

## Description

KP6215 is a highly integrated fast charging protocol detection chip, which is suitable for AC-DC fast charging charger solution.

KP6215's internal detection logic is consistent with Battery Charging Specification 1.2(BC1.2)'s, and it can quickly and accurately detect various BC1.2 quick-charge protocols, including QC2.0, QC3.0A, SCP, FCP, AFC etc. As well as identify Apple2.4A. At the same time, support customers to customize the private agreement of mobile phone.

KP6215 Built-in voltage-stabilizing loop and loop compensation parameters, by adjusting the current at the output sampling terminal, accurate control of the output voltage.

KP6215 adjusts the output voltage according to the protocol request. KP6215 Direct power supply from the output voltage, the input voltage range of 3.0Vdc, can support hold a variety of fast charge protocol output voltage.

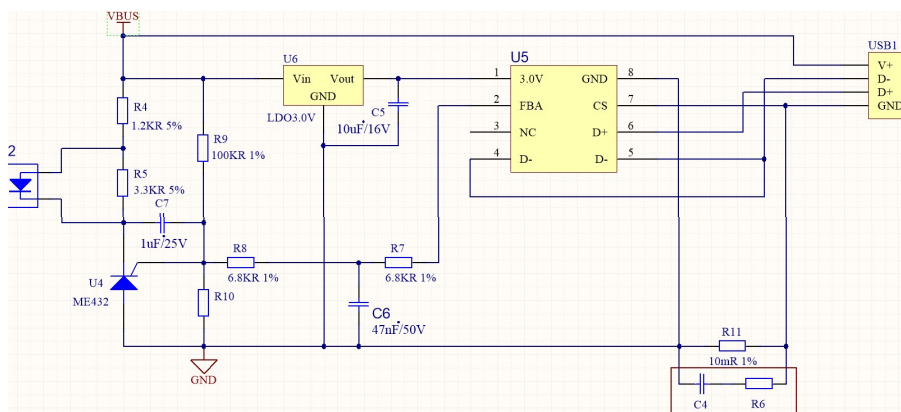
KP6215 has a variety of protection functions, adaptive output overvoltage protection, adaptive output undervoltage protection, output short-circuit protection and Over-temperature protection.

## Features

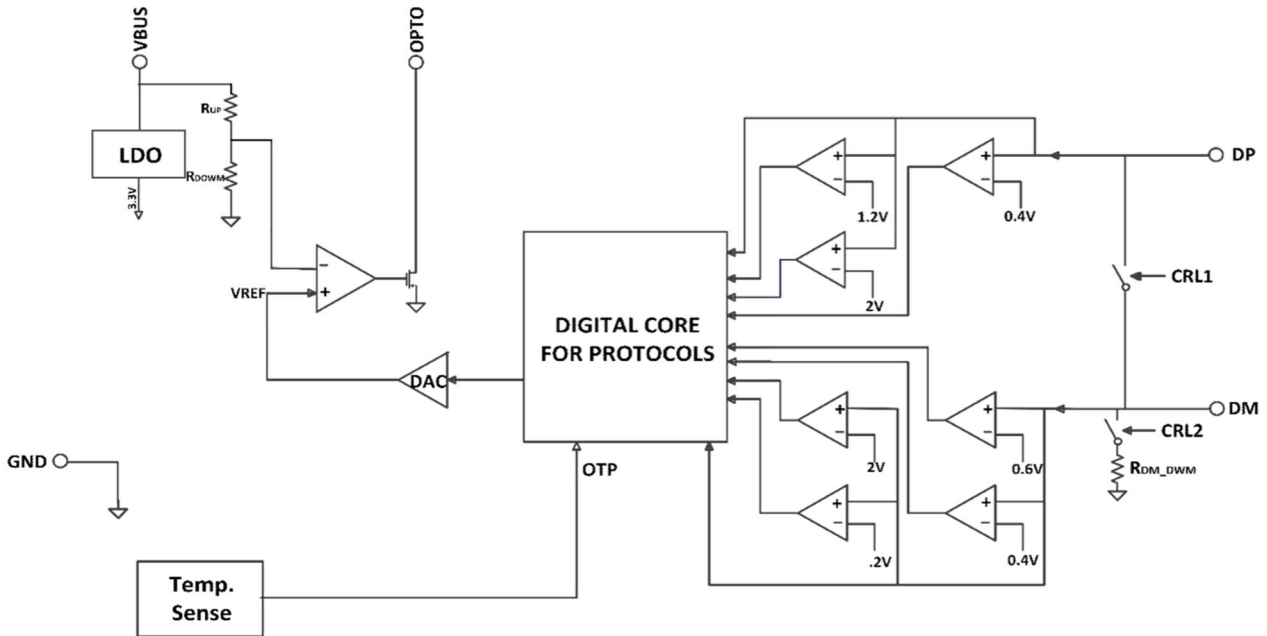
- Support various fast charging protocols: QC2.0/3.0A class, SCP,FCP, AFC, Apple 2.4A and BC 1.2.
- Internal integration of voltage-stabilizing loop and compensation parameters to simplify the peripheral circuit
- Input voltage range: 3.0Vdc
- DP/DM pin high voltage
- Internal current discharge circuit
- Adaptive output over-voltage protection, output under-voltage, output short-circuit protection
- Internal over-temperature protection
- Package: SOP-8

## APPLICATIONS

- Suitable for Quick-Charge Adaptor



### Function Block diagram



### Ordering Information

Package	Part Number		Marking ID		Packing Type
	Pb-free	Halogen-free	Pb-free	Halogen-free	
SOP-8	KP6215	KP6215	KP6215	KP6215	Reel & Carton

### Absolute Maximum Ratings

(NOTE: Stresses greater than those listed under Absolute Maximum Ratings may cause permanent damage to the device)

Parameter	Min.	Max.	Unit
Vbus voltage range	-0.3	3.0	V
DP/DM voltage range	-0.3	15	V
OPTO voltage range	-0.3	5	V
The voltage range of others pin	-0.3	5	V
Operating junction temperature TJ	-20	150	°C
Leading Temperature (10s)	---	260	°C
ESD, CDM model per JEDEC EIA/JESD22-C101F	---	1000	V
Latch-up test per JEDEC 78	---	200	V
ESD, HBM model per Mil-Std-883H, Method 3015	---	2000	V
ESD, MM model per JEDEC EIA/JESD22-A115	---	200	V

### Recommend Operation Conditions

Parameter	Min	Max	Unit
Ambient temperature	-40	85	°C

### Package ( SOP-8 )

