

# MA8601

## USB 2.0 High Speed 4-port hub controller

### Description

The MA8601 is a high performance solution for USB 2.0 High Speed 4-port hub controller with fully compliant with Universal Serial Bus Specification 2.0. The controller inherits advanced serial interface technology to consume the least power when 4 DS (downstream) ports function simultaneously.

MA8601 adapt Single Transaction Translator (STT) and Ganged power management to achieve cost effective purpose. Users can also implement multiple Hub configuration options through external EEPROM.

MA8601 supports SSOP28 package targets at mainstream stand along 4 ports Hub market.

### Features

- Compliant with USB Specification Revision 2.0
  - ✓ Upstream Port supports high-speed (480MHz) and full-speed (12MHz) traffic
  - ✓ Configurable 4/3/2 downstream ports support high-speed, full-speed, and low-speed
  - ✓ Backward compatible to USB Specification Revision 1.1
- Integrated Fast 8051 microprocessor
- 12Mhz Oscillator clock input
- Integrated upstream 1.5K $\Omega$  pull-up downstream 15K $\Omega$  pull-down resistors
- Single Transaction Translator (Single TT)
- Ganged Power Control and Global Over Current detection for downstream ports
- Leading small power consumption USB2.0 Hub
- On chip 5V to 3.3V/1.2V regulator
- Automatic re-enumeration for switching between self-powered and bus-powered modes
- External EEPROM interface for customized information storage
  - ✓ Customized VID, PID
  - ✓ Number of downstream port

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- ✓ Product ID
- ✓ Serial number
- ✓ Two LED port indicator mode
- ✓ 4 Downstream port LED (enable green) and one Active/Suspend LED(Red)
- ✓ One joint Downstream port LED for 4 ports (enable green) and one Active/Suspend LED(Red)
- ✓ package

## **Package**

SSOP28

### **Prolific Technology Inc.**

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