All in one, NiMH Battery Charger IC
- LS2533A

Linkas

Features

Build-in charge circuit can directly provide 180~250mA charge current, for saving external component cost, such as P channel MOSFET or Transistor.

Adding external transistor for increasing charge current.

Build-in voltage regulator, can directly use PC USB port's power; no need voltage regulator components.

2 Charge full terminations

- Battery voltage termination can be set to meet over 90% full capacity.

- Timer termination: force to stop when time out, for some minor portion of batteries whose full battery voltage is too low.

Trickle charge: keep charging with very small charge current to compensate battery self-discharge.

Build in battery alive function, for waking up long shipment or un-used battery..

Time out protect Timer (~12 hrs): force to stop charge process, when time up.

Single color LED charge status display: Charge- flash, Charge full- On, No battery- Off.

Single pin for economic RC oscillator circuit. And time out timer can be setting through this Resistor, (103pf +150K ohm, or others combination).
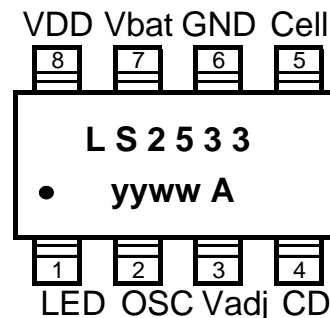
Pin settable for 1, 2, or 3 cells NiMH battery charge application.

Working voltage: 5.0 Volt .

Package: SOP-8 (150 mil).

Marking: LS2533
         yywwA

```
     VDD  Vbat GND  Cell
      8    7    6    5
   ┌─────────────────────┐
   │                     │
   │     L S 2 5 3 3     │
   │  ●   yyww A         │
   │                     │
   └─────────────────────┘
      1    2    3    4
     LED  OSC Vadj  CD
```

■ Application: Wireless mouse, MP3 charger function.

Pin Assignment:

Pin No.	Name	I/O	Description
1	LED	O	LED Status output
2	OSC	I	OSC RC Oscillator input
3	Vadj	I	Full voltage fine turn adjust input.
4	CD	O	Charge Drive output for increase charge current
5	Cell	I	Battery Cells setting input
6	GND	P	Ground
7	Vbat	I/O	Connect to battery positive port
8	VDD	P	Power input (5.0V)