

INGCurrent up to 5A, efficiency up to 95%
Support 4.2/4.35/4.4/4.5v battery type
Support for JEITA specification
Support temperature loop control

SYNCHRONOUS BOOST

Output power up to 22.5w, efficiency up to 95%
We Are The Distributor Of Brand In Hong Kong, China.
Automatic load detection / light load detection
Support wireless charging mode
Support small current mode

OUTPUT FAST CHARGING PROTOCOL

Support PPS /pd3.0/pd2.0
Support qc4 + / qc4 / qc3.0 / qc2.0
Support AFC
Support FCP
Support FCP
Support SCP
Support pe2.0 /pe1.1
Support SFCP
Support for vooc

INPUT FAST CHARGING PROTOCOL

Support pd3.0 /pd2.0Support AFCSupport FCPSupport
SCPSupport pe1.1

TYPE-C INTERFACE

Built in USB type-C interface logic
support Try.SRC function

BC1.2 MODULE

Support bc1.2 DCP mode
Support apple / Samsung mode

LIGHTNING DECRYPTION

Built in lightning decryption function

PROTECTION MECHANISM

Input Overvoltage Protection
Output over current / short circuit protection
Charging timeout / overvoltage protection
Temperature protection

RECOMMENDED PARAMETERS

Parameters	Syool	MIN	Typical	MAX	UNIT
Input Voltage	VBUSB/VB	4.5		13.5	V
Battery Voltage	BAT	2.8		4.5	V
Working Temperature		20		+60	°C

The charging process is divided into the following three processes: Trickle mode, constant current mode and constant voltage mode. When the battery voltage is lower than 3V, the charging module is in trickle mode and the charging current is 300mA;

When the battery voltage is greater than 3V, the charging module will enter the constant current mode. At this time, it will charge at full speed according to the set target current, and the power can be about 21W: When the battery voltage rises to the charging target voltage (such as 4.2V), the charging module enters the constant voltage mode, and the current gradually decreases while the battery terminal voltage remains unchanged;

When the charging current decreases to the cut-off current, the charging ends. After full charge, if the battery voltage drops to 0.1V lower than the target voltage, it will automatically restart charging.

(Note: if the voltage exceeds 4.2V, it is normal and the battery will not be damaged. When the voltage is 4.2V, the light is still flashing, which means it is not fully charged. Full charge depends not only on the charging voltage.)

Integrated PPS/PD3.0/PD2.0 fast charging protocol, support input and output bidirectional fast charging. PPS output supports 5-9V@3A, 5-11V@2A, PD3.0/PD2.0 output support 5V@3A, 9V@2A, 12V@1.5A. The input voltage supports 5V / 9V / 12V. Integrated QC fast charging protocol, support QC4+ / QC4 / QC3.0 / QC2.0, support class A. QC2.0 supports 5V 9V 12V output voltage. QC3.0 supports 5V-12V output voltage, 200mV/step.

Integrated AFC fast charging protocol, output support 5V / 9V 12V. The input supports 5V / 9V voltage

Integrated FCP fast charging protocol, output support 5V 9V 12V. The input supports 5V / 9V voltage.

Integrated SCP fast charging protocol, output support 5V@4.5A. Input support 5V@3A. Integrated with PE2.0 and PE1.1 fast charging protocol, PE2.0 supports 5V ~ 12V output voltage, 500mV / step. PE1.1 supports 5V / 7V / 9V 12V output voltage. The input supports 5V / 9V voltage.

SFCP fast charging protocol is integrated to support 5V 9V 12V output voltage. Integrated VOOC fast charging protocol. Output support 5V@4A

DISCHARGE STATE

Capacity	LED1	LED2	LED3	LED4
75~100%	On	On	On	On
50~75%	On	On	On	Off
25~50%	On	On	Off	Off
5~25%	On	off	Off	Off
1~5%	Flicker	off	Off	Off
0%	Off	Off	Off	Off

BATTERY POWER INDICATOR UNDER LED CHARGING STATE

Capacity	LED1	LED2	LED3	LED4
100%	On	On	On	On
75~99%	On	On	On	Flicker
50~75%	On	On	Flicker	Off
25~50%	On	On	Off	Off
0~25%	Flicker	Flicker	Off	Off

The layout is reasonable. The hibeen windowed and tinned to reducecurrenpartthe loss and improve the charging and discharging efficiency

R8 sets the resistance for the battery capacity.

If the later replacement battery capacity difference is not big, you can leave it alone, if the difference is too big, please replace the resistance again. Calculation formula of resistance value: Resistance value $Q = (\text{Total battery capacity MAH} + 2000) * 5/3$. For example, the resistance of 30000 MAH should be $(30000 + 2000) * 5/3 = 53333 \Omega$. It can be replaced by a similar resistor, such as 53k.

Both type-A and type-a USB sockets are designed with 5p high current USB sockets. The contact copper is thickened and widened to increase over-current capacity. Please remove the protection board, directly connect our motherboard cell. (because the built-in current can't be too high, it will be protected as soon as the output power is high.)

3: Use crocodile clip motherboard test, please don't charge mobile phone. If the phone needs to be charged, it must be soldered (many buyers don't listen to it. Whenever there is a problem, they will tell us how the motherboard is broken, how the motherboard can't be charged quickly, how the motherboard can power off and restart, etc. Please operate according to the requirements, thank you for your cooperation).

4: The 4.2V 18650 / polymer / ternary lithium battery can be used as the battery. Large monomer and multiple 18650 can be used in parallel. Iron lithium battery, disposable dry battery, Ni MH battery, lead-acid battery and Ni Cd battery can not be used. Batteries cannot be connected in series. For the first time there will be inaccurate power display. Please discharge the battery and then fill it up. For the first time, you can continue to charge the battery for more than 5 hours when the 4 lights are all on. There is no need to worry about it.

5: The motherboard must preset the battery capacity, so the approximate battery capacity must be noted or explained to the customer service. Otherwise, the preset battery capacity of the case is 30000MAH, and that of the single motherboard without the case is 20000MAH. Or

replace the resistor by yourself later.

6: OPPO flash charging and Huawei super fast charging are supported. Different protocols have different power. Please understand clearly before shooting. Except that some mobile phones do not support fast charging, others do. (the reason why the mobile phone is not supported is that the mobile phone's own agreement is not open, and the third party can't use it. If you want to use it, you can only go to the official website of each mobile phone to buy it.)

KEY FUNCTION

Short press to activate the output (this method will delay the fast charging request of the inserted device. It is recommended to insert electric equipment in standby mode, which will automatically start the output.)

If you double-click it, it will shut down by force

Long press will enter the small current charging function or flashlight function (the small current function can charge the watch Bluetooth and other small current devices. There will be water flow prompt on the four power lights. Long press again to exit, and it will not turn off within 2 hours. It's not that it's on, it's low power charging. low current mode low power charging