

ARK-DS302

Compact HD Digital Signage Platform



Features

- Compact size and low profile for easy installation & mounting
- Fanless design for enhanced reliability
- Extremely power saving and low power consumption platform
- Built-in Intel GMA 500 hardware video decode accelerator
- Supports both landscape and portrait mode of display
- Supports Windows XPe Vista & Linux
- Supports WDT (watchdog timer) for signage purpose



Introduction

ARK-DS302 is a small profile, all-in-one Windows XPe ready network appliance and control box for digital signage application. The Intel Silverthorne XL processor gives it the power for full HD decoding. This easy-to-implement network appliance enables centralized control, scheduling and delivery of multimedia content through IP/Ethernet networks. Built on an x86 platform and XP Embedded OS, it is easy for application development. The compact -size design and the standard mounting bracket of ARK-DS302 makes it can be easily mounted behind the signage display devices.

Specifications

Processing System	CPU	Intel® Silverthorne XL, 1.1 GHz (Z510)	Intel® Silverthorne XL, 1.6 GHz (Z530)
	Chipset	Intel Poulso XL (US15W)	
	L2 Cache	512 K	
	BIOS	AWARD 8M bit	
	Front Side Bus	400 MHz	533 MHz
Graphic	Chipset	Intel GMA 500 for XPe (hardware video decode accelerator for MPEG-2, AVC/H.264)	
	Memory Size	DVMT memory size up to 256 MB (programmable)	
Memory	Technology	Single DDR2-400/533 SODIMM supported.	
	Capacity	1 GB (max. capacity as 2 GB)	
Network	LAN	GigaLAN 1 x RJ45	
	Wireless	Optional (via MiniPCIe module)	
I/O Ports	Display	1 x DVI-D (with DVI-D to HDMI convertor)	
	Audio	Azalia compatible audio codec to provide 1 x LINE-IN and 1 x LINE-OUT	
	USB 2.0	2 x USB connector	
	Serial	1 x RS-232	
	PSW	1 x Power on/off button 1 x Reset button	
Expansion	Mini-PCIe	1 x Mini-PCIe	
Media formats (with AP S/W)***	Video codec**	WMV, H.264, MPEG 2/4	
	Video format	WMV, MOV, AVI	
	Audio codec	2 channels, MPEG-1 Layers I, II and III (MP3), 16-bit PCM, bit rate up to 384 kbps, sample rate up to 48 KH, AC3, AAC., etc (depends on S/W codec)	
	Still image format	JPEG, BMP, TIFF, GIF, PNG	
	Flash format	SWF	
Player function (with AP S/W)	Text	Fixed Text, Live RSS Feed	
	Program update	Through LAN, WAN or USB storage	
	Scrolling text	Variable scrolling speed and position	
	Playlist	Scheduling playback, endless loop playback, auto play after power on	
Storage	CF card	Compact Flash socket for type II / CF version without CF card (P/N: DSA-3020-BXLE)	
	HDD	2.5" HDD SATA (160 GB default) / HD Version [HDD Version P/N: DSA-3020-HDXLE]	
Power	Power computation	Average 10W	
	Power supply	12 V DC ~19 V DC , 2A mini	
Environment	Operating temperature	0 ~ 45° C	
	Storage temperature	-20° C ~ 80° C	
	Relative humidity	95% @ 40° C (non-condensing), Operating	
	Vibration resistance	1 Grms (CF Version) / 0.5 Grms (HD Version), IEC 60068-2-64, Random, 5 ~ 500 Hz, 1hr/axis	

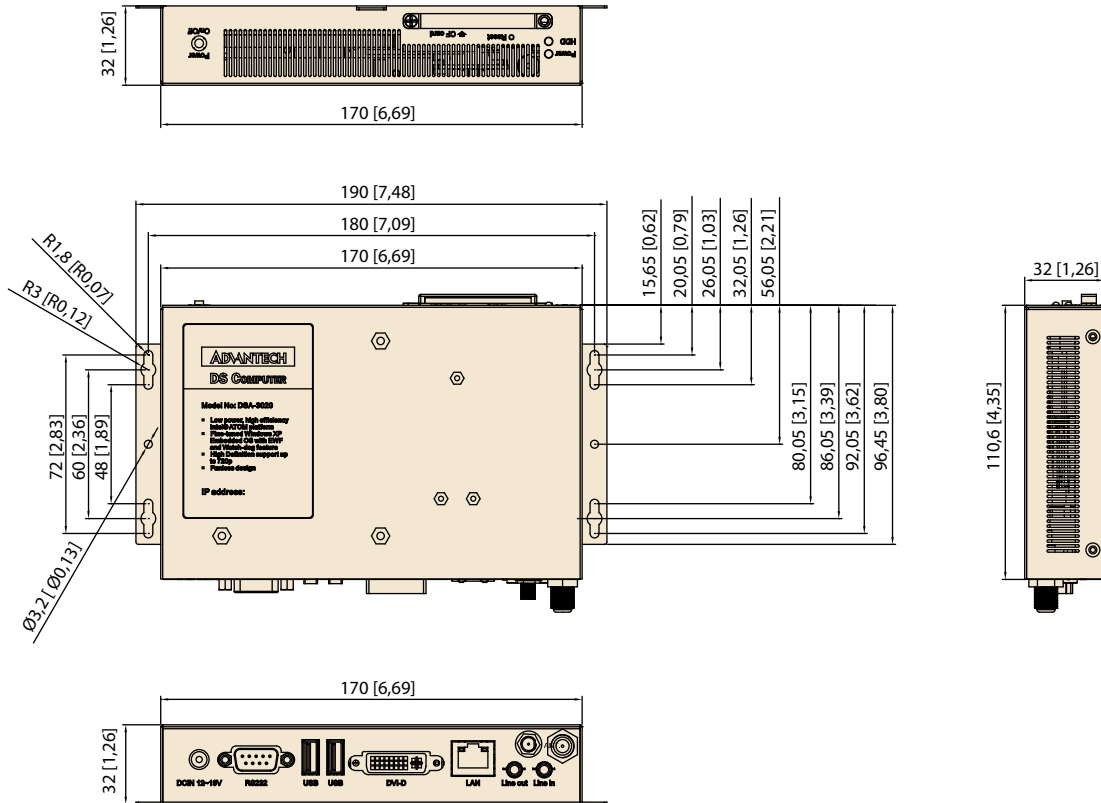
* Testing with 3rd party decoder @1080P 25mpbs, H.264

** Limited on CPU performance & decoder from 480P to 1080P

*** The playback is supported by the software not provided by Advantech

Dimension

Unit: mm (inch)



Physical	Dimension	170 x 110.6 x 32 mm (6.7" x 4.4" x 1.3")
	Weight	0.8 kg (1.76 lb) / 0.9 kg (1.98 lb)
Watchdog timer	Output	Interrupt, system reset
	Interval	Programmable 2 ~ 40 sec. default.
Certification	Electromagnetic	CE, FCC
	Safety	UL, CB, CCC
	Environmental protection	RoHS, WEEE

Ordering Information

Part No.	Description
ARK-DS302D-S6A2E	DSA-3020 1.6 GHz CPU with 1 GB RAM, 160 GB HDD
ARK-DS302-S6A2E	DSA-3020 1.6 GHz CPU, standard CF version without CF card
ARK-DS302-S1A2E	DSA-3020 1.1 GHz CPU with 1 GB RAM, 160 GB HDD

Power Cord Option

Part Number	Descriptions
1700001524	Power cord 3P/3P 180cm, US/UL
170203183C	Power cord, 3P, 183cm, Europe
170203180A	Power cord, 3P, 180cm, UK
1700008921	Power cord, 3P, Japan/ with PSE mark
1757002601	Power adaptor, 12V-19V, Japan/ with PSE mark

Accessory List

Part Number	Description
2070007649	XPE WES2009 for ARK-DS302 V4.0 ENG
2070008130	XPE WES2009 for ARK-DS302 JPN V4.01
968EMW0021	Wireless IEEE 802.11b/g/n (AW-NE768)
1750000318	EMI Antenna 2 DBI 2.4 GHz SMA CONN
1700001854	A Cable SMA/I-PEX 11CM C-G
XAERVA-TV CA-TM500	DVBT Hybrid mini card
9680005765	Bluetooth Module USB 3.3V
1700013637	A Cable 1 x 8P-0.8/1 x 8P-1.25 14.5 cm
1960033142N000	Mounting kit for DSA-3020/ DSA-2130/ DSA-3040
1960035858N000	Mounting kit for DSA-3020

Packing List

1. DSA-3020
2. CD-ROM
3. VESA Mounting Bracket
4. DVI-D to HDMI Converter
5. Power Adaptor