

# Highly integrated PMIC with 5 DC/DC Buck Converters and 10 LDOs

## FEATURES

- 3.0V~5.5V Input Operating Range
- 25uA Off-Mode Current
- **5 Buck DC/DC Step Down Converters**
  - DCDC-A: PFM/PWM dual mode,0.6V~1.1V adjustable,10mV/step;1.12V~1.52V, 20mV/step,output current 2.5A
  - DCDC-B: PFM/PWM dual mode,scaling in 1.0-2.55V,50mV/step,output current 2.5A, DVM
  - DCDC-C: PFM/PWM dual mode,0.6V~1.1V adjustable,10mV/step;1.12V~1.52V,20mV/step output current 2.5A
  - DCDC-D: PFM/PWM dual mode,0.6V~1.5V adjustable,20mV/step;1.6V~3.3V,100mV/step, output current 1.5A
  - DCDC-E: PFM/PWM dual mode,scaling in 1.1V~3.4V,100mV/step,output current 1.5A
- **10 LDOs**
  - ALDO1: scaling in 0.7~3.3V, 100mV/step, output current 300mA
  - ALDO2: scaling in 0.7~3.3V, 100mV/step, output current 300mA
  - BLDO1: scaling in 0.7V~1.9V,100mV/step, output current 400mA
  - BLDO2: scaling in 0.7V~1.9V,100mV/step, output current 300mA
  - BLDO3: scaling in 0.7V~1.9V,100mV/step, output current 200mA
  - BLDO4: scaling in 0.7V~1.9V,100mV/step, output current 200mA
  - CLDO1: scaling in 0.7V~3.3V,100mV/step, output current 400mA
  - CLDO2: 0.7V~3.4V adjustable,100mV/step; 3.6V~4.2V,200mV/step, output current 300mA
  - CLDO3: scaling in 0.7V~3.3V ,100mV/step; output current 200mA

- **System Management**
  - Support TWSI(Two Wire Serial Interface), address is 0x6C/0x6D or 0x6E/0x6F
  - Support RSB(Reduced Serial Bus) interface, address is 0x03A2/0x04E6
  - Internal Over-Temperature-Protection(OTP)
  - Internal output voltage monitor for 5 DCDC converters
  - Internal output PWROK signal
  - Provides power-on and power-off key
  - Internal on-off switch with the internal ideal resistance of 90 mΩ
  - Programmable power on voltage and sequence
- 56 pin , 7x7mm<sup>2</sup> QFN Package

## APPLICATIONS

- STB
- OTT Box
- Tablet
- Mini PC

## DESCRIPTION

AXP155 is a highly integrated power management IC targeting at 5V power source applications that requires multi-channel regulator outputs.It provides up to 7.5A current output through tri-phase Buck,and can comprise a battery powered total solution together with battery manage unit(BMU).

AXP155 integrates 5-ch step-down converters Buck converter, 10-ch LDOs. To ensure the security and stability of the power system,AXP155 provides protection circuit such as OVP,UVP,OTP and OCP.In addition,AXP155 embraces a fast interface for system to dynamically adjust output voltage.

AXP155 is available in 7mm x 7mm 56-pin QFN package

# TYPICAL APPLICATION DIAGRAM

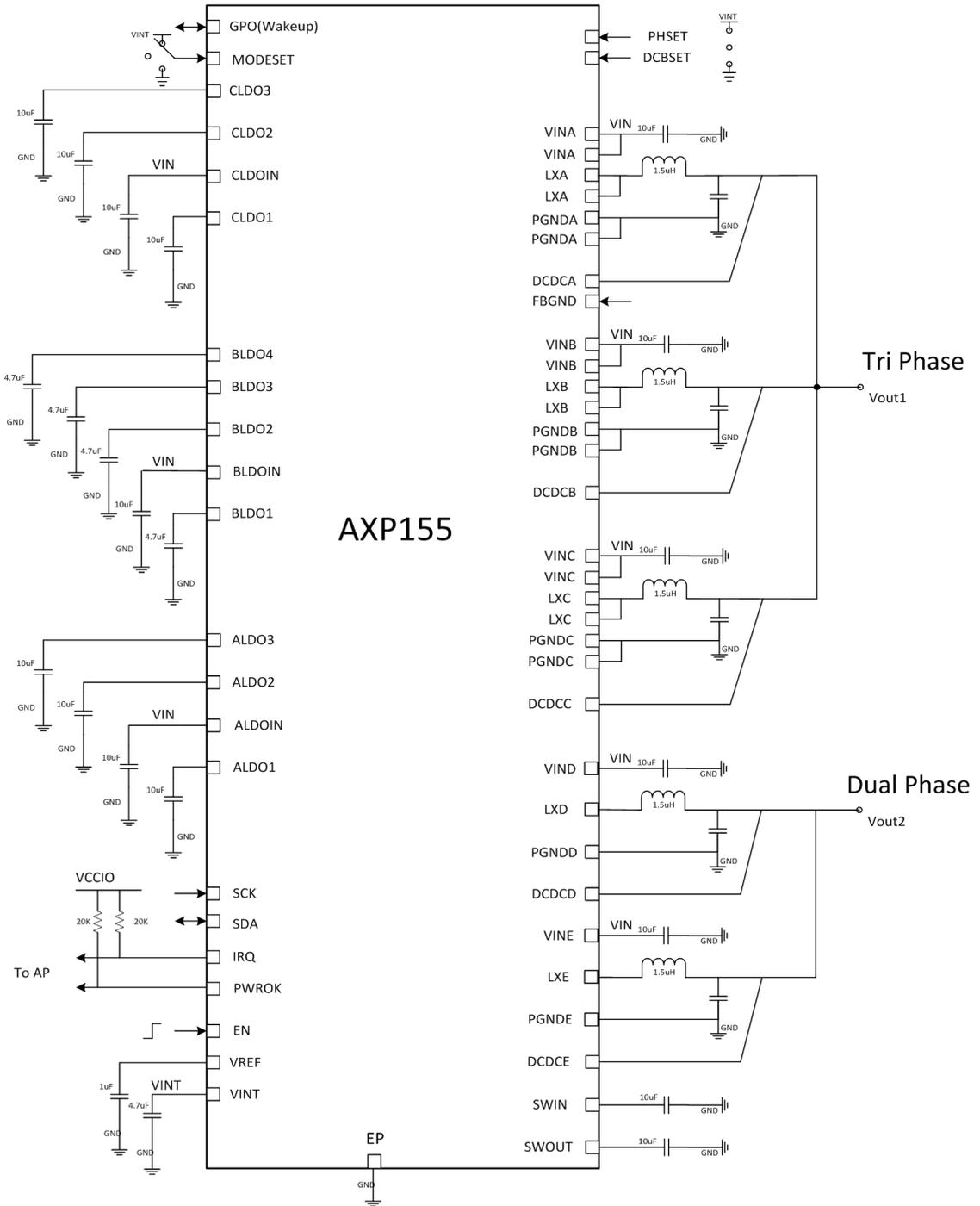
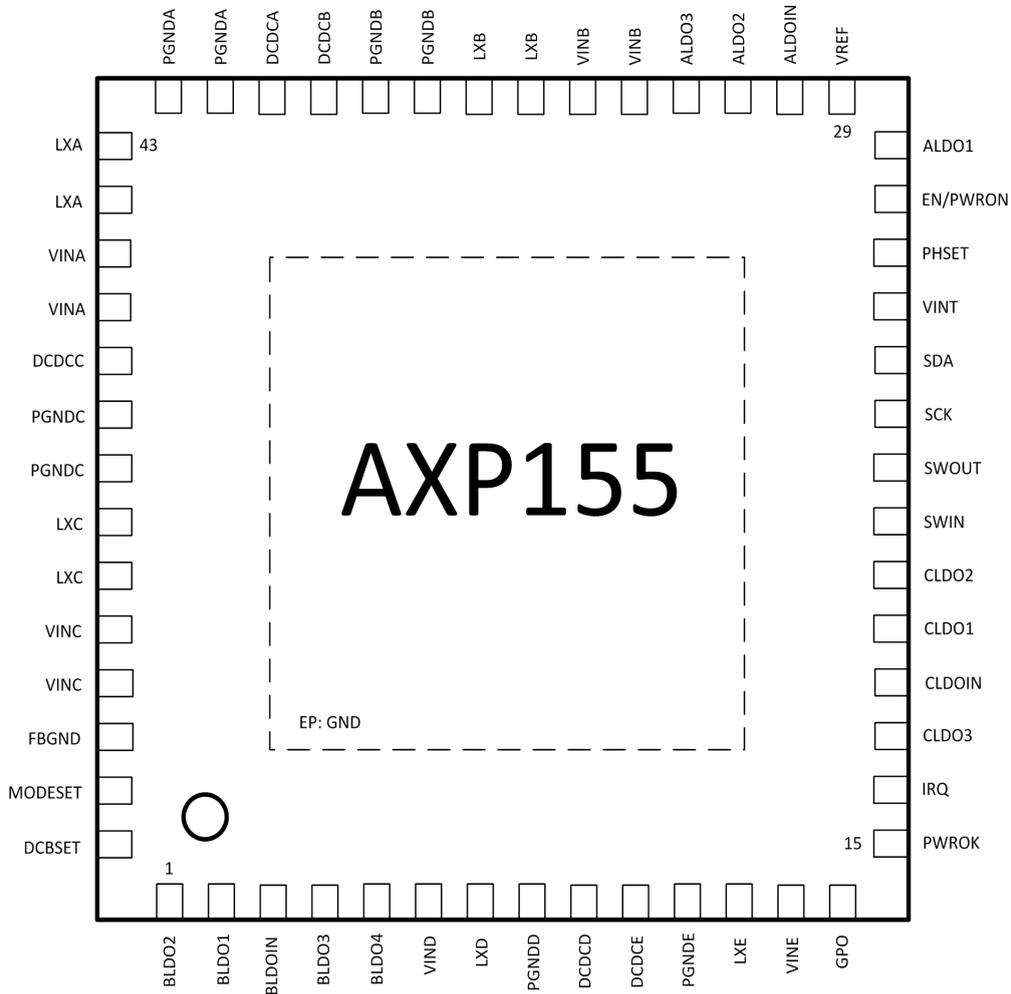


Figure 1 Typical Application Circuit

# PIN CONFIGURATION



**Figure 2. AXP155 Pin Configuration**

# DECLARATION

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