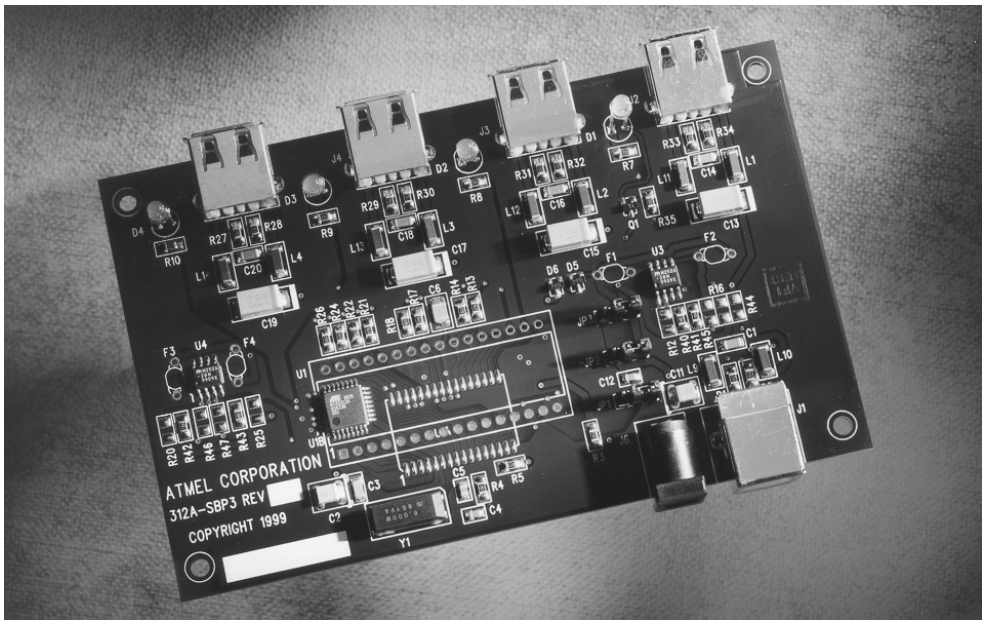
Features

- **Instant Prototype With the AT43312A Hub Controller**
- **Reduce Design Cycle**
- **Reduce System Debugging**
- **Simplify Component Selection**
- **Avoid Typical Design Problems**

Overview

The AT43DK312A comes with everything designers need to develop a full-featured USB Hub. To eliminate typical prototyping hassles, a fully populated stand-alone hub is included. Designers can take the stand-alone hub from the box to the system to see the operation of the AT43312A hub controller chip. An application note explains the component selection and resolves typical problems for the designer.



USB Hub Development Kit

AT43DK312A

Rev. 1641A–04/00

Stand-alone Hub

The hub may immediately be plugged into any USB system. The only requirements are that the system has an operational USB port and that the system has the USB drivers enabled on the operating system.

The bus-powered portion of the controller will configure without the power supply attached. However, the power supply must be connected if the devices are to be attached to the downstream ports. Next, connect the upstream port to the USB connector on the computer. Windows will flash a “New Hardware Found” box indicating the “Atmel USB Hub” was detected and automatically load the generic USB hub drivers. USB check tests or downstream devices can then be used on the configured hub.

Documentation

The application note covers the latest information detailing how to design a USB hub with the AT43312A chip. Explanations of component selection, USB hub requirements, and design insights will assist designers in smoothly integrating a USB hub onto existing or new designs.

By understanding the reference design, layout and component selection may be optimized for specific design constraints.

Included:

- Application Note
- Reference Design Schematics
- Bill of Materials
- AT43312A Datasheet
- Bus- or Self-powered Operation (Jumper Selectable)
- USB Cable
- Power Supply

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