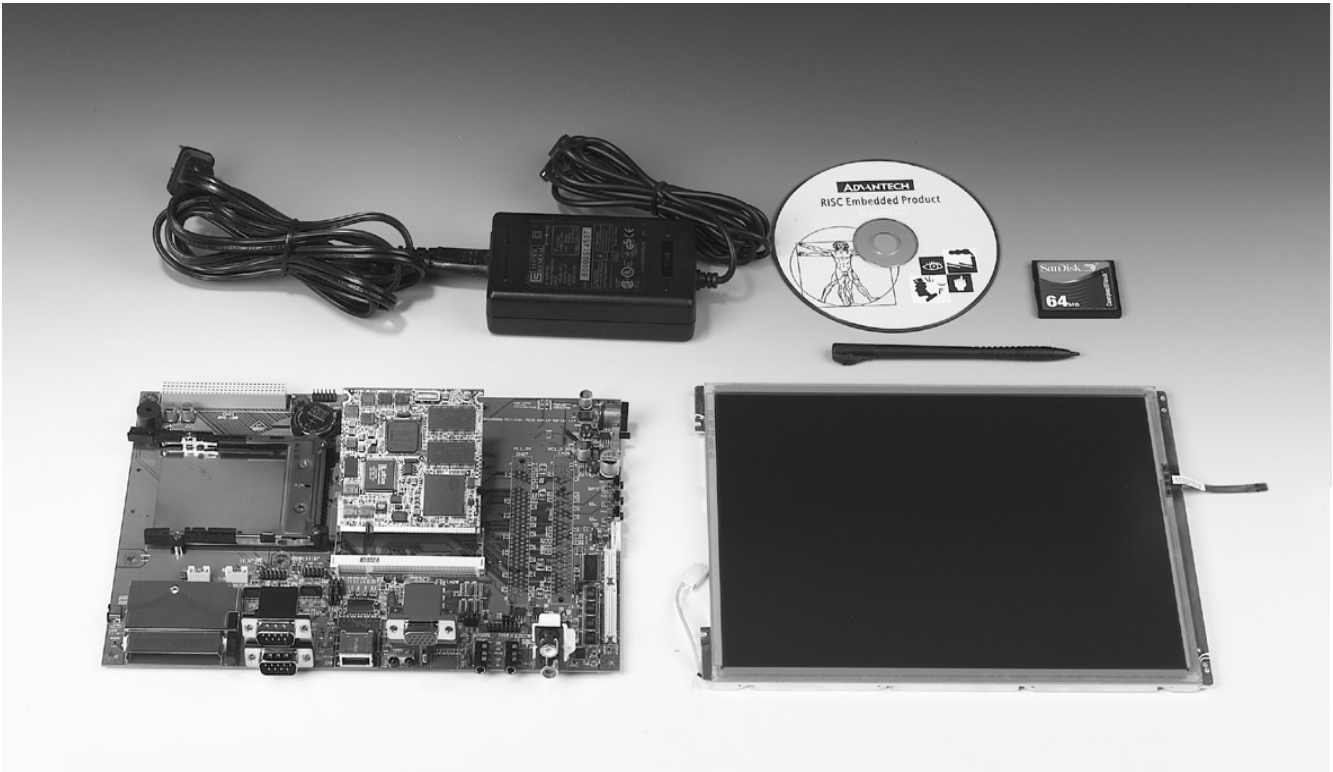


SOM-ADK2552 Series Design-in Kit

Design-in Kit for SOM-A2552 Intel®
XScale® PXA255 System On Module



Introduction

The Design-in Kit package provides developers a complete reference design-in suit for application evaluation/ development and their own Customer Solution Board (CSB) development. It contains all the needed information, documentation and tools for starting hands-on work with the followings items:

- **Target SOM (SOM-A2552-440B0):** SOM-A2552 standard version board.
- **SOM-A2552 Series Reference Customer Solution Board:** Sample CSB for developer reference.
- **64 MB CompactFlash card**
- **Design-in reference documentation:**
 - Design-in zone login information card
 - Design-in Kit user's manual
 - RISC SOM Carrier Board Design Guide
 - Schematics, bill of material, layout guide of reference CSB
- **Testing Set**

Designed for sample CSB or customers' own CSB/mass production testing. It includes:

- H/W testing tools: RS232 loop-back testing tool, ADAM-4520 for RS485 testing, null MODEM cable, JTAG cable, USB ActiveSync cable, Audio cable, RS232 cable and RS485 cable.
- S/W testing Utility: Advantech-developed testing utility. Testing process will be implemented by S/W testing utility and H/W testing tools.
- Documentation: "Advantech RISC SOM Platform Testing Method". Users can use the base documents to know how to implement testing process.

- **Software Development Tools**

Software tools is a complete package for customers to develop their target image to align with their target CSB and applications

- BSP: Binary Board Support Package for target SOM Design-in Kit. Users can integrate their target Windows CE platform into components, Apps and drivers
- SDK: For customer target Application development
- Reference Image: Reference Image for the selected model of SOM Design-in Kit
- Upgrade Utility: Users can use the upgrade utility to upgrade boot logo, image & bootloader.
- LCD Tuner: Advantech-developed program for users to tune the LCD register settings.

- **Design-in Zone Guide**

Advantech has established a dedicated website portal called SOM Design-in Zone to assist customers with CSB development by providing direct and professional technique support in most efficient way. The home page is located at <http://SOM-designin.advantech.com.tw>

SOM-ADK2552-B00 does not include the LCD kit; please order your LCD kit of your choice

SOM-ADK2552 Series Design-in Kit

LCD Kit: (OPTIONAL item)

Advantech supplies a full range of certified LCD kits in difference sizes and types for customers to fit into their target CSB and target application.

Each LCD kit includes the selected LCD panel, inverter and needed cables which are designed to work with each Advantech Standard RISC-based SOM Design-in Kit platform.

The current available LCD kits include the following:

- 6.4" TFT VGA LCD kit (PRIMEVIEW/PD064VT2)
- 10.4" TFT SVGA LCD kit (AU/ UB104SXX)
- 15" TFT XGA LCD kit (AUO/ M150XN07)

Specifications

- **PCB Form factor** 237 mm x 160 mm
- **SOM module P/N** SOM-A2552-440B0
- **Boot loader Storage** Pre-installed on SOM module
- **OS Image Storage** Thru CompactFlash Card (CFC)
- **AMI Bus (X1 Bus)** Advantech RISC standard AMI-120 connector with driving buffers on SOM module
- **Watch Dog** PXA255 Built-in
- **RTC** External RTC w/backup power pin
- **System Backup battery** 65 mAh 2032 type rechargeable Li-ion coin battery For RTC/SDRAM
- **Serial Port connector** 2 x RS-232 DB-9 connectors (COM1,COM2)
1 x IrDA 1.1 Physical Layer (COM3)
1 x 5 x 2 2.00 mm pin header (COM4)
1 x 6 x 2 2.00 mm pin header (COM5)
- **PCMCIA/CompactFlash** 1 x Type II CFC slot and 1 x Type II PCMCIA slot
- **USB Host** 1 x USB 1.1 host connector
- **USB Client** 1 x mini USB 1.1 Client connector
- **LCD interface (TTL level)** 40-pin Advantech standard LCD connector, 24-bit LCD interface, resolution up to 1024 x 768
- **LCD LVDS** 20-pin Advantech standard LCD connectors, supports 1-channel LVDS signals
- **CRT** DB-15 connector, resolution up to 1024 x 768
- **TV-in** 1 RCA jack for TV-in function
- **TV-out** 1 RCA jack for TV-out function
- **T/S** 4-wire resistive touch screen housing
- **Audio interface** 8 x 2 mm Pin header-Line-in, Line-out
MIC-in, Speaker-out, Line-in Jack and Line-out Jack
- **Buzzer** Yes
- **SM Bus** Yes
- **System Reset button** H/W reset button, S/W reset button, Wakeup/Suspend button
- **OS support** Windows CE .NET 4.2
- **Power input** 12 V DC in with power switch
- **Inverter** 5-pin housing for LCD inverter control
- **Operating temperature** 0 ~ 60° C
- **Operating humidity** 0% ~ 90%
- **Certification** FCC/CE

Packing List

- **SOM-A2552-440B0** SOM-A2552 standard version board.
- **SOM-A2552-440B0 carrier board** Carrier board for SOM-A2552-440B0
- **64MB compact flash card**
- **Testing Kit** Includes H/W testing tools, S/W testing utility and documentation.
- **AC power Adaptor** AC/DC power adaptor for Design-in kit power supply.
- **SOM-A2552 series support CD** Includes Software Development tools, SOM-A2552 specs, SOM-ADK2552 specs, SOM-A2552 manual, SOM-ADK2552 manual, Testing Kit application note & SOM-A2552 carrier board design guide.

Ordering Information

SOM-A2552 Design-in Package

- **Design-in Kit SOM-ADK2552-B00 (Must order)** SOM-A2552 Series Design-in Kit. (** without Panel)
- **LCD Kit LCD-A064-TTV1-0 (Optional item)** 6.4" TFT VGA LCD kit. The kit includes 4-wire resistive T/S, inverter, cables and installation guide.
- **LCD Kit LCD-A104-TTS1-0 (Optional item)** 10.4" TFT SVGA LCD kit. The kit includes 4-wire resistive T/S, inverter, cables and installation guide.
- **LCD-A150-TTX2-0 (Optional item)** 15" TFT XGA kit. This kit includes 4-wire resistive T/S, inverter, cables and installation guide..
- **RISC Windows CE Builder RSW-ACEBW1-042 (Optional item)** RISC CE-Builder Windows CE .Net 4.2 version 1.