Click here to ask about the production status of specific part numbers.

MAX77511/MAX77711 10V Input, Quad-Phase Configurable, 3A/Phase, High-Efficiency Buck Converter

General Description

The MAX77511/MAX77711 are four-phase, 3A/phase, configurable single to quad output, step-down buck regulators for 1s/2s Li+ battery inputs. Output voltage is programmable through an I²C interface between 0.25V and 5.2V. The buck has four combinable 3A switching phases (Φ) for up to four regulated outputs. Phases are configurable to higher-current multiphase outputs: 4Φ, (3+1)Φ, (2+2)Φ, (2+1+1)Φ, or (1+1+1+1)Φ.

Six GPIOs can be purposed for I/O expansion or buck status and control. Pseudo-random spread-spectrum modulation suppresses EMI. Soft-start, soft-stop, and DVS slew times are programmable with I²C. MAX77711 offers a 300mA linear regulator.

MAX77511/MAX77711 are available in a 64-bump, 3.54mm x 3.54mm wafer-level package (WLP).

Applications

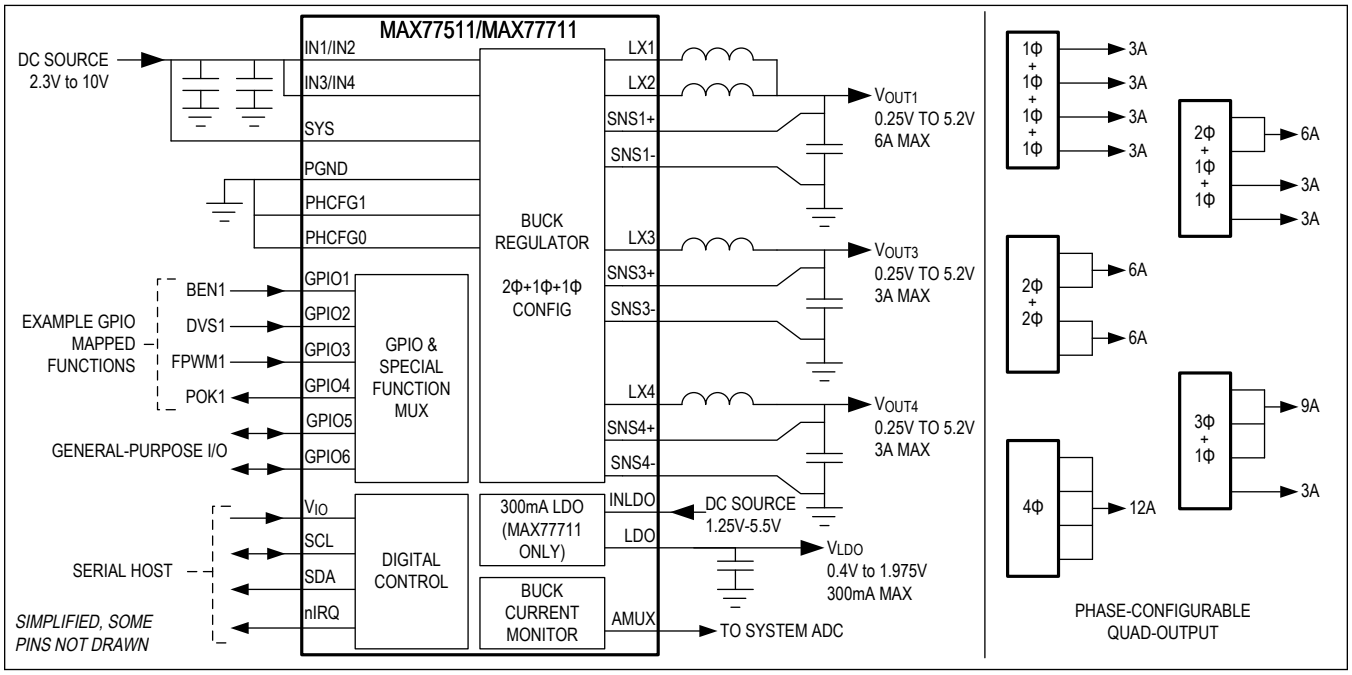
- DSLR, Mirrorless, HD Video, and Action Cameras
- 2-Cell Li+/Li-ion Equipment
- Notebook Computers and Robots
- Embedded Microprocessors, FPGAs, or ASICs

Benefits and Features

- 3A/Phase Configurable Buck Regulator
  - 3A, 6A, 9A, or 12A Output Current Capability
- 2.3V to 10V Input Voltage Range
- 0.25V to 5.2V Output Voltage Range
  - 0.25V to 1.3V (5mV steps) in Low-Range
  - 1V to 5.2V (20mV steps) in High-Range
- Pin Programmable Output/Phase (Φ) Configuration
  - 4Φ, (3+1)Φ, (2+2)Φ, (2+1+1)Φ, (1+1+1+1)Φ
- High-Efficiency and Low-Heat
- Uses Small 2520 Inductor
- 1MHz Nominal Switching Frequency per Phase
  - Pseudo-Random Spread-Spectrum Options
- Six Multi-Function GPIOs for Hardware Buck Control
  - Enable, DVS, FPWM, and Power-OK
- 300mA pMOS LDO (MAX77711 Only)
- Built-In Flexible Power Sequencing with Soft-Start/Stop
- Protection Features
  - Hard and Soft-Short Protection, UVLO, and Thermal Protection

ABRIDGED

Simplified Block Diagram

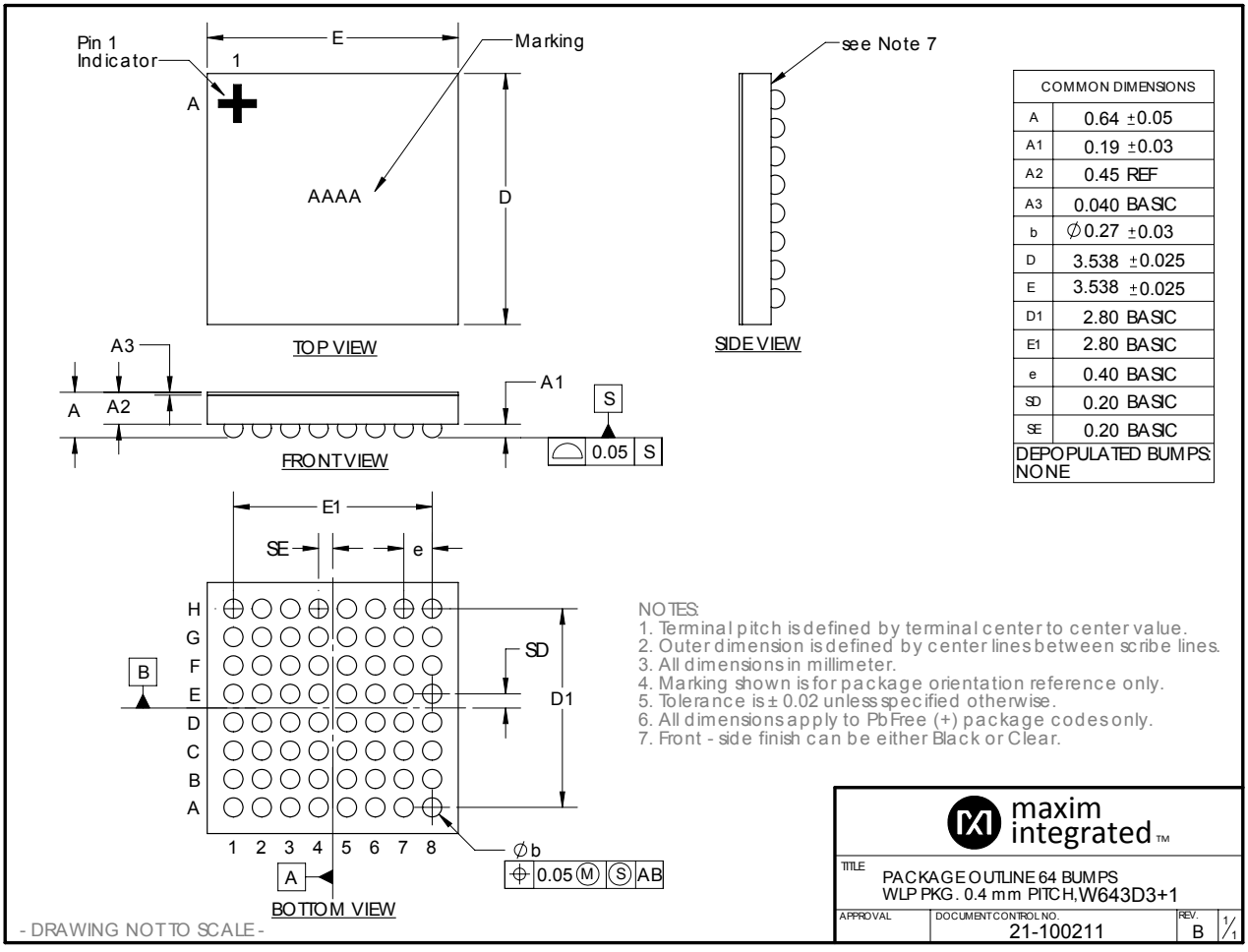


maxim integrated™

Package Information

64 WLP

Package Code	W643D3+1
Outline Number	21-100211
Land Pattern Number	Refer to *Application Note 1891*
Thermal Resistance, Four-Layer Board:	
Junction to Ambient (θ_{JA})	38.20°C/W



ABRIDGED

For the latest package outline information and land patterns (footprints), go to *www.maximintegrated.com/packages*. Note that a "+", "#", or "-" in the package code indicates RoHS status only. Package drawings may show a different suffix character, but the drawing pertains to the package regardless of RoHS status.

Package thermal resistances were obtained using the method described in JEDEC specification JESD51-7, using a four-layer board. For detailed information on package thermal considerations, refer to *www.maximintegrated.com/thermal-tutorial*.

ABRIDGED

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Switching Voltage Regulators ***category:***

Click to view products by Analog Devices ***manufacturer:***

Other Similar products are found below :

FAN53610AUC33X FAN53611AUC123X FAN48610BUC33X FAN48610BUC45X FAN48617UC50X R3 430464BB KE177614 MAX809TTR NCV891234MW50R2G NCP81103MNTXG NCP81203PMNTXG NCP81208MNTXG NCP81109GMNTXG SCY1751FCCT1G NCP81109JMNTXG AP3409ADNTR-G1 NCP81241MNTXG LTM8064IY LT8315EFE#TRPBF LTM4668AIY#PBF NCV1077CSTBT3G XCL207A123CR-G MPM54304GMN-0002 MPM54304GMN-0004 MPM54304GMN-0003 XDPE132G5CG000XUMA1 AP62300Z6-7 MP8757GL-P MIC23356YFT-TR LD8116CGL HG2269M/TR OB2269 XD3526 U6215A U6215B U6620S LTC3412IFE LT1425IS MAX25203BATJA/VY+ MAX77874CEWM+ XC9236D08CER-G ISL95338IRTZ MP3416GJ-P BD9S201NUX-CE2 MP5461GC-Z MPQ4415AGQB-Z MPQ4590GS-Z MAX38640BENT18+T MAX77511AEWB+