

Dual Synchronous Buck PMIC

Adaptable PMIC AnD8204

Product Description

The AnD8204 Adaptable PMIC uses AnDAPT AmP™ advanced technology consisting of fully flexible digital fabric combined with high performance analog blocks. The AnD8204 consists of two configurable 6A Synchronous Buck Regulators and four high current load switches. The AnD8204 is fully tested and ready to use in designs. The AnD8204 Buck regulators use Voltage Mode control. The AnD8204 also has an integrated sequencer and 4 additional integrated auxiliary LDOs. The user can modify output voltage and rail sequencing using resistor or WebAdapter™ online tools. The sequencer has the capability to be based on timed delays or Power Good signals. Adaptable PMICs provide fastest prototyping and time to market, while providing best in class performance and flexibility. The AnD8204 design is available in the WebAmP™ software tool library for full customization capability. The Adaptable PMIC is optimized to power high end Processors by integrating multiple power rails into single chip designs.

Features

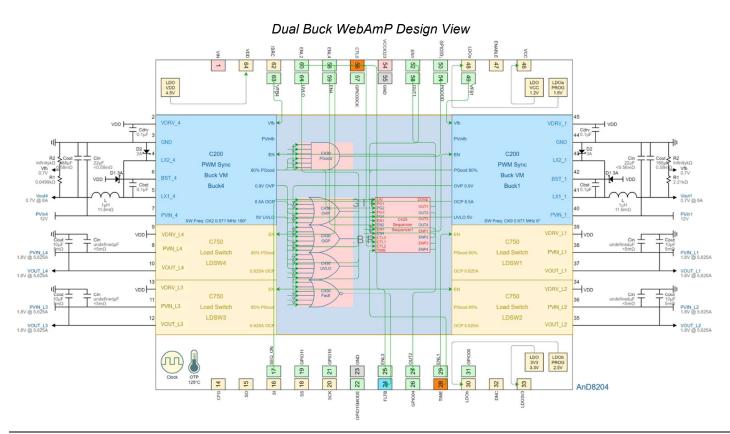
- Two 6A Synchronous Buck Regulators
- PVIN: 4.75V to 14V, V_{OUT}: 0.7V to 5.0V
- 571kHz Switching Frequency
- Integrated 30 mΩ MOSFET
- Protection: UVLO, OCP, OVP, OTP
- Four 6A load switches (Vout: 0.5V to 3.3V)
- Four auxiliary LDOs: 1.2V, 1.8V, 2.5V, 3.3V internal input voltage 4.5V, or external 5V up to 200mA output current
- Adjustable output voltage with 2.4 mV resolution
- 1% load regulation
- Buck efficiency up to 95%
- Power-good flag output and Enable input
- Soft start/stop, sequencing, pre-bias startup
- -40°C to +125°C operating junction temperature
- Easy WebAmP upgrade path to On-Demand PMIC

Applications

- On-demand power management, multi-rail power integration
- Powering server, processor, memory, storage, network switcher and router platforms
- Powering FPGA, processor, SSD, subsystem power control & sequencing

Product Detail

The AnD8204 Adaptable PMIC consists of two customizable, Synchronous Buck Regulators, customizable control and status pins including enable input, an optional power-good output, and optional output flags to signal when the system triggers an overvoltage (OVP), overcurrent (OCP), or undervoltage lockout (UVLO) condition. It also includes four high current load switches.

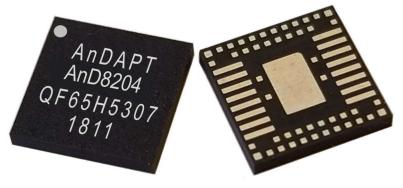




Order Information

Part Number	Package	Description	Availability
AnD8204QF65	QF65	Multi-Rail Dual Buck PMIC	Now

Package Marking Example – QF65



TOP VIEW

Package Pinout

VCCI023 ENABLE **GPI033** LDOa ENL2 ISRC ENL4 VIN 64 62 47 60 58 56 54 52 50 48 VCC 1 46 59 57 53 51 63 61 55 49 2 VDRV_4 45 VDRV_1 UVLO EN4 GPIO3 GND OUT1 PGOOD VFB1 VFB4 3 44 **GND GND** 65 LX2_4 4 43 LX2_1 **GND** BST 4 BST_1 LX1 4 5 6 42 41 LX1_1 PVIN_4 7 40 PVIN_1 AnD8204 . VDRV_L1 VDRV L4 PVIN_L4 8 38 PVIN_L1 9 39 VOUT_L4 10 37 VOUT_L1 Thermal Pad PVIN L3 PVIN_L2 11 36 VOUT_L2 VOUT_L3 12 35 SEQ_ONGPIO11GPIO10 GND ENL3 OUT2 ENL1 GPIO00 VDRV_L3 13 34 VDRV_L2 31 17 19 21 23 25 27 29 14 33 LDO3V3 18 20 22 26 28 30 32 15 16 CFG

SO

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SCK

GPIO15MODE

VFBL2

DNC

LDOb