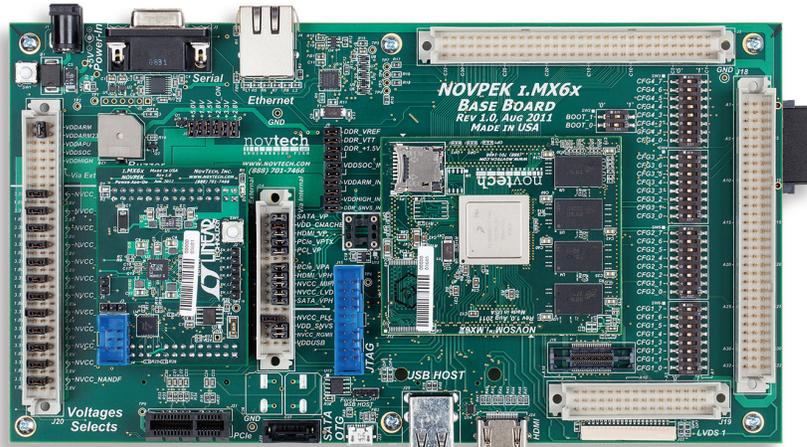


LTC3676/LTC3676-1 PMIC Reference Design Based on NXP i.MX 6 Series Processors

NOVPEK i.MX6x-LT Platform Evaluation Kit

Unleash the Power of the NXP i.MX 6 Series Processor



Includes:

- Module Based on NXP i.MX 6 Series
- Base Board
- NovTech LTC3676 Power Solution
- Boot-Loader
- LINUX Porting
- QNX Porting
- Android Porting

novtech
ENGINEERING FIRM inc

Linear Technology PMIC Module

This PMIC board provides sufficient power for single through quad core variants of the NXP i.MX 6 series of processors and the NOVPEK base board. The PMIC solution supports two modes of power sequencing:

1. LDO1 is always on to support an external μ Controller and allows software customized start-up sequences
 2. Enable pin strapping options support powering the i.MX 6 series domains directly via hardware control without the need of an external μ Controller
- LTC3676 has 4 DC/DC and 4 LDO regulators, providing ~9A total current output
 - Input supply voltage range: 2.7V to 5.5V for USB and battery applications
 - LTC3676-1 provides DDR VREF and VTT switcher
 - LTC3676 for designs without VTT

Linux drivers available at: www.linear.com/3676

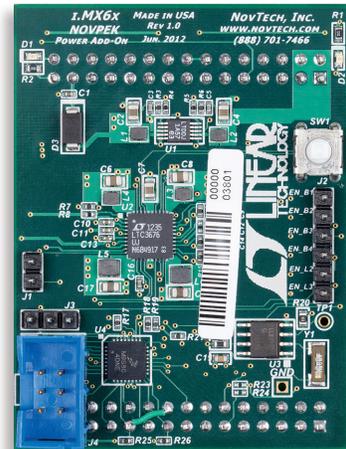
To purchase these boards, visit:

Novtech

http://novsum.com/images/docs/imx6_linear_pmic_full.pdf
954-471-7281 or 888-701-7466

Arrow

www.arrow.com
800-833-3557 (US) or 303-305-5691 (Outside US)

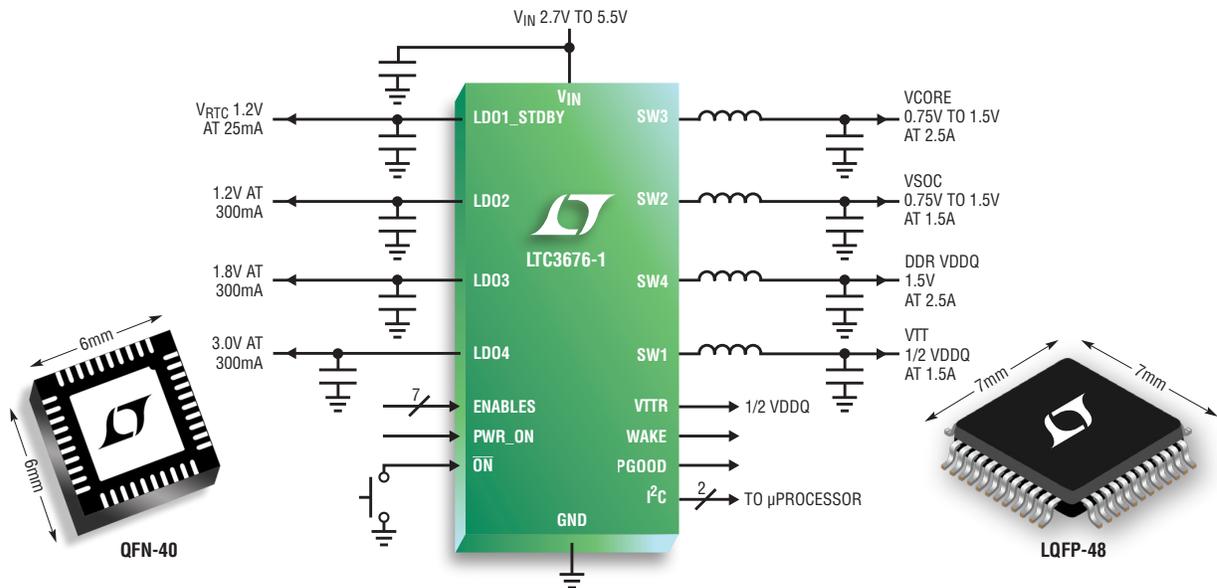


novtech
ENGINEERING FIRM inc



LT, LT, LTC, LTM, Linear Technology and the Linear logo are registered trademarks of Linear Technology Corporation. All other trademarks are the property of their respective owners.

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

