Features

- Intel® Atom™ Processor E3825 Dual Core 1.33 GHz SoC
- 1 x 2.5" SATA HDD/SSD Bay
- 1 x GbE & 1 x VGA & 1 x GPIO
- 1 x RS-232 & 1 x RS-232/422/485
- 1 x Full-Size MiniPCIe (ex. WLAN or WWAN module)
- 1 x Half Size MiniPCIe (ex. mSATA)
- Optional VESA / DIN Rail / Wall Mounting kits
- Threaded DC jack design
- Supports SUSIAccess and Embedded Software APIs

Specifications

<table>
<thead>
<tr>
<th>ARK-1123L-S3A1E</th>
</tr>
</thead>
</table>

**Processor System**
- CPU: Intel Atom E3825 Dual Core SoC
- Frequency: 1.33 GHz
- L2 Cache: 1 MB
- BIOS: AMI EFI 64 Mbit (Default BIOS is supported for 64-bit OS installation, BIOS for 32-bit OS is supported by project)

**Memory**
- Technology: DDR3L 1066MHz
- Max. Capacity: 8 GB
- Socket: 1 x 204-pin SO-DIMM

**Graphics**
- Chipset: Intel® Atom SoC integrated Graphic Engine
- DirectX* 11.1, OGL 3.0, OCL 1.1, OGL ES 2.0 support
- Encode: H264, MPEG2/4, VC1, WMV9
- Decode: H264, MPEG2
- VGA: 1 x VGA, support up to 1920 x 1200 at 60Hz

**Audio**
- Main System: ALC-888S, High Definition Audio. Line-out & Line-in

**Ethernet**
- LAN #1: 10/100/1000 Mbps Intel I210 GbE, support Wake on LAN

**I/O Interface**
- Serial Ports: 1 x RS-232 & 1 x RS-232/422/485 (BIOS selectable)
- USB Interface: 1 x USB 2.0 & 1 x USB3.0

**Other**
- Watchdog timer: 255-level timer interval, setup by software
- GPIO: 8 bit GPIO

**Expansion**
- Mini PCIe: 1 x Full-size Mini PCIe, support WLAN or WWAN module

**Storage**
- 2.5" Drive Bay: 1 x 2.5" SATA HDD Bay (Max Height 9.5mm)
- mSATA: 1 x Half-size mSATA

**Software Support**
- Microsoft Windows: WES7, Windows 7, WE8S, Windows 8 and Windows 10 (32-bit support by project)
- Linux: Support (by Project)

**Power Requirement**
- Power Input Voltage: Single 12 VDC
- Power Adapter: AC to DC, DC12 V/3 A, 36 W with threaded design

**Power Consumption**
- Typical: 5.28W
- Max: 8.16W

**Mechanical**
- Construction: Aluminum housing
- Mounting: VESA/DIN Rail/Wall Mounting Kits (Optional)
- Dimensions (W x H x D): 133.8 x 43.1 x 94.2 mm (5.27” x 1.7” x 3.71”)
- Weight: 0.8kg

**Environment**
- Operating Temperature: With extended temperature SSD/mSATA/RAM : -30 – 70° C with 0.7m/s air flow
- With standard temperature HDD/SSD/mSATA/RAM peripherals: 0 – 40° C with 0.7m/s air flow
- Storage Temperature: -40 – 85° C (-40–185° F)
- Relative Humidity: 95% @ 40° C (non-condensing)
- Vibration During Operation: With mSATA/SSD: 3 Grms, IEC 60068-2-64, random, 5 – 500 Hz, 1 hr/axis
- With SSD: 0.5Gms, IEC 60068-2-64, random, 5–500Hz, 3 axes, 1hr/axis
- Shock During Operation: With mSATA/SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration
- With SSD: 10G, IEC 60068-2-27, half sine, 11 ms duration

**Regulation**
- EMC: CE/FCC Class A, CCC, BSMI
- Safety: UL, CCC, BSMI, CB

For technical advice and sales please contact tel: 0330 124 4540 email: smartwave@apcplc.com
**Packing List**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>1 x ARK-1123L Unit</td>
</tr>
<tr>
<td>-</td>
<td>1 x User Manual (Simplified Chinese)</td>
</tr>
<tr>
<td>96PSA-A36W12W7</td>
<td>1 x AC to DC adapter DC 12V/3A 36W, -20 ~ 60° C</td>
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</table>

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

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2070013031</td>
<td>WES7E 64-bit with EN/JP/TC/SC (OS size around 11G)</td>
</tr>
<tr>
<td>2070013369</td>
<td>WES8 64-bit with EN/JP/TC/SC (OS size around 13G)</td>
</tr>
<tr>
<td>2070014790</td>
<td>WIN10 IoT LTSB x64 Eng</td>
</tr>
</tbody>
</table>

**Ordering Information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Intel CPU</th>
<th>RAM</th>
<th>VGA</th>
<th>GbE</th>
<th>USB 2.0</th>
<th>USB 3.0</th>
<th>RS-232/422/485</th>
<th>GPIO</th>
<th>Audio</th>
<th>MiniPCIe</th>
<th>2.5&quot; HDD bay</th>
<th>mSATA</th>
<th>Operating Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARK-1123L-S3A1E</td>
<td>Intel Atom E3825</td>
<td>Up to 8GB</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1 Full size</td>
<td>1 (H/S)</td>
<td>1</td>
<td>-30 ~ 70° C</td>
</tr>
</tbody>
</table>

Note: Memory, storage and operating system bundled by request.

**Optional Items**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1700001524</td>
<td>Power Cable 3-pin 180cm, USA type</td>
</tr>
<tr>
<td>170203183C</td>
<td>Power Cable 3-pin 180cm, Europe type</td>
</tr>
<tr>
<td>170203180A</td>
<td>Power Cable 3-pin 180cm, UK type</td>
</tr>
<tr>
<td>1700008921</td>
<td>Power Cable 3-pin PSE Mark 183cm</td>
</tr>
<tr>
<td>AMK-V003E</td>
<td>ARK-112X series VESA mounting kit</td>
</tr>
<tr>
<td>AMK-R001E</td>
<td>ARK-112X series DIN-rail mounting kit</td>
</tr>
<tr>
<td>AMK-W001E</td>
<td>ARK-112X series Wall mounting kit</td>
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