

# ARK-1380

## Mainstream Solution for Space Critical Applications



### Features

- Fanless, ultra compact embedded box IPC
- Built-In Intel® Ultra Low Voltage Celeron® M 1 GHz (512 KB L2 Cache)/ 600 MHz CPU
- Two RS-232/422/485 serial ports and Four USB ports
- Comprehensive display, communication and connectivity
- Ultra compact size, VESA mounted, robust construction with fanless operation
- Windows® CE .NET & Windows® XP Embedded ready solution
- IP40

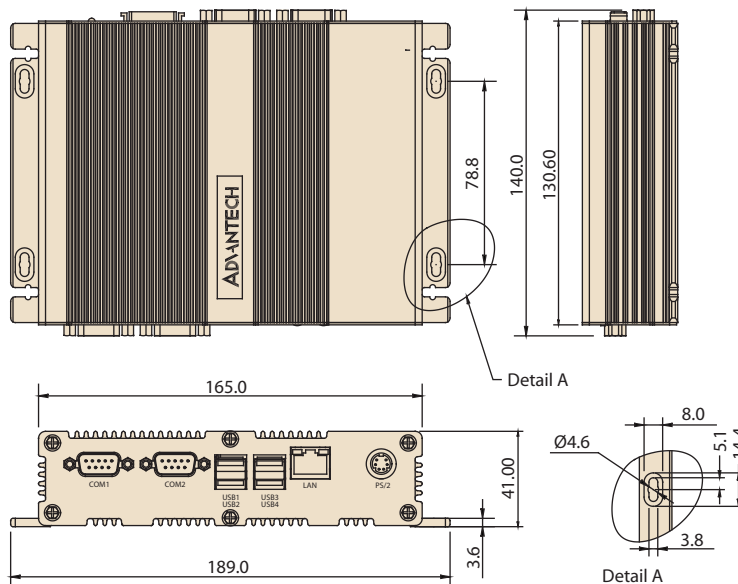


### Specifications

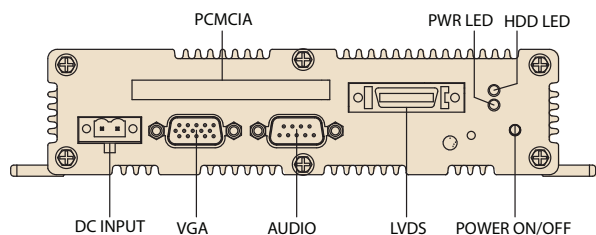
|                       |                            |                                                                                                               |                            |
|-----------------------|----------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------|
| Processor System      | CPU                        | Intel Celeron M ULV                                                                                           | Intel Celeron M ULV        |
|                       | Max. Speed                 | 373 (1 GHz)                                                                                                   | 600 MHz                    |
|                       | Front Side Bus             | 400 MHz FSB                                                                                                   | 400 MHz FSB                |
|                       | System Chipset             | Intel 855GME + ICH4 Chipset                                                                                   | Intel 852GM + ICH4 Chipset |
|                       | BIOS                       | AWARD 4 Mbit, FWH                                                                                             |                            |
| Memory                | Technology                 | DDR 333/400 MHz                                                                                               |                            |
|                       | Max. Capacity              | 1 GB                                                                                                          |                            |
|                       | Socket                     | 1 x 200-pin SODIMM                                                                                            |                            |
| Graphics              | Chipset                    | Built-in 855GME/ 852GM                                                                                        |                            |
|                       | Interface                  | CRT interface<br>Dual 18-bit LVDS interface                                                                   |                            |
| Ethernet              | LAN                        | 10/100 Mbps Ethernet controller, Supports Wake on LAN                                                         |                            |
| Audio                 | Amplifier                  | Output 2.2 W Amplifier                                                                                        |                            |
|                       | Interface                  | 1 x D-sub 15-pin connector, Line-in, Spkr-out, Mic-in                                                         |                            |
| I/O Interface         | Serial Ports               | 2 x RS-232/422/485 ports by BIOS selectable                                                                   |                            |
|                       | USB Interface              | 4 x USB ports, USB 2.0 Compliant                                                                              |                            |
|                       | Keyboard/Mouse             | 1 x PS/2 port, Supports PS/2 Mouse and Keyboard                                                               |                            |
| Other                 | Watchdog Timer             | 255 level timer interval, setup by software                                                                   |                            |
| Expansion             | PC Card                    | 1 Slot PC Card, Supports CardBus (Card-32) and 16-bit (PCMCIA 2.1/JEIDA4.2) cards 5 V and 3.3 V working power |                            |
| Storage               | HDD                        | -                                                                                                             |                            |
|                       | SSD                        | Supports CompactFlash socket for type I/II CompactFlash disk                                                  |                            |
| Software Support      | Microsoft Windows          | Windows XP Embedded, Windows XP Professional, Windows 2000, Windows CE .NET 6.0                               |                            |
| Power Requirement     | Power Type                 | AT/ATX                                                                                                        |                            |
|                       | Power Input Voltage        | 9 V <sub>DC</sub> ~ 35 V <sub>DC</sub>                                                                        |                            |
|                       | Minimum Power Input        | 9 V @ 3.8 A, 12 V @ 2.9 A, 19 V @ 1.84 A, 35 V @ 1 A                                                          |                            |
|                       | Power Adapter              | AC to DC, DC19 V/3.42 A, 65 W                                                                                 |                            |
| Power Consumption     | Typical                    | 13.5 W (ULV Celeron M 1.0 G)                                                                                  |                            |
|                       | Max                        | 16.2 W (ULV Celeron M 1.0 G)                                                                                  |                            |
| Mechanical            | Construction               | Aluminum housing                                                                                              |                            |
|                       | Mounting                   | DIN-rail mounting; Desk/wall-mounting; VESA mounting                                                          |                            |
|                       | Dimensions (W x H x D)     | 189 x 41 x 130.6 mm (7.44" x 1.61" x 5.14")                                                                   |                            |
|                       | Weight                     | 1.15 kg (2.53 lb)                                                                                             |                            |
| Environment           | Operating Temperature      | 0 ~ 60° C (32 ~ 140° F)                                                                                       |                            |
|                       | Storage Temperature        | -40 ~ 85° C (-40 ~ 185° F)                                                                                    |                            |
|                       | Relative Humidity          | 95% @ 40° C (non-condensing)                                                                                  |                            |
|                       | Vibration During Operation | With CompactFlash disk: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1hr/axis.                     |                            |
|                       | Shock During Operation     | With CompactFlash disk: 50 Grms, IEC 60068-2-27, half sine, 11 ms duration                                    |                            |
|                       | EMC                        | CE/FCC Class A, CCC, BSMI                                                                                     |                            |
| Safety Certifications | UL, CCC, BSMI              |                                                                                                               |                            |

## Dimensions

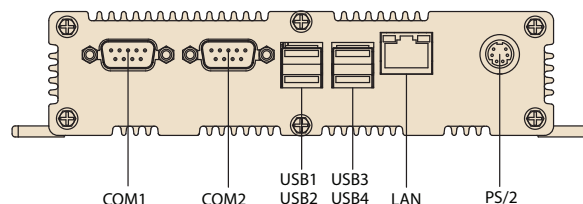
Unit: mm



### Front Panel External I/O Mechanical Layout/Drawing



### Rear Panel External I/O Mechanical Layout/Drawing



## Packing List

| Part Number | Description                                            |
|-------------|--------------------------------------------------------|
| -           | 1 x ARK-1380 unit                                      |
| 1700001394  | 1 x 2-Pole Phoenix to DC-Jack Power Cable              |
| 1700006011  | 1 x DB-9 Male to Mic-In, Line-out, Line-in Audio Cable |
|             | 1 x Driver/Utility CD/Manual                           |
|             | 1 x Traditional Chinese user manual for CCC            |
|             | 1 x China RoHS                                         |

## Optional Items

| Part Number | Description                                                                                     |
|-------------|-------------------------------------------------------------------------------------------------|
| 1757000222  | AC-to-DC Adapter DC19 V/3.42 A 65 W, with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use |
| 1700001947  | Power Cable 2-pin 180 cm, USA type                                                              |
| 1700001948  | Power Cable 2-pin 180 cm, Europe Type                                                           |
| 1700001949  | Power Cable 2-pin 180 cm, UK Type                                                               |
| 1700002141  | Power Cable 2-pin PSE Mark 183 cm                                                               |
| 9666K10000E | DIN-rail Mounting Kit                                                                           |
| 9666K10001E | VESA Mounting plate                                                                             |
| 1700060202  | PS2 Keyboard/Mouse Cable                                                                        |

## Ordering Information

| Part Number     | Description                                                         |
|-----------------|---------------------------------------------------------------------|
| ARK-1380-1S0A1E | Intel Celeron M ULV 1 GHz<br>Ultra-compact embedded box IPC         |
| ARK-1380-2S0A1E | ARK-1380-1S0A1E with 512 MB Memory, 1 GB CF,<br>Windows XP Embedded |
| ARK-1380-1M0A1E | Intel Celeron M ULV 600 MHz<br>Ultra-compact embedded box IPC       |
| ARK-1380-2M0A1E | ARK-1380-1M0A1E with 512 MB Memory, 1 GB CF,<br>Windows XP Embedded |

### Embedded OS (Only available for T-Parts OEM, and CTOS service)

| Part Number | Description                                                                         |
|-------------|-------------------------------------------------------------------------------------|
| 2070005331  | ARK-1380 XPe V3.01-2, English, Chinese-Traditional,<br>Chinese-Simplified, Japanese |
| 2070005332  | ARK-1380 XPe V3.01-2, English, French, German,<br>Italian, Spanish                  |
| 2070001121  | CE50 Pro Plus ARK-1380 V1.2 ENG                                                     |
| 2070001123  | CE60 Pro ARK-1380 V1.0 ENG                                                          |