Product Description

The AnD7122 Adaptable PMIC uses AnDAPT AmP™ advanced technology consisting of fully flexible digital fabric embedded with high performance analog blocks. The AnD7122 consists of one configurable DrMOS controller, one 10A high current synchronous Buck regulator, two high current LDOs, two Load Switches along with an integrated sequencer and four additional auxiliary LDOs. The AnD7122 is fully tested and ready for use in designs. The AnD7122 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
- Two 1 A LDOs. V_{OUT}: 0.7 V to 5.0 V
- Two 6 A Load Switches V_{OUT}: 0.6 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°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 AnD7122 adaptable PMIC consists of one customizable DrMOS Controller, two high current LDOs, two Load Switches and status pins including enable input and an optional PGOOD output.
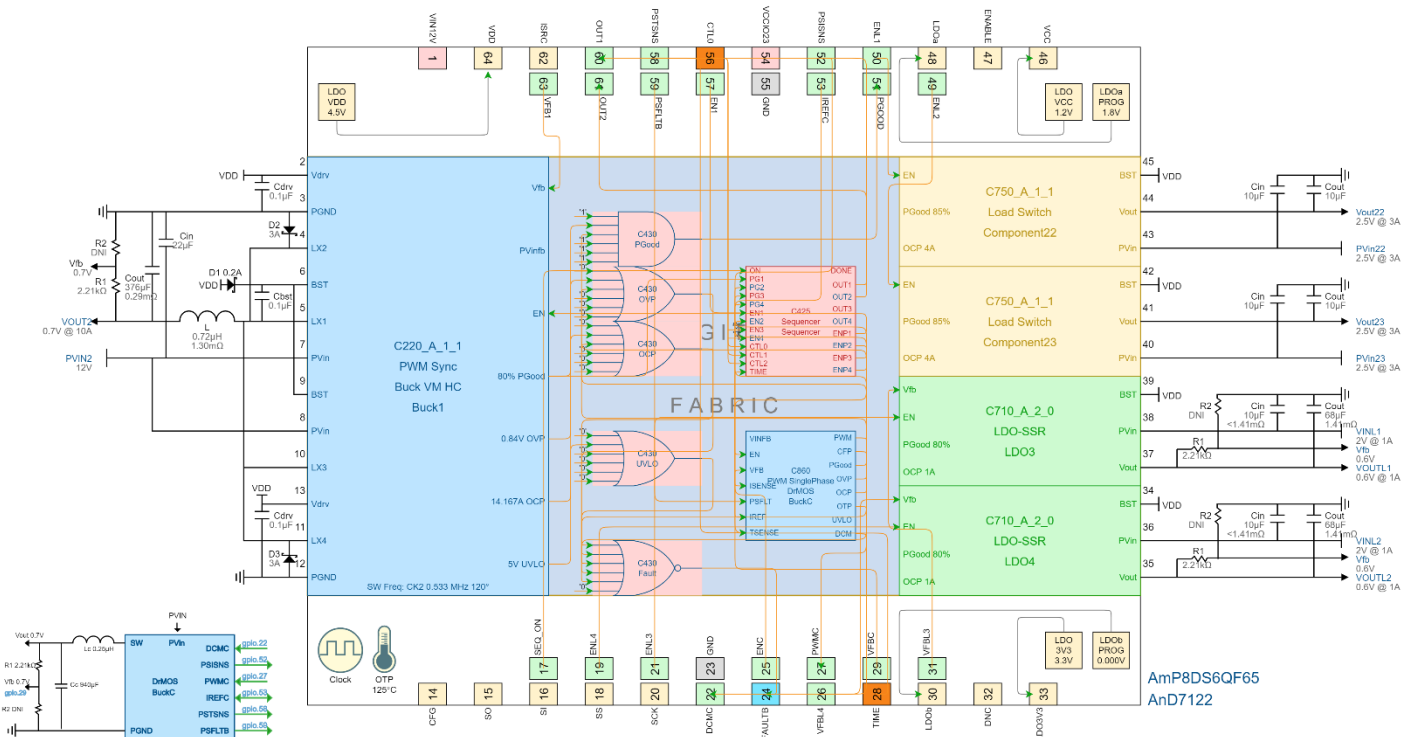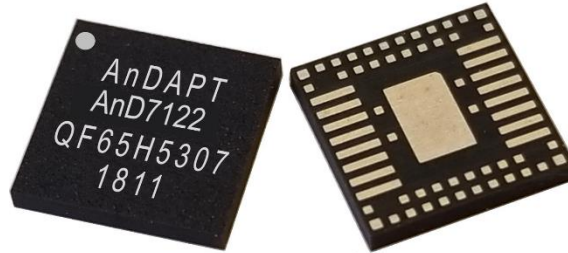

Figure 1. AnD7122 WebAmP Design View

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Order Information

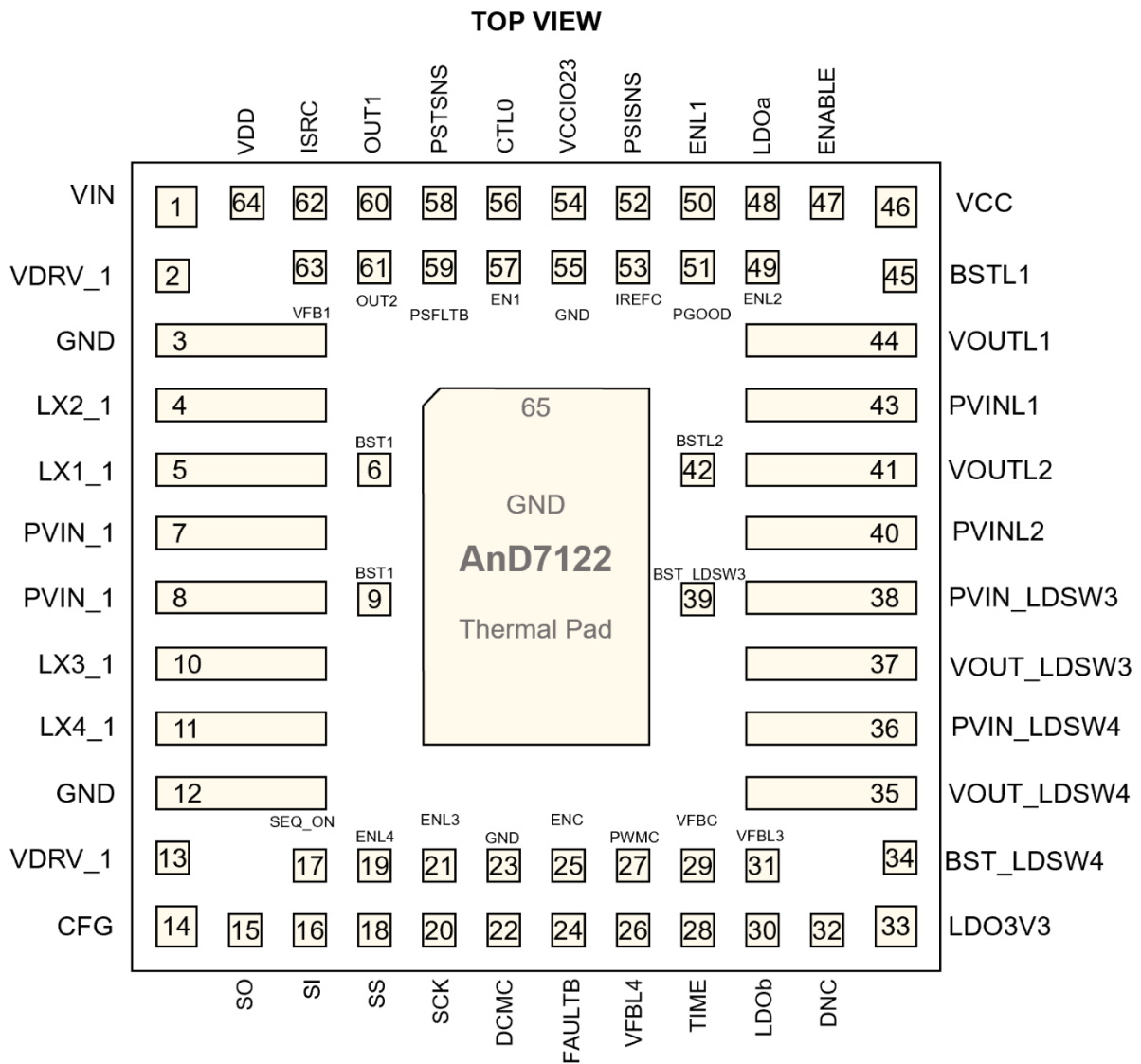| Part Number	Package	Description	Availability
AnD7122QF65	QF65	DrMOS Cntrl, Buck, LDO & LDSW, PMIC	Now

Package Marking Example – QF65

Package Pinout

Figure 2. AnD7122 package pinout