

# ARK-DS306

## AMD G-Series Fanless Digital Signage Player



### Features

- AMD G-series T40N (DC 1.0 GHz) + A50M FCH, 1 x DDR3 SODIMM, supports up to 4 GB
- DirectX® 11, 2D/3D acceleration, dual display: HDMI, VGA
- Built-in Mini-PCIe slot for easy expansion
- Supports 2 Gigabit LAN connectors, HD audio, 2 x COM, 2 x USB I/O interfaces
- Storage: 1 x 2.5" SATA HDD drive bay, 1 x CFast slot
- Supports VESA mounting (Optional)
- Supports iManager, SUSIAccess for Signage and Embedded Software APIs

Acronis McAfee susiAccess iManager



### Introduction

The ARK-DS306 is powered by an AMD Embedded G-Series APU with the AMD A50M Fusion Controller Hub system chipset, and provides a power-efficient platform for high-performance multi-media content delivery. Based on this new APU platform, ARK-DS306 offers an outstanding visual experience with full multi-media capability, while maintaining very low power consumption. It is an excellent high performance solution for versatile digital signage applications.

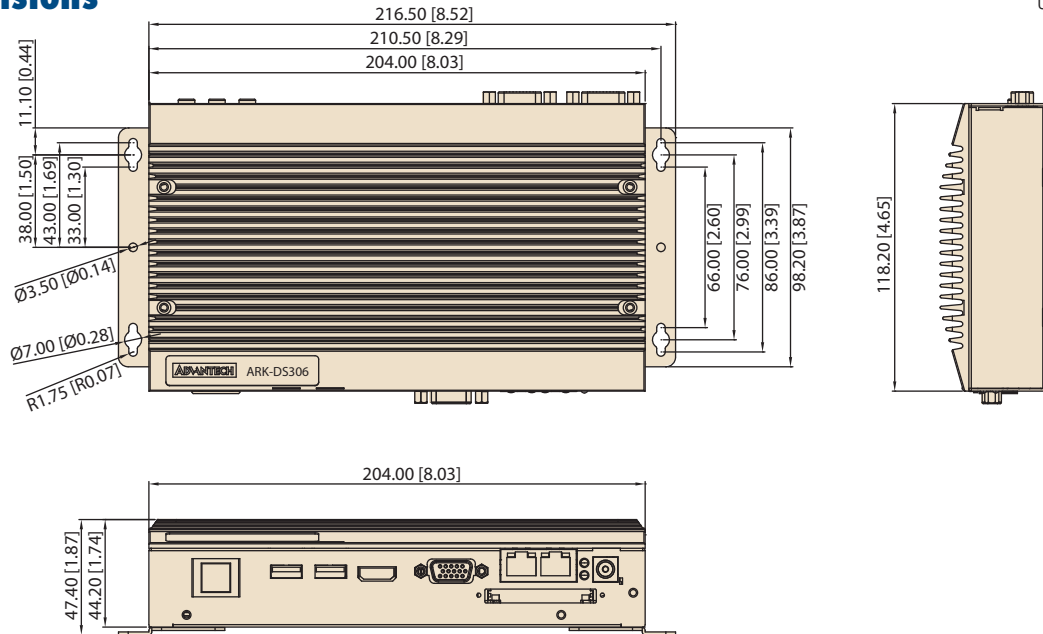
### Specifications

|                          |                        |                                                                                                                         |
|--------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Processor System         | CPU                    | AMD G-Series, T40N 1.0GHz dual core                                                                                     |
|                          | System Chipset         | A50M FCH                                                                                                                |
|                          | BIOS                   | AMI EFI 16 Mbit                                                                                                         |
| Memory                   | Technology             | 1 x DDR3 204-pin SODIMM                                                                                                 |
|                          | Max. Capacity          | Max. up to 4 GB                                                                                                         |
| Display                  | Chipset                | AMD G-Series                                                                                                            |
|                          | Graphic Engine         | DirectX 11 graphics with UVD 3.0<br>2D Acceleration, 3D Acceleration, Motion Video Acceleration, Supports DVD, Blu-ray* |
|                          | Output                 | HDMI x 1, VGA x 1                                                                                                       |
|                          | Resolution             | VGA: 1920 x 1080 at 60 Hz<br>HDMI: Supports 1920 x 1080p at 60 Hz, 36 bpp, Supports HDMI v1.3, using TMDS data encoding |
|                          | Dual display           | Yes                                                                                                                     |
| Storage                  | SATA                   | 1 x 2.5-inch SATA II HDD/SSD (support 9.5 mm / 7 mm height)                                                             |
|                          | Cfast (socket)         | 1                                                                                                                       |
| Ethernet                 | Interface              | 2 Gigabit LAN Controller Realtek RTL8111E-VB-GR 10/100/1000Mbps                                                         |
|                          | Connector              | 2 x RJ-45                                                                                                               |
| Audio                    | Chipset                | Realtek ALC892, High Definition Audio (HD)                                                                              |
| I/O Interface            | HDMI                   | 1                                                                                                                       |
|                          | VGA                    | 1                                                                                                                       |
|                          | LAN                    | 2 (RJ-45)                                                                                                               |
|                          | USB                    | 2 (USB 2.0 compliant)                                                                                                   |
|                          | Audio                  | Line-in, Line-out, Mic-in                                                                                               |
|                          | Serial                 | 2 x COM (RS-232)                                                                                                        |
|                          | Mini-PCIe (Internal)   | 1 (for optional expansion modules)                                                                                      |
|                          | Power input            | 1 (DC-in Jack)                                                                                                          |
| Power Requirement        | Management             | ACPI 2.0                                                                                                                |
|                          | Power Consumption      | Typical: 9 W (w/o expansion)<br>Max.: 13W (w/o expansion)                                                               |
|                          | Input Voltage          | 12V DC-in (ATX/AT mode, default ATX)                                                                                    |
|                          | Others                 | Supports boot on power back and schedule boot up function                                                               |
| Watchdog Timer           | Output                 | Interrupt, system reset                                                                                                 |
|                          | Interval               | 255 levels timer interval, programmable by software                                                                     |
| Physical Characteristics | Mounting               | Easy mounting kits for LCD or Plasma                                                                                    |
|                          | Dimensions (W x H x D) | 204 x 44.2 x 118.2 mm                                                                                                   |
|                          | Weight                 | 1.1 kg                                                                                                                  |
| Environment              | Operating Temperature  | Operating: 0 ~ 40° C (32 ~ 104° F) (w / HDD); 0 ~ 50° C (32 ~ 122° F) (w / CFast Card)                                  |
|                          | Relative Humidity      | 95% @ 40° C (non-condensing), Operating                                                                                 |
| Software Development Kit | Operating System       | Supports Microsoft Windows 8, Windows 7, XP with SP3, XP Embedded                                                       |
|                          | EWf & WDT SDK          | EWf and WDT libraries for signage stability design in XPE                                                               |
| Certifications           | Linux                  | Linux Fedora 14                                                                                                         |
|                          | Electromagnetic        | CE/FCC Class A, CCC, BSMI                                                                                               |
|                          | Safety                 | UL, CB, CCC, BSMI                                                                                                       |

\* Playback is supported by software not provided by Advantech.

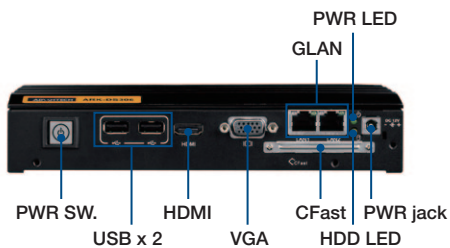
## Dimensions

Unit: mm [inch]



## ARK-DS306 External I/O

### Front



### Back



## Packing List

| Part Number | Description                          |
|-------------|--------------------------------------|
| -           | 1 x ARK-DS306 Unit                   |
| -           | 1 x Driver/Utility CD/Manual         |
| -           | 1 x User Manual (Simplified Chinese) |
| -           | 1 x 12V Power Adapter                |
| -           | 1 x China RoHS                       |
| -           | 1 x Mounting plate set               |

## Embedded OS

| Part Number | Description                |
|-------------|----------------------------|
| 2070010844  | XPE WES2009 V4.0 Multi-24  |
| 2070011381  | WES7E, 32-bit, EN/JP/TC/SC |
| 2070012523  | WES7P, 32-bit, EN/JP/TC/SC |
| 2070012483  | WE8S, 32-bit, EN/JP/TC/SC  |

## Accessories

| Part Number  | Description                                      |
|--------------|--------------------------------------------------|
| AMO-WIFI06E  | Wi-Fi 802.11 b/g/n Mini-PCIe module (w/ antenna) |
| AMO-HSDPA02E | 3.75G HSDPA Mini-PCIe module                     |
| AMK-V001E    | VESA mount kit                                   |
| AMK-V002E    | VESA mount kit for ARM                           |
| AMK-V005E    | VESA mount kit (Generic for ARK-DS/DS products)  |

## Ordering Information

| Part Number      | Description                           |
|------------------|---------------------------------------|
| ARK-DS306B-D0A1E | ARK-DS306 Barebone                    |
| ARK-DS306F-D0A1E | ARK-DS306, AMD T40N, 2G RAM, 500G HDD |

## Power Cord

| Part Number | Description                       |
|-------------|-----------------------------------|
| 1700001524  | 3-pin power cord (US)             |
| 170203183C  | 3-pin power cord (EU)             |
| 170203180A  | 3-pin power cord (UK)             |
| 1700008921  | 3-pin power cord with PSE (Japan) |
| 1700019146  | 3-pin power cord (CCC)            |

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