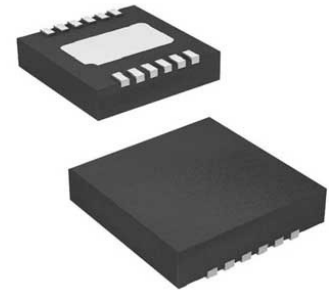


## Linear Battery Charger Li-Ion 200mA 4.2V 12-Pin DFN EP T/R



Images are for reference only

[Inquiry](#)

**Manufacturer:** [STMicroelectronics, Inc](#)

**Package/Case:** DFN-12

**Product Type:** Power Management ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The STNS01 is a linear charger for single-cell Li-Ion batteries integrating an LDO regulator and several battery protection functions.

The STNS01 uses a CC/CV algorithm to charge the battery; the fast-charge current can be programmed using an external resistor. Pre-charge current and termination current are scaled accordingly. The floating voltage value is 4.2 V. The input supply voltage is normally used to charge the battery and provide power to the LDO regulator. When a valid input voltage is not present and the battery is not empty, the device automatically switches to battery power. The STNS01 integrates overcharge, over-discharge and overcurrent protection circuitry to prevent the battery from being damaged under fault conditions. It also features a charger enable input to stop the charging process when battery overtemperature is detected by an external circuitry. When the shutdown mode is activated, the battery power consumption is reduced to less than 500 nA to maximize battery life during shelf time or shipping. The device is available in the DFN12L (3x3x0.75 mm) package.

### Key Features

Chargessingle-cellLi-IonbatterieswithCC/CValgorithmmandchargertermination

Chargecurrentprogrammableupto200mA

1%accuracyonfloatingvoltage(4.2V)

Integrated3.1VLDOregulator

Automaticpowerpathmanagement

Batteryoverchargeprotection

Batteryover-dischargeprotection

### Recommended For You

**STIS14PHR**

STMicroelectronics, Inc  
HSOP-8

**ST890CDR**

STMicroelectronics, Inc  
SOP-8

**STWD100YNYWY3F**

STMicroelectronics, Inc  
SOT23-5

**STC3100IQT**

STMicroelectronics, Inc  
QFN

**STM706TM6F**

STMicroelectronics, Inc  
SOP-8

**STWD100NYWY3F**

STMicroelectronics, Inc  
SOT23-5

**STPD01PUR**

STMicroelectronics, Inc  
24-QFN

**STGAP2SICSNTR**

STMicroelectronics, Inc  
SOIC-8

**STSPIN230**

STMicroelectronics, Inc  
VFQFPN16

**STWBC**

STMicroelectronics, Inc  
QFN32

**STWBC2**

STMicroelectronics, Inc  
SOP

**STMPS2171MIR**

STMicroelectronics, Inc  
SO-8

**STSPIN240**

STMicroelectronics, Inc  
QFN16

**STMPS2151MIR**

STMicroelectronics, Inc  
SOP8

**STC3115IJT**

STMicroelectronics, Inc  
CSP-10