

## **AP1013AS**

18V 1ch H-Bridge Motor Driver

## **Description**

The AP1013AS is the single H-bridge motor driver which has four drive modes, forward, reverse, brake and standby, to operate up to 18V motor supply voltage. N type LDMOS is built in both high and low side for output driver to achieve small package. It also has under voltage detection and thermal shut down circuits. It is suitable for driving various types of small motors.

## **Key Features**

| □ Control Supply Voltage:  | 2.7V to 5.5V                                  |
|--|---|
| □ Logic Terminal Supply Voltage:   | 1.62V to Control Supply Voltage               |
| □ Wide Motor Drive Operating Voltage: 2V to 1                              | 8V (NMOS high side and Low side architecture) |
| □ Maximum Output Current (DC): 1.1A@Ta=29                                  | 5°C, 0.8A@Ta=85°C                             |
| □ Maximum Output Current (Peak): 1.8A (Ta=2                                | 25°C, less than 20ms in 200ms)                |
| □ H-Bridge On Resistance: RON(TOP+BOT)=0.36Ω (Typ.)@25°C                   |   |
| □ Power-Down Mode: VM leakage current less than 1µA (Ta=25°C)              |   |
| □ Built-in Under Voltage Detection Circuit: Detection Voltage ; 2.2V(Typ.) |   |
| □ Built-in Thermal Shut Down Circuit (Tj): 175°                            | C (Typ.)                                      |
| □ Junction Temperature: 150°C (Max.)                                       |   |
| □ Package: 16pins TSSOP Package  |   |

## **Block Diagram**

