

Product Description

The AnD7220 Adaptable PMIC uses AnDAPT AmP™ advanced technology consisting of fully flexible digital fabric embedded with high performance analog blocks. The AnD7220 consists of one configurable DrMOS controller, one 10A high current synchronous Buck regulator, one 6A synchronous Buck regulator, two high current LDOs, along with an integrated sequencer and four additional auxiliary LDOs. The AnD7220 is fully tested and ready for use in designs. The AnD7220 Buck regulators use voltage-mode control. The user can modify output voltages and rail sequencing using external resistors or WebAdapter™ online tool. The sequencer can be programmed based on either timed delays or Power Good (PGOOD) signals. Adaptable PMICs provide fastest prototyping and time-to-market, while providing best-in-class performance and flexibility. The Adaptable PMIC is optimized to power high-end processors by integrating multiple power rails into single-chip designs.

Features

- One 40 A DrMOS Controller. V_{OUT} : 0.7 V to 5 V
- One 10 A High Current Sync Buck. V_{OUT} : 0.7 V to 5.0 V
- One 6 A Sync Buck. V_{OUT} : 0.7 V to 5.0 V
- Two 1 A LDOs. V_{OUT} : 0.7 V to 5.0 V
- Protections. Input output UVLO, OCP, OVP, OTP
- Four 200 mA auxiliary LDOs. V_{OUT} : 1.2 V, 1.8 V, 2.5 V, 3.3 V

Input voltage for auxiliary LDOs is either the internal 4.75V LDO, or an external 5 V

- Adjustable output voltage with 2.4 mV resolution
- 1% load regulation
- Buck regulator efficiency up to 95%
- PGOOD flag output and Enable input
- Soft start/stop, sequencing, pre-bias startup
- -40°C to $+125^{\circ}\text{C}$ 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 AnD7220 adaptable PMIC consists of one customizable DrMOS Controller, two 6A synchronous Buck regulators, two high current LDOs and status pins including enable input and an optional PGOOD output.

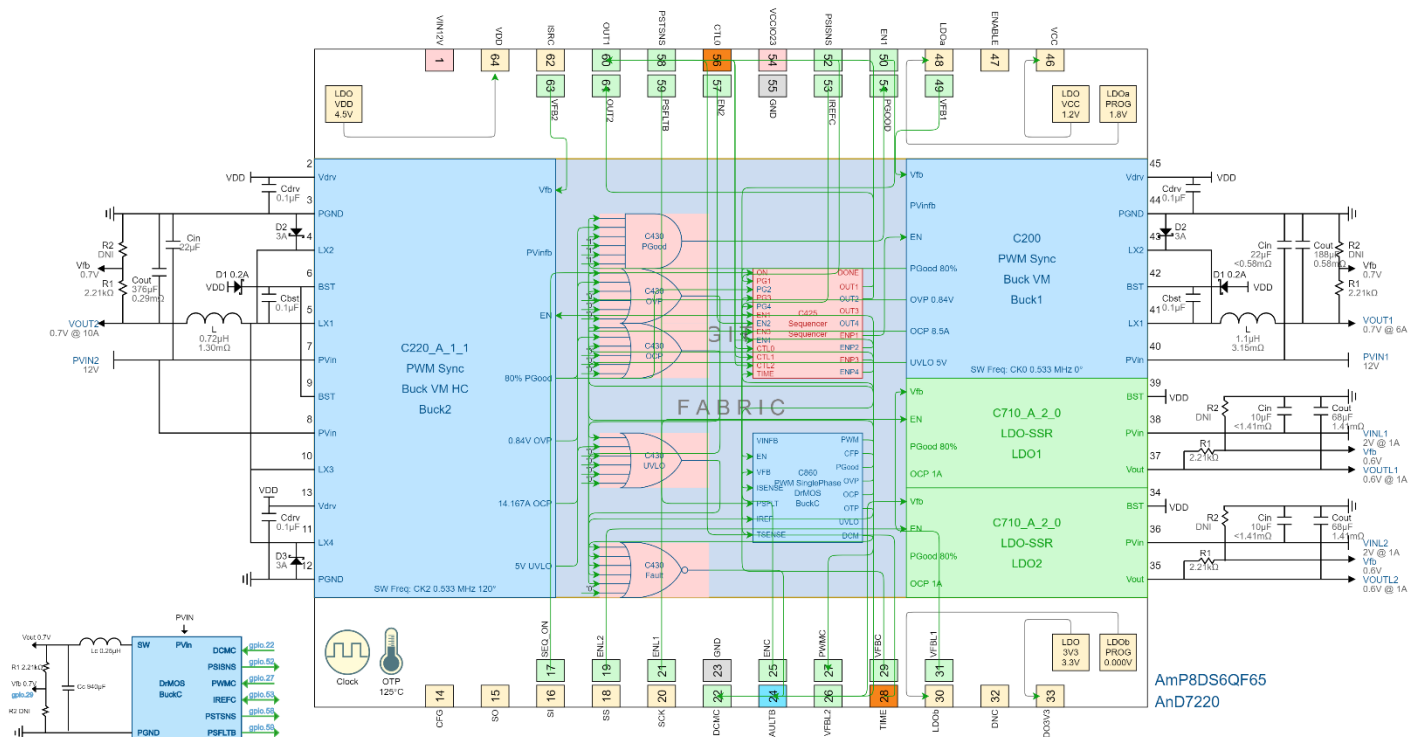
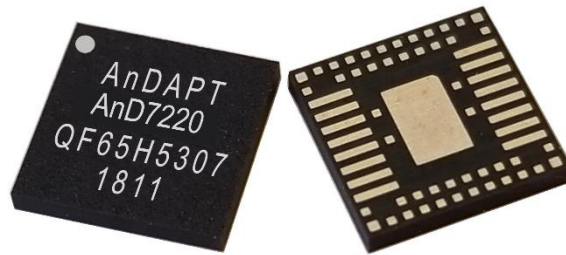


Figure 1. AnD7220 WebAMP Design View

Order Information

Part Number	Package	Description	Availability
AnD7220QF65	QF65	DrMOS Cntrl, Dual Buck & LDO PMIC	Now

Package Marking Example – QF65



Package Pinout

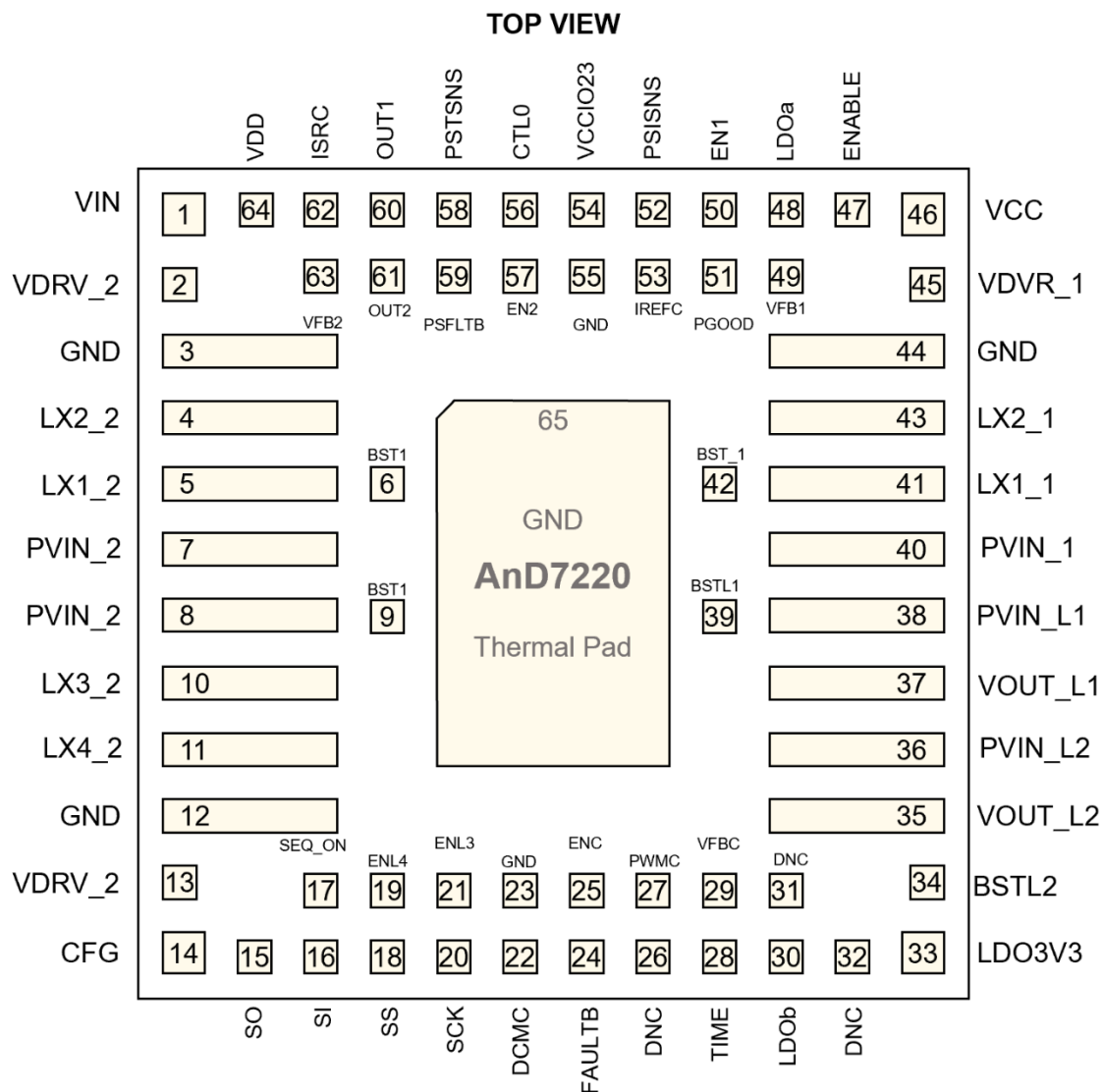


Figure 2. AnD7220 package pinout