# ARK-3440

## Intel® Core™ i3/i5/i7 Processor with PCI/PCle Expansion and Dual SATA HDDs

### Features
- Intel® Core™ i3/i5/i7 fanless embedded IPC
- Multi-display and support for wide screen with high resolution
- Supports 2 GbE, eSATA, 6 USB 2.0, audio and 3 COM ports
- Two internal 2.5" SATA HDD drive bays
- Various expansion interfaces for diverse applications
- Easy integration, easy maintenance, and wide input voltage range
- IP40

### Specifications

#### Processor System
- **CPU**: Intel Core i7 SV up to 2.53 GHz
- **System Chipset**: Intel QM57 chipset
- **BIOS**: AMI 64 MB SPI BIOS

#### Memory
- **Technology**: DDR3 1066/1333 MHz
- **Max. Capacity**: 4 GB
- **Socket**: 2 x 204-pin SODIMM

#### Graphics
- **Chipset**: Integrated graphics built in Intel QM57
- **Interface**: CRT Interface (Optional by cable)

#### Ethernet
- **LAN 1**: 10/100/1000 Mbps Ethernet controller, support Wake On LAN
- **LAN 2**: 10/100/1000 Mbps Ethernet controller, support Wake On LAN

#### Audio
- **Amplifier**: Dual output 2.2 W amplifier
- **Interface**: Spkr-out, Mic-in, Line-in

#### IO interface
- **Serial Interface**: 2 x RS232, 1 x RS232/422/485 (w/ auto flow control)
- **USB Interface**: 6 x USB ports, compliant with USB 2.0
- **Parallel Port**: Supports D-sub 25-pin connector (optional)
- **Digital I/O**: Support 16-bit digital IO (optional)

#### Other
- **Thermal alarm**: Yellow LED lighting
- **Watchdog timer**: 255-level timer interval, setup by software

#### Expansion
- **ISA/PCI/PCle Slot**: 1 Slot PCI and 1 Slot PCIe x1 (default); 2 Slots PCIe x1 (optional); 2 Slots PCI (optional); 1 Slot PCI and 1 Slot PCIe x4 (optional)
- **Mini PCI/Mini PCle**: 2 x Mini PCle

#### Storage
- **HDD**: Supports drive bay space for 2 x SATA 2.5" HDD (9.5 mm height only)
- **SSD**: Supports Compact Flash socket for type II Compact Flash disk

#### Software Support
- **Microsoft Windows**: Windows 7, XP Professional, XP Embedded
- **Linux**: Fedora 14

#### Power Requirement
- **Power Type**: ATX
- **Input Voltage**: 9 VDC ~ 34 VDC
- **Minimum Power Input**: DC 9-34V @ 6.0-1.5A
- **Power Adapter**: AC to DC, 19V/7.89A, 150W (Optional)
- **Power Consumption**:Typical 38 W (with is Intel @ Core i7-610E at 2.53 GHz and w/o expansion)
- **Max.**: 47.94 W (with is Intel @ Core i7-610E at 2.53 GHz and w/o expansion)

#### Mechanical
- **Construction**: Aluminum housing
- **Mounting**: Desk/wall-mounting
- **Dimensions (W x H x D)**: 200 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 extend temperature peripherals Compact Flash disk: -20 to 50°C with 10°C to 50°C, with airflow
- **Relative Humidity**: 95% @ 40°C (non-condensing)
- **Vibration Loading During Operation**: With Compact Flash disk: 5 Gms, IEC 60068-2-64, random, 5 – 500 Hz, 1 Oct./min, 1 hr/axis.
- **Shock During Operation**: With Compact Flash disk: 50 G, IEC 60068-2-27, half sine, 11 ms duration
- **EMC**: CE/FCC Class A, CCC, BSMI

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[Downloaded from Arrow.com](https://www.arrow.com)
ARK-3440

Dimensions

Unit: mm (inch)

Front Panel External I/O Mechanical Layout/Drawing

Rear Panel External I/O Mechanical Layout/Drawing

Packing List

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>-</td>
<td>1 x ARK-3440 Unit</td>
</tr>
<tr>
<td>-</td>
<td>1 x Driver/Utility CD/Manual</td>
</tr>
<tr>
<td>1960014487700C</td>
<td>2 x desk/wall mount plate</td>
</tr>
<tr>
<td>1652003234</td>
<td>1 x 4-pin Phoenix DC power connector</td>
</tr>
<tr>
<td>1654000446</td>
<td>1 x DVI-I to CRT connector</td>
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</table>

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARK-3440F-U5A1E</td>
<td>Intel Core i7 compact embedded box IPC</td>
</tr>
<tr>
<td>ARK-3440F-U4A1E</td>
<td>Intel Core i5 compact embedded box IPC</td>
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<tr>
<td>ARK-3440F-U1A1E</td>
<td>Intel Core i3 compact embedded box IPC</td>
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Optional Items

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1757002161</td>
<td>AC-to-DC adapter, DC19 V/7.89A 150 W, with phoenix power plug, 0 - 40° C for home and office Use</td>
</tr>
<tr>
<td>1702002600</td>
<td>Power cable 3-pin 180 cm, USA type</td>
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<tr>
<td>1700004713</td>
<td>CABLE DVI-I to DVI-D and CRT</td>
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<tr>
<td>1700018187</td>
<td>LPT cable 2 x 130-2.0/D-SUB 25P(F) 20 cm for ARK-3440</td>
</tr>
<tr>
<td>1700009407</td>
<td>DIO cable 1<em>8P-2.54/2</em>10P-2.0 125 10 cm for ARK-3440</td>
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<tr>
<td>1700008871</td>
<td>COM Cable D-SUB 9P(M)/IDE#2 10P-2.0 20 cm</td>
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<tr>
<td>AMO-R010E</td>
<td>2 slot riser card, 1 x PCIe x1 + 1 x PCI</td>
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<tr>
<td>AMO-R009E</td>
<td>2 slot riser card, 2 x PCIe x1</td>
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<tr>
<td>AMO-R013E</td>
<td>2 slot riser card, 2 x PCIe</td>
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<tr>
<td>AMO-R014E</td>
<td>2 slot riser card, 1 x PCI + 1 x PCIe x4 (customized BIOS required)</td>
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</tbody>
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Embedded OS

<table>
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<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>2070009811</td>
<td>WES2009 ARK-3440 ENG_FRE_GER_ITA_SPA</td>
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<tr>
<td>2070009812</td>
<td>WES2009 ARK-3440 ENG_CHT_CHS_JPN</td>
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