

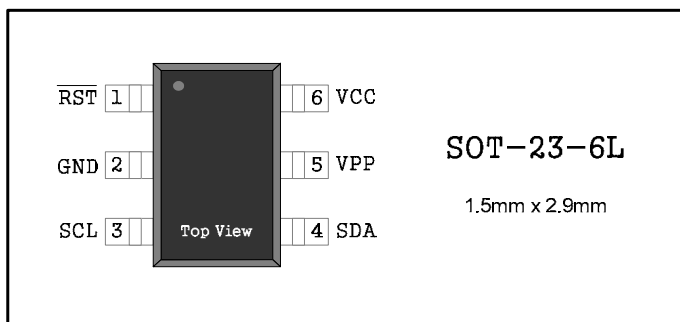
## Features

- High performance illegal copy protection IC
- 128bits encryption applied with AES-128
- 32/64bits OTP cells for user serial code
- IIC Serial Interface, Supporting up to 400 Kbps
- 3.3V/1.8V Operation Voltage
- Reset-Output (open drain,  $\overline{RST}$ )
- Reset delay time on power up. Fixed (Factory-Programmed) reset out times : 8ms to 1s
- Built- in Power on Reset / 16MHz OSC
- Two Power Mode ( Active, Sleep )

## Applications

- DMB, Navigation
- Mobile Phone, PMP, MP3
- DVR(PVR), DVDP
- Set-Top Boxes (STBs)
- Etc.(Most of electronic system using u-Processor)

## Pin Configuration



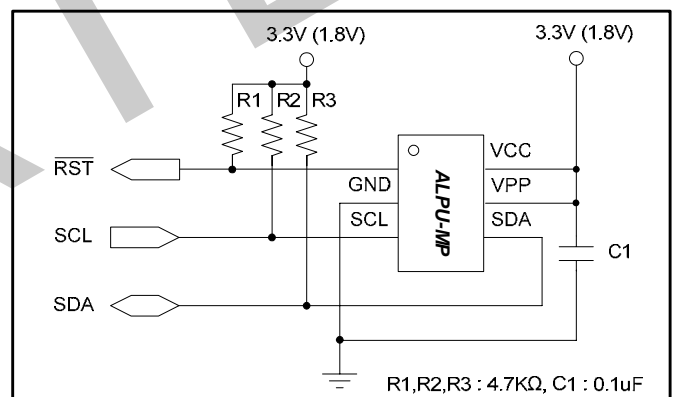
## Ordering Information

Part	Operation Voltage	Package Type
ALPU-MP	3.3V	SOT-23-6L
ALPU-MPL	1.8V	SOT-23-6L

## General Description

The ALPU-MP is the high-end IC among the ALPU series. Its encryption core is based on Rijndael AES-128 with 192-bits programmable parameters. It is a slave device that always operates with MCU through the serial bus. In addition the ALPU-MP has Reset-out( $\overline{RST}$ ) function that gives the reset signal to reset pin of the external device.

## Typical Operation Circuit



< SOT-23-6L Package Type >

## Encryption Flow

