

Triple Synchronous Buck PMIC

Adaptable PMIC AnD8320

Product Description

The AnD8320 Adaptable PMIC uses AnDAPT AmP™ advanced technology consisting of fully flexible digital fabric combined with high performance analog blocks. The AnD8320 consists of three 6A configurable synchronous Buck Regulators and two high current LDOs. The AnD8320 is fully tested and ready to use in designs. The AnD8320 Buck regulators use Voltage Mode control. The AnD8320 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 AnD8320 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

- Three 6A Synchronous Buck Regulators
- PVIN: 4.75V to 14V, V_{OUT}: 0.7V to 5.0V
- 533kHz Switching Frequency
- Integrated 30 mΩ MOSFET
- Protection: UVLO, OCP, OVP, OTP
- Two high current 1A LDO (Vout: 0.6V 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

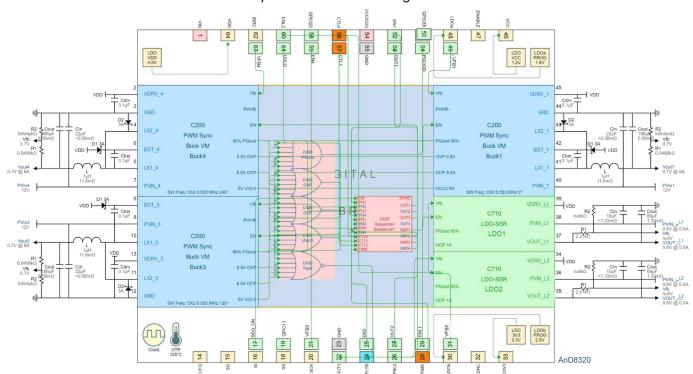
Applications

- 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 AnD8320 Adaptable PMIC consists of three 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 Input undervoltage lockout (UVLO) condition. It also includes two high current LDOs.



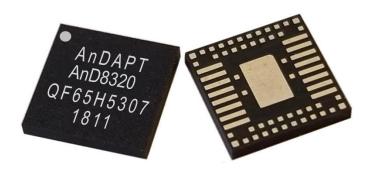


Order Information

AnDAPT

Part Number	Package	Description	Availability
AnD8320QF65	QF65	Multi-Rail Triple Buck PMIC	Now

Package Marking Example – QF65



Package Pinout

TOP VIEW VCCI023 ENABLE GP1023 GP1033 LDOA ENL2 VDD VIN 64 62 60 58 56 54 52 50 48 47 46 VCC 1 59 57 55 53 51 49 63 61 2 45 VDRV_1 VDRV 4 VFB4 UVLO EN4 CTL1 GND OUT1 PGOOD VFB1 GND 3 44 GND 65 LX2_4 4 43 LX2_1 GND BST 1 BST_4 6 42 5 LX1_4 41 LX1_1 PVIN 4 40 PVIN 1 AnD8320 BST 3 VDRV L1 PVIN 3 8 PVIN L1 9 39 38 LX1_3 10 37 VOUT_L1 Thermal Pad 36 PVIN L2 11 LX2_3 VOUT_L2 GND 12 35 SEQ_ON GPIO11 VFB3 GND EN3 OUT2 ENL1 VFBL1 13 34 VDRV 3 VDRV-L2 25 29 31 17 19 21 23 27 14 33 15 22 30 32 LDO3V3 16 26 28 CFG SO LDOB DNC SCK OUT3 FLTB VFBL2 TIME \overline{S}