USB Power Manager With Power Selection, Battery Charging, Buck Regulators

Productive Product: Linear Technology's LTC3557 multi-function power management device for Li-Ion/Polymer battery applications integrates a linear PowerPath manager, a standalone battery charger, ideal diode, three high efficiency synchronous buck regulators and an always-on LDO in a low-profile 4 mm × 4 mm QFN package. The powerpath manager seamlessly manages the transition between multiple input sources and power to the load, while for fast charging the linear battery charger provides up to 1.5A charge current from a wall adapter supply or up to 500 mA charge current from a USB port. The three integrated synchronous buck regulators feature 100 percent duty cycle operation and are capable of providing output currents of 600/400/400 mA respectively, with adjustable output voltages down to 0.8V. The high 2.25 MHz switching frequency allows the use of low cost capacitors and inductors less than 1 mm in height. The internal low $R_{DS(ON)}$ switches enable efficiencies as high as 95 percent, maximizing battery run time. In addition, pin-selectable Burst Mode operation optimizes efficiency at light loads with a quiescent current of 35 µA per regulator (<1 µA in shutdown). Pricing starts at $3.95 each for 1,000-piece quantities.
Linear Technology
www.linear.com [1]

Source URL (retrieved on *08/29/2014 - 8:47pm*):
http://www.ecnmag.com/product-releases/2007/09/usb-power-manager-power-selection-battery-charging-buck-regulators?qt-video_of_the_day=0

Links:
[1] http://www.linear.com/