Power Components for Drag & Drop

AnDAPT offers a broad selection of Power Components for the AmP family, with competitive figures of merit that replace hundreds of traditional catalog parts and point-of-load (POL) regulators. Consequently, AmP platform devices help reduce inventory costs and operating expenses.

Power components of various topologies, range from buck, boost, buck-boost, battery chargers, load switches, LDOs to gate drivers, controllers, sequencers and supervisors. Single and multi-phase regulators and controller topologies are also offered. These come complete with a selection of control loop, compensation, control and telemetry choices.

The library, shown in the List of Power Components Table (next page) includes a variety of prebuilt, proven Power Components

- Regulator topologies: Buck, Boost, Buck-Boost regulators, Synchronous or asynchronous, Single or multi-phase
- Linear topologies: LDOs with source-side, drain-side and push-pull (DDR)regulation; Load Switch
- Controller topologies: Buck, Synchronous, Single or multi-phase, External MOSFET or DrMOS
- Mixed topologies: Battery chargers, H-bridges
- Supervisory functions: Sequencers, Fault Managers, Timers

Users simply drag-and-drop a component from the library onto the selected platform.

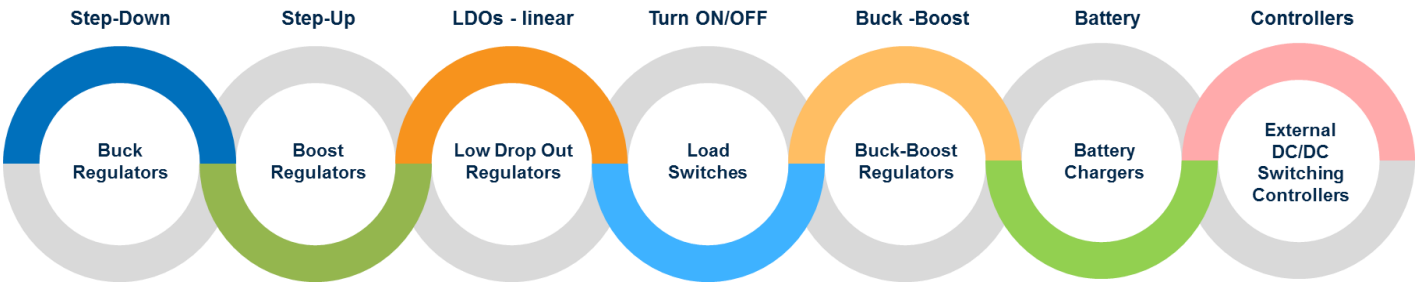
Each Power Component includes features defined via on-screen options which enables the user to optimize the component to the application need.

Power Component Advantages

The key advantages of AmP Power Components include the following.

- Mix-and-match Power Components to meet the various and differing power requirements of your system.
- Integrate multiple, dissimilar power rails to consolidate parts count, reduce board area, simplify sourcing, and reduce inventory requirements.
- Simplify sequencing and control of multiple power rails.
- Add monitoring and reset controls.
- Tailor a Power Component with the exact features and unique specifications required in your design.

Power Components for Drag & Drop
Web Tool to Select, Integrate & Analyze Power Components



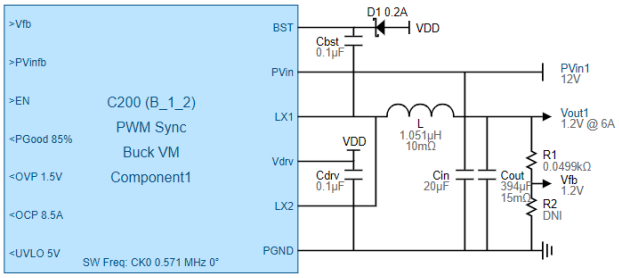
Selecting a Power Component

As shown in the List of Power Components Table, Power Components come with different topologies and capabilities. Across a table row, the Power Components are compatible in power path performance, yet have increasing capabilities for control, monitoring and telemetry.

Pro Series Power Components include the standard features that one expects in similar stand-alone devices, plus some additional capabilities, where applicable, such as …

- Adjustable switching frequency
- Adaptable stability, bandwidth, gain and phase margin
- Internally adjustable soft start and stop
- Adjustable protections: Undervoltage lockout (UVLO), overcurrent (OCP), overvoltage (OVP), and over-temperature (OTP)

Example Schematic symbol for Power Components



List of Power Components Table

CATEGORY	FUNCTION	PRO SERIES	I2C SERIES
PWM Switching Regulator Integrated Switch	PWM Sync Buck VM	C200	I200
	PWM Sync Buck VM High Current	C220	I220
	PWM Async Buck VM	C150	I150
Linear Regulator	LDO-SSR CV Source Side Regulation LDO-DDR CV Push-Pull DDR RAM	C710	I710
Load Switch	Load Switch, Slew Rate Controlled, Current Limit	C750	I750
DrMOS Controller	PWM Buck DrMOS [ACM]	C860	I860
Supervisor	Sequencer	C420	
	Gate	C430	
	Clock Source	C431	
	DFF4	C432	
	Reference Comparator	C434	I480
	I2C Control		