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Revision History

<table>
<thead>
<tr>
<th>Revision</th>
<th>Brief Description of Changes</th>
<th>Date of Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Initial Issue</td>
<td>August 2nd 2017</td>
</tr>
<tr>
<td>1.1</td>
<td>Update to AP1430 web page link</td>
<td>August 28th 2017</td>
</tr>
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Customer Service

Visit our website at [www.kontron.com](http://www.kontron.com).

Customer Comments

If you have any difficulties using this guide, discover an error, or just want to provide some feedback, please send a message to Kontron. Detail any errors you find. We will correct the errors or problems as soon as possible and post the revised user guide on our website. Thank you.
Symbols

The following symbols may be used in this guide

**DANGER**

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**WARNING**

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION**

CAUTION indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

**NOTICE**

NOTICE indicates a property damage message.

**Electric Shock!**

This symbol and title warn of hazards due to electrical shocks (>60 V) when touching products or parts of them. Failure to observe the precautions indicated and/or prescribed by the law may endanger your life/health and/or result in damage to your material. Please refer also to the "High-Voltage Safety Instructions" portion below in this section.

**ESD Sensitive Device!**

This symbol and title inform that the electronic boards and their components are sensitive to static electricity. Care must therefore be taken during all handling operations and inspections of this product in order to ensure product integrity at all times.

**HOT Surface!**

Do NOT touch! Allow to cool before servicing.

**i**

This symbol indicates general information about the product and the user guide.

This symbol also indicates detail information about the specific product configuration.

This symbol precedes helpful hints and tips for daily use.
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Electrostatic Discharge

⚠️ CAUTION ⚠️ The AP100 is sensitive to electrostatic discharge (ESD). Users must take the appropriate precautions when handling ESD-sensitive devices.

Limited Warranty

Kontron grants the original purchaser of Kontron’s products a TWO YEAR LIMITED HARDWARE WARRANTY as described in the following. However, no other warranties that may be granted or implied by anyone on behalf of Kontron are valid unless the consumer has the express written consent of Kontron.

Kontron warrants their own products, excluding software, to be free from manufacturing and material defects for a period of 24 consecutive months from the date of purchase. This warranty is not transferable nor extendible to cover any other users or long-term storage of the product. It does not cover products which have been modified, altered or repaired by any other party than Kontron or their authorized agents. Furthermore, any product which has been, or is suspected of being damaged as a result of negligence, improper use, incorrect handling, servicing or maintenance, or which has been damaged as a result of excessive current/voltage or temperature, or which has had its serial number(s), any other markings or parts thereof altered, defaced or removed will also be excluded from this warranty.

If the customer’s eligibility for warranty has not been voided, in the event of any claim, he may return the product at the earliest possible convenience to the original place of purchase, together with a copy of the original document of purchase, a full description of the application the product is used on and a description of the defect. Pack the product in such a way as to ensure safe transportation (see our safety instructions).

Kontron provides for repair or replacement of any part, assembly or sub-assembly at their own discretion, or to refund the original cost of purchase, if appropriate. In the event of repair, refunding or replacement of any part, the ownership of the removed or replaced parts reverts to Kontron, and the remaining part of the original guarantee, or any new guarantee to cover the repaired or replaced items, will be transferred to cover the new or repaired items. Any extensions to the original guarantee are considered gestures of goodwill, and will be defined in the “Repair Report” issued by Kontron with the repaired or replaced item.

Kontron will not accept liability for any further claims resulting directly or indirectly from any warranty claim, other than the above specified repair, replacement or refunding. In particular, all claims for damage to any system or process in which the product was employed, or any loss incurred as a result of the product not functioning at any given time, are excluded. The extent of Kontron liability to the customer shall not exceed the original purchase price of the item for which the claim exists.

Kontron issues no warranty or representation, either explicit or implicit, with respect to its products reliability, fitness, quality, marketability or ability to fulfill any particular application or purpose. As a result, the products are sold “as is,” and the responsibility to ensure their suitability for any given task remains that of the purchaser. In no event will Kontron be liable for direct, indirect or consequential damages resulting from the use of our hardware or software products, or documentation, even if Kontron were advised of the possibility of such claims prior to the purchase of the product or during any period since the date of its purchase.

Please remember that no Kontron employee, dealer or agent is authorized to make any modification or addition to the above specified terms, either verbally or in any other form, written or electronically transmitted, without the company’s consent.
1/ Introduction

1.1. Product Description

The AP1430 network platform offers high reliability and performance through the LGA1151 socket Intel® Xeon® E3 and 6th generation Intel® Core™ processors (codename: Skylake) with Intel® C236 chipset. The new platform features increased processor performance and faster I/O based on PCIe Gen 3, and brings greater memory bandwidth and capacity with DDR4 technology. This powerful network device offers outstanding I/O density scaling up to 13 one gigabit Ethernet ports, or three 10GbE ports in a modular architecture. The Network Interface Card (NIP) enables numerous port configurations with or without network bypass, offload and acceleration.

More detailed product information on the AP1430 is available on Kontron’s website at:


1.2. Purpose of this Document

This document serves as an ordering reference guide, providing details on what parts are available from Kontron for the AP1430 platform and its associated accessories and spares. Included are the necessary order codes and other important configuration information related to the ordering of the product.

Supported third-party components are not covered by this document, and may be found in the Tested Hardware and Operating System List (THOL) of the AP1430.

1.3. Technical or Customer Support

You can reach Kontron customer support in the following ways: visit the Kontron website at kontron.com or email your questions to Support-COM@kontron.com.
2/ Ordering AP1430 System and Components

This section includes information to help order AP1430 systems.

2.1. Base System

Base system (PN 1061-3644) includes:

- Chassis
  - sheet metal, top cover, PCIe faceplate adapter bracket, air duct, interconnection cables, misc. parts
- Boards and cables
  - Baseboard, power distribution board, system management board, fans, interconnect cables
- AC PSU (quantity = 2)
- Power distribution board
- Power cord (quantity = 2)
- CPU heatsink
- 2.5" HDD Carrier (no HDD) + SATA cable
- Front ears + basic rear brackets (up to 26.5" (673 mm) rack depth).

2.2. Select CPU

The AP1430 is designed to support the following processor SKUs from the Intel® Xeon® processor E3-1200 v5 series.

Table 1: Intel® Processors Xeon® E3 v5 Family Supported by the AP1430

<table>
<thead>
<tr>
<th>Processor Number</th>
<th>Cores</th>
<th>Hyperthreading</th>
<th>Speed</th>
<th>TDP</th>
<th>Graphical Engine</th>
<th>Memory Speed Support</th>
<th>Kontron P/N</th>
<th>Intel P/N (tray)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3-1225 v5</td>
<td>4</td>
<td>No</td>
<td>3.3 GHz</td>
<td>80 W</td>
<td>Yes Intel® HD Graphics P530</td>
<td>DDR4-1866/2133MHz</td>
<td>1060-3695</td>
<td>CM8066201922605</td>
</tr>
<tr>
<td>E3-1275 v5</td>
<td>4</td>
<td>Yes</td>
<td>3.6 GHz</td>
<td>80 W</td>
<td>Yes Intel® HD Graphics P530</td>
<td>DDR4-1866/2133MHz</td>
<td>1060-3274</td>
<td>CM8066201934909</td>
</tr>
</tbody>
</table>

Note: Use of the above processors requires passive heatsink. One heatsink is included in the base system, no need to order separately.

2.3. Select Memory

Refer to your Global Sales Support representative (GSS) for ordering choices.

DDR4 - UDIMM only.

No RDIMM or LRDIMM support.
2.4. Select Storage

SATA HDD/SSD

The AP1430 can be equipped with up to two SATA 2.5" HDD or SSD.

Please refer to the Tested Hardware and Operating System List (THOL) for complete listing of HDD’s that have been validated in the AP1430.

Flash Drives

The AP1430 can be equipped with one Compact Flash module.

Please refer to the Tested Hardware and Operating System List (THOL) for complete listing of Compact Flash that had been validated in the AP1430.

2.5. Using PCIe card

Customer can add a Low-Profile PCIe x4 card in rear slot. As per PCIe standard, maximum power consumption of such card must be 25W.
### 3/ Ordering AP1430 Serviceable Items

The table below lists all of the Serviceable Spares items that may be ordered for the AP1430 system. Generally, these are items that need replacement over the life of the product. These items are made available so that customers might stock their service depots and repair centers. Please read the following notes regarding this parts list.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Min. Order Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1061-7170</td>
<td>AC Power Supply Unit (300W)</td>
<td>1</td>
</tr>
</tbody>
</table>
About Kontron

Kontron, a global leader in embedded computing technology and trusted advisor in IoT, works closely with its customers, allowing them to focus on their core competencies by offering a complete and integrated portfolio of hardware, software and services designed to help them make the most of their applications.

With a significant percentage of employees in research and development, Kontron creates many of the standards that drive the world’s embedded computing platforms; bringing to life numerous technologies and applications that touch millions of lives. The result is an accelerated time-to-market, reduced total-cost-of-ownership, product longevity and the best possible overall application with leading-edge, highest reliability embedded technology.

Kontron is a listed company. Its shares are traded in the Prime Standard segment of the Frankfurt Stock Exchange and on other exchanges under the symbol “KBC”. For more information, please visit: http://www.kontron.com/

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