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 µController 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 µController
   - 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 switche
   - LTC3676 for designs without VTT

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

To purchase these boards, visit:
Novtech
954-471-7281 or 888-701-7466
Arrow
www.arrow.com
800-833-3557 (US) or 303-305-5691 (Outside US)
New PMIC for Advanced Application Processors

The LTC3676 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