


Copy Protection Solution

Product	Package Type	Feature	Interface	Operation Voltage	Application
ALPU-MP	 6L-SOT23	High performance illegal copy protection IC 128bits encryption applied with AES-128 Simple authentication IIC Serial Interface, Supporting up to 400 Kbps Built-in Power on Reset/16MHz OSC	I ² C	3.3V / 1.8V	Black-box, Navigation, Mobile Phone, STBs (Set-Top Boxes), (Most of electronic system using u-Processor)

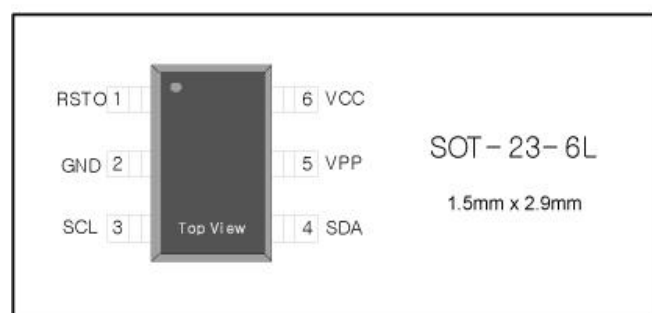
Features

- 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, RSTO)
- Reset delay time on power up. Fixed (FactoryProgrammed)
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

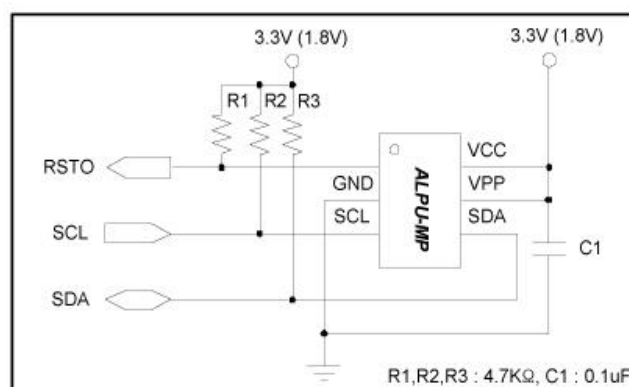
Each customer will have different device number.

Part	Operation Voltage	Package Type	Code Number
ALPU-MP	3.3V	SOT-23-6L	xxx:3digits(Hex)
ALPU-MPL	1.8V	SOT-23-6L	xxx:3digits(Hex)

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(RSTO) function that gives the reset signal to reset pin of the external device.

Typical Operation Circuit



< SOT-23-6L Package Type >

Encryption Flow

