ARK-3400

Intel® Celeron® M Solution with 2 PCI Expansion Slots and Multiple I/O

Features

- Fanless, Intel® Celeron™ M Processor Compact Embedded Box IPC
- Dual display and support for wide screen with high resolution
- Supports 2 GbE, eSATA, 6 USB 2.0 and 4 COM ports
- Internal one 2.5" SATA HDD drive bay
- 2 x PCI expansion slot for diverse applications
- Easy integration, easy maintenance, and wide input voltage range
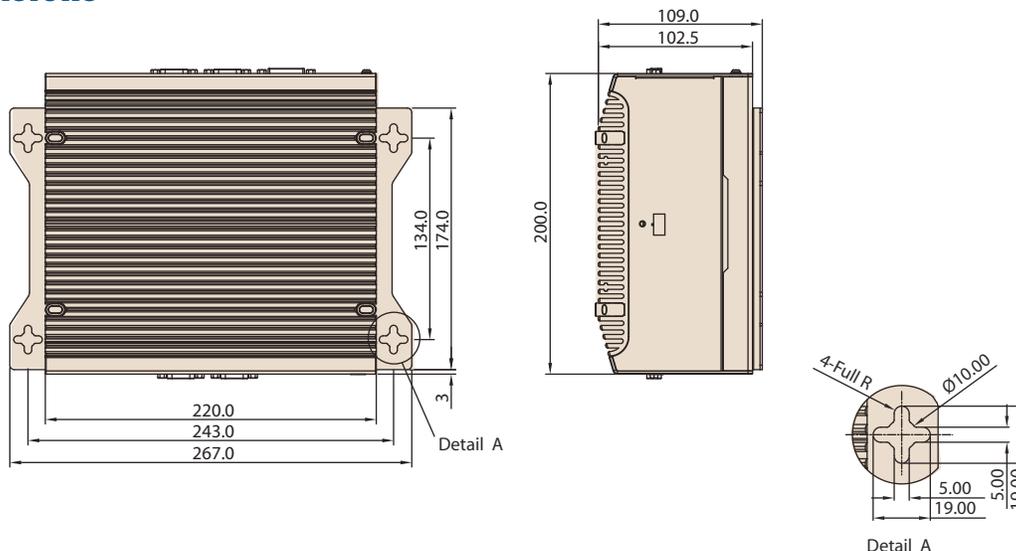- Supports 48-bit LVDS panel (optional)
- Compliant with IP40

Windows Embedded

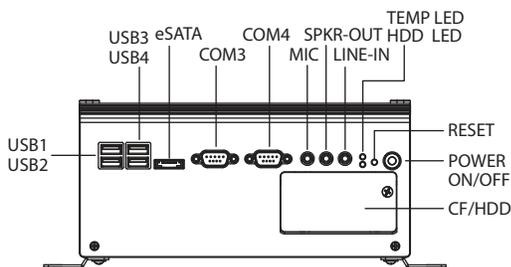LISTED c UL us E180881 CE FCC RoHS COMPLIANT 2002/95/EC

Specifications

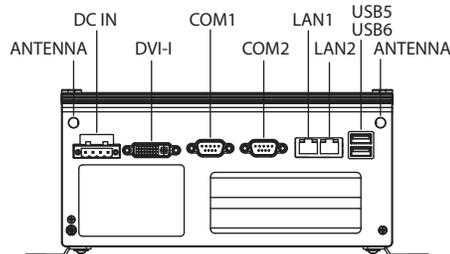|			
Processor System	CPU	Mobile Intel Celeron 370	Mobile Intel Celeron 373
	Max. Speed	1.5 GHz	1.0 GHz w/o L2 Cache
	System Chipset	Intel 910GMLE + ICH6-M Chipset	
	Front Side Bus	400 MHz	400 MHz
	BIOS	Award 4 MB Flash BIOS	
Memory	Technology	DDR2 400 MHz (910GMLE)	
	Max. Capacity	2 GB	
	Socket	1 x 200-pin SODIMM	
Graphics	Chipset	Integrated graphics built in Intel 910GMLE, Mobile Intel Graphics Media Accelerator 900	
	Interfaces	CRT Interfaces (Optional by Cable) DVI Interfaces, compliant with DVI 1.0 LVDS 1 48-bit LVDS Interfaces (Optional) LVDS 2 48-bit LVDS Interfaces (Optional)	
Ethernet	LAN 1	10/100/1000 Mbps Ethernet controller, supports Wake On LAN	
	LAN 2	10/100/1000 Mbps Ethernet controller, supports Wake On LAN	
Audio	Interfaces	Line-out, Mic-in, Line-in	
I/O Interfaces	Serial Interfaces	2 x RS-232 port and 2 x RS-232/422/485 port (RS-485 with autoflow control)	
	USB Interfaces	6 x USB ports, Compliant with USB 2.0	
	eSATA Interfaces	1 x eSATA port	
	Parallel Port	Supports D-sub 25-pin connector (optional by cable)	
	Digital I/O	Support up to 16-bit DIO (optional)	
Other	Thermal Alarm	Yellow LED lighting	
	Watchdog Timer	255 level timer interval, setup by software	
Expansion	ISA/PCI/PCIe Slot	2 x PCI Slots, Supports maximum dimension of 167 mm (width) x 106 mm (length) for expansion PC board	
	Mini PCI/Mini PCIe	1 x Mini PCI	
Storage	HDD	Supports drive bay space for 1 x SATA 2.5" HDD (9.5 mm height only)	
	SSD	Supports CompactFlash socket for type I/II CompactFlash disk	
Software Support	Microsoft Windows	Vista, XP Professional, XP Embedded, WinCE 5.0, WinCE 6.0	
	Linux	Fedora 9.0	
Power Requirement	Power Type	AT/ATX	
	Power Input Voltage	14 V_{DC} ~ 24 V_{DC}	
	Minimum Power Input	14 V–24 V === 3.0 A-1.8 A	
	Power Adapter	AC to DC, DC19 V/7.89 A, 150 W (Optional)	
Power Consumption	Typical	Typical 21 W (CPU is Mobile Intel Celeron 370 1.5 GHz and w/o expansion)	
	Max.	Max. 26 W (CPU is Mobile Intel Celeron 370 1.5 GHz and w/o expansion)	
Mechanical	Construction	Aluminum housing	
	Mounting	Desk/Wall-mounting	
	Dimensions (W x H x D)	220 mm x 102.5 mm x 200 mm (8.66" x 4.04" x 7.87")	
	Weight	4 kg (8.8 lb)	
Environment	Operating Temperature	With industrial grade CompactFlash disk: -20 ~ 55° C With 2.5-inch extended temperature hard disk -20 to 45° C, with air flow	
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)	
	Relative Humidity	95% @ 40° C (non-condensing)	
	Vibration Loading During Operation	With CompactFlash disk: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis With 2.5-inch hard disk: 1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis	
	Shock During Operation	With CompactFlash disk: 50 G, IEC 60068-2-27, half sine, 11 ms duration With hard disk: 20 G, IEC 60068-2-27, half sine, 11 ms duration	
	EMC	CE/FCC Class A, CCC, BSMI	
	Safety Certifications	UL, CCC, BSMI	

ADVANTECH   Embedded IPC

Dimensions

Unit: mm (inch)

Detail A

Front Panel External I/O Mechanical Layout/Drawing

USB3 eSATA
USB4
COM3 COM4 MIC SPKR-OUT LINE-IN
TEMP LED
HDD LED

USB1
USB2
RESET
POWER ON/OFF
CF/HDD

Rear Panel External I/O Mechanical Layout/Drawing

DC IN
ANTENNA DVI-I COM1 COM2 LAN1 LAN2 USB5 USB6 ANTENNA

Packing List

Part Number	Description
-	1 x ARK-3400 Unit
-	1 x Driver/Utility CD/Manual
1960014487T00C	2 x Desk/Wall mount plate
1652003234	1 x 4-pin Phoenix DC power connector
1654000446	1 x DVI-I to CRT connector

Ordering Information

Part Number	Description
ARK-3400F-S5A1E	Celeron M 370 1.5 GHz Compact Embedded Box IPC
ARK-3400F-S0A1E	Celeron M 373 1.0 GHz Compact Embedded Box IPC

Optional Items

Part Number	Description
1757002161	AC-to-DC Adapter, DC19 V/7.89 A 150 W, with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
1702002600	Power Cable 3-pin 180 cm, USA type
1702002605	Power Cable 3-pin 180 cm, EU type
1702031801	Power Cable 3-pin 180 cm, UK type
1700004713	Cable DVI-I to DVI-D and CRT
1700009398	LVDS Cable for ARK-3400
1700009396	LVDS power Cable for ARK-3400
1700009407	Digital I/O Cable for ARK-3400
1700009405	Printer Cable for ARK-3400

Embedded OS

Part Number	Description
2070008330	XPE WES2009 for ARK-3400 V4.0 ENG
2070008331	XPE WES2009 for ARK-3400 V4.0 ENG_FRE_GER_ITA
2070008332	XPE WES2009 for ARK-3400 V4.0 ENG_CHT_CHS_JPN
2070008333	CE 5.0 Pro ARK-3400 V1.1 ENG
2070008334	CE 6.0 Pro ARK-3400 V1.2 ENG