

# ARK-5420

## Intel® 3rd Generation Core™ i Processor Fanless System with PCIe4 & PCI Slot



### Features

- Support Intel 3rd Generation Core i7/i5/Celeron BGA type CPU
- Intel® HM76 PCH
- Support wide temperature -25° C ~ 60° C
- Support VGA & HDMI
- 1 x 2.5" HDD+1 x m-SATA
- Support PCIe4 /PCI slot /Mini-PCIE
- Supports 9 ~ 36V wide range DC input

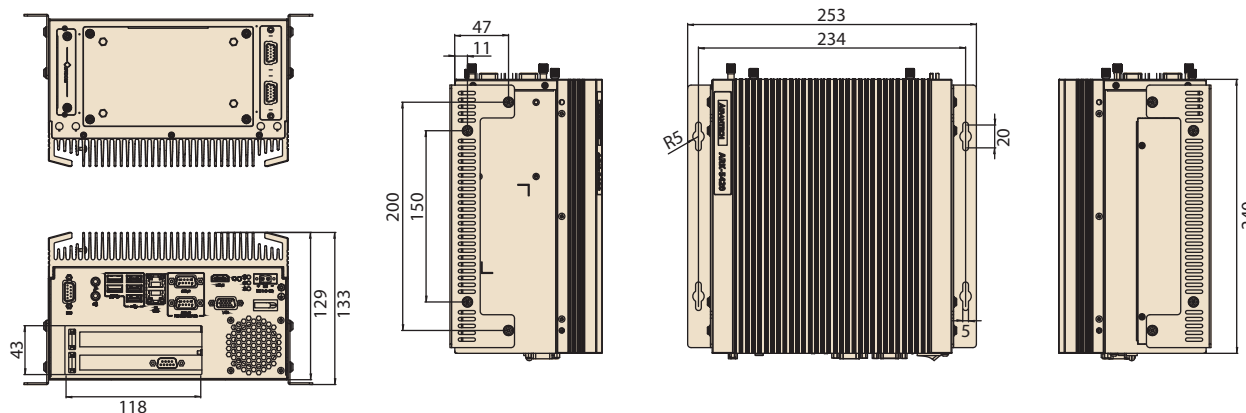


### Specifications

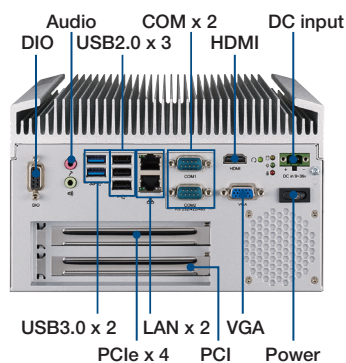
|                     |                       |   |                           |                               |
|---------------------|-----------------------|---|---------------------------|-------------------------------|
| System Chipset      | CPU                   | Intel Core i7-3555LE  | Intel i5-3610ME Processor | Intel Celeron 1020E processor |
|                     | Max Speed             | 2.5GHz  | 2.7 GHz                   | 2.20 GHz                      |
|                     | L3 Cache              | 6 MB  | 4 MB                      | 2 MB                          |
|                     | Chipset               | Intel HM76  |                           |                               |
|                     | BIOS                  | AMI SPI 64 Mb   |                           |                               |
| Memory              | Technology            | DDR3 1333/1600, non ECC   |                           |                               |
|                     | On board memory       | 4 GB on board   |                           |                               |
|                     | Socket                | 1 x 204-pin SODIMM (up to 8GB per DIMM)<br>Note: SODIMM and HDD Tray has mechanism interferences, only 1 x HDD or 1 x CF can be used when you request to expand memory size |                           |                               |
|                     | Maximum Capacity      | 12 GB   |                           |                               |
| Display             | Chipset               | Intel Integrated Graphics HD4000, support Direct x11  |                           |                               |
|                     | VGA                   | 1 x DB15, max resolution up to 2048 x 1536  |                           |                               |
|                     | HDMI                  | 1 x HDMI, support HDMI1.4 standard, max to 1920 x 1200 @ 60Hz   |                           |                               |
|                     | Display Option        | Support Dual independent display  |                           |                               |
| Ethernet            | Controller            | Intel i210-AT, 10/100/1000 Mbps   |                           |                               |
|                     | Interface             | 2 x RJ-45   |                           |                               |
| Storage             | HDD                   | Support 1x 2.5"HDD + CF module (Optional function)  |                           |                               |
|                     | SSD                   | 1 x internal mSATA (Mini-PCIE interface)  |                           |                               |
| I/O                 | USB                   | 2 x USB3.0 + 3x USB 2.0   |                           |                               |
|                     | Serial Port           | 2 x DB9, RS232/422/485 with automatic flow control  |                           |                               |
|                     | DIO                   | 1 x DB9, 8-bit  |                           |                               |
|                     | Audio                 | 2 (1 x Line-Out, 1 x Mic-in)  |                           |                               |
|                     | LPT                   | 1 x DB26 (Front panel, option)  |                           |                               |
|                     | PCIE                  | 1 x PCIe4   |                           |                               |
| Expansion Slot      | PCI                   | 1 x PCI32 33Mhz Slot<br>1 x Internal Mini-PCle (Full-Size)  |                           |                               |
|                     | LED                   | Power x 1/Storage x 1/Fault x 1   |                           |                               |
| LED & Button        | Button                | Power on/off Switch x 1<br>Reset button x 1   |                           |                               |
|                     | Power Type            | ATX/AT  |                           |                               |
| Power               | Power Input Voltage   | 9 ~ 36V <sub>DC</sub>   |                           |                               |
|                     | Output                | System reset  |                           |                               |
| Watchdog Timer      | Interval              | Programmable 1~255 sec/min  |                           |                               |
|                     | Temperature           | Operating (With Industrial SSD)      Operating (with HDD)      Non-Operating  |                           |                               |
| Environment         | Humidity              | -25 ~ 60° C with 0.7m/S air flow      0 ~ 40° C      -40 ~ 85° C  |                           |                               |
|                     | Vibration             | 95% @ 40° C (non-condensing)  |                           |                               |
|                     | Shock                 | With SSD: 2 Grms @ 5 ~ 500 Hz, random, 1 hr/axis<br>With 2.5" HDD: 0.5 Grms @ 5 ~ 500 Hz, random, 1 hr/axis   |                           |                               |
|                     | Shock                 | With SSD: 20G, IEC-68-2-27, half-sine wave, 11 ms duration<br>With 2.5" HDD: 10G, IEC-68-2-27, half-sine wave, 11 ms duration   |                           |                               |
| Mechanical Features | Dimension (W x H x D) | 253 x 129 x 240 mm  |                           |                               |
|                     | Install               | Desktop/Wall-mounting   |                           |                               |
| Certifications      | EMC                   | CE/FCC Class A, CCC, BSMI   |                           |                               |
|                     | Safety                | UL,CCC,BSMI   |                           |                               |

## Dimensions

Unit: mm



## Front View



## Rear View



## Ordering Information

| Part Number    | CPU          | VGA | HDMI | USB3/2 | GbE | COM | PCIe Exp | PCI Exp | Power     |
|----------------|--------------|-----|------|--------|-----|-----|----------|---------|-----------|
| ARK-5420-U5A1E | i7-355LE     | 1   | 1    | 2 + 3  | 2   | 2   | 1(x4)    | 1       | DC9 ~ 36V |
| ARK-5420-U7A1E | i5-3610ME    | 1   | 1    | 2 + 3  | 2   | 2   | 1(x4)    | 1       | DC9 ~ 36V |
| ARK-5420-U2A1E | Celeron 1020 | 1   | 1    | 2 + 3  | 2   | 2   | 1(x4)    | 1       | DC9 ~ 36V |

## Packing List

| Part No.       | Description              |
|----------------|--------------------------|
| -              | ARK-5420                 |
| -              | 1 x Driver CD            |
| 1960059401N001 | 2 x Supporting-angels    |
| 1652002205     | 1 x 2-pin Terminal Block |

## Optional Accessory

| Part No.         | Description  |
|------------------|--|
| 1700019592       | Parallel cable/D-SUB 25P(F)/IDE#2 26P-2.0 15cm           |
| 9692005000E      | CF card board  |
| 96PSA-A120W24T2  | ADP A/D 100-240V 120W 24V                                |
| 1702002600       | Power Cord 3P UL/CSA(USA) 125V 10A 1.83M 180D (for 120W) |
| 1700022940-01    | Power cord PSE 7A 125V 3P 3m DAC-ST01 (for 120W)         |
| 1702002605       | Power cord 2P FRANCE 10A/16A 220V 1.83M 90D (for 120W)   |
| 96PSA-A65W19P2-2 | ADP A/D 100-240V 65W 19V WO/PFC                          |
| 1700001524       | Power Cord 3P UL 10A 125V 180cm (for 65W)                |
| 170203183C       | POWER Code 3P Europe (WS-010+WS-083)183cm (for 65W)      |
| 1700021376-01    | Power Cord 3P PSE 7A 125V 250cm(IEC60320-C5) (for 65W)   |
| PCA-TPM-00A1E    | TPM module   |
| PCA-COM232-00A1E | COM 232 module (4xCOM 232 expanded by cable)             |
| 98R1542000E      | ARK-5420 TPM/COM module Bracket Accessory                |
| 98R2542002E      | ARK-5420 FAN module accessory                            |

## Embedded OS

| Part Number | Description                            |
|-------------|--|
| 2070013339  | Img WES7P ARK-5420 V5.6.6 10muti;sap   |
| 2070013330  | Image WES2009 ARK-5420 V4.7 10muti;SAP |