



MiniPC Industrial AOpen DEX4502 v.5

|                                 |                                                    |
|---------------------------------|----------------------------------------------------|
| <b>Category:</b>                | MiniPC Industry                                    |
| <b>Manufacturer:</b>            | AOpen                                              |
| <b>Others:</b>                  | None                                               |
| <b>Chipset:</b>                 | Intel GM45 / ICH9M                                 |
| <b>CPU Support:</b>             | Socket P - Intel Core 2 Duo (Penryn)               |
| <b>Installed CPU:</b>           | Intel Pentium Dual Core T8600, 2.4GHz, (cache 3MB) |
| <b>Memory Support:</b>          | 2 x SODIMM DDR2, Up to 4GB                         |
| <b>Installed Memory:</b>        | 4GB DDR II                                         |
| <b>Graphic Card:</b>            | Intel GMA X4500MHD                                 |
| <b>Storage (HDD) Support:</b>   | 1 x 2,5" - Up to 750GB                             |
| <b>Installed Storage (HDD):</b> | 64GB SSD - 2,5" SATA II                            |
| <b>CD/DVD Drive:</b>            | None                                               |
| <b>LAN:</b>                     | 10/100/1G Intel GbE LAN controller                 |
| <b>Wireless LAN card:</b>       | No (Optional Yes)                                  |
| <b>TV Tuner:</b>                | No (Optional Yes)                                  |

|                             |                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Front Panel (ports):</b> | 4 x USB 2.0                                                                                                                       |
| <b>Rear Panel (ports):</b>  | 4x USB 2.0, 1x LAN RJ45 (10/100/1G LAN),6x Audio Jack Stereo, 1 x HDMI (cable to DVI in Box), 1x e-SATA, 1x DVI , 1 x COM (RS232) |
| <b>Power:</b>               | External AC adapter                                                                                                               |
| <b>Supported OS:</b>        | Windows XP, Windows Vista, 7                                                                                                      |
| <b>Installed OS:</b>        | None                                                                                                                              |
| <b>Dimensions:</b>          | 200mm x 60mm x 200mm                                                                                                              |
| <b>Expansion:</b>           | Hybrid TV Tuner DVB-T (analog + digital + FM), , WiFi 802.11 a/b/g/n                                                              |

## Product from the Archive - production finished

### MiniPC Industrial AOpen DEX4502 v.5

#### Terms and Conditions:

- 1. Resistance on damage & small size ...
- 2. Advnced technology ...
- 3. Using & interface ...
- 4. Use ...
- 5. Recapitulation ...
- 6. Accessory in Box ...
- 7. **Energy saving and cost reducing...**



**DIGITAL ENGINE** the series of products AOpen firm dedicate to industrial use ...



[Resistance on damage & small size ...](#)

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The AOpen Digital Engine DEX4502 is a high performance Intel-based system in a 7,87W x 7,87H x 2,36D footprint that weighs less than 6,27 pounds.

## Environment specifications:

**Operating Temperature:** -5°C ~ 40°C

**Non-Operating Temperature:** -20°C ~ 60°C

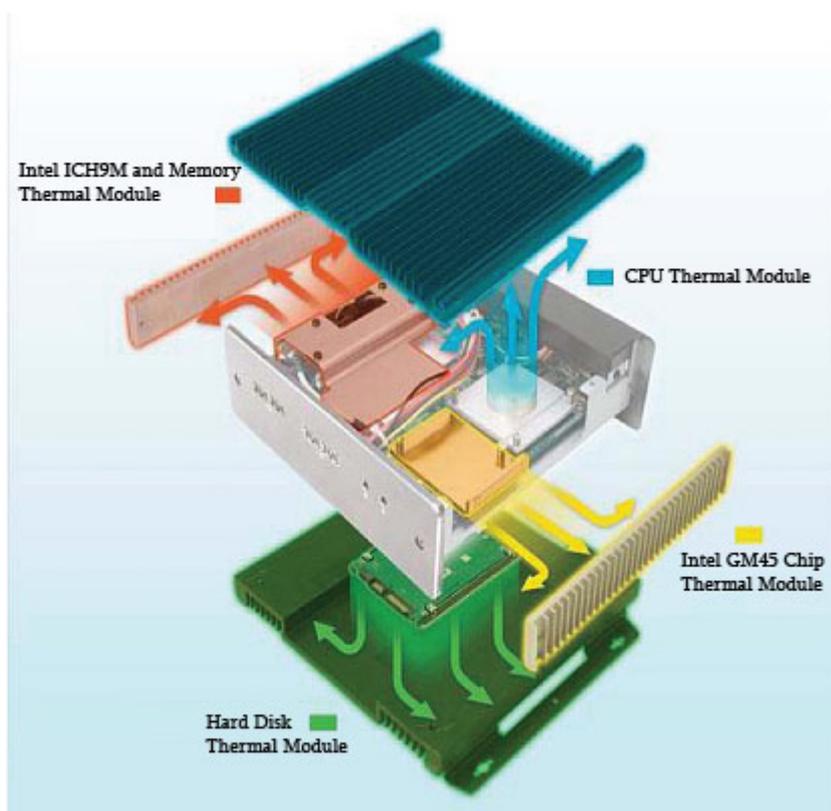
**Humidity:** 90% RH(40% non-condensed)

**Operating Vibration:** 0.5Grms, 10 ~ 500Hz

**Non-Operating Vibration:** 2Grms, 10 ~ 300Hz

**Operating Shock:** Half Sine, 8G, 11ms

**Non-Operating Shock:** Half Sine, 50G, 11ms

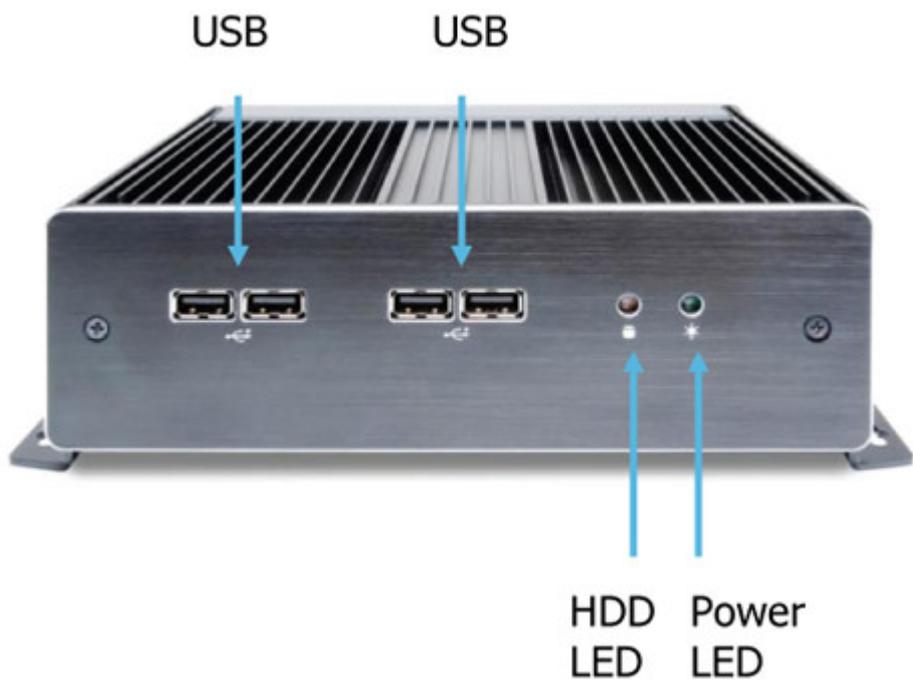


The system has been especially developed as a non-spindle concept, meaning more reliability and zero noise. The AOpen heat pipe solution and aluminum fans create a reliable passive cooling that prevents dust intake and fulfills silent requirements.

Powered by the Intel GM45 chipset, AOpen Digital Engine features HDCP (high-definition copy protection), H.264 high-definition video acceleration and is full HD ready to offer 1080P perfect playback , up to a maximum resolution of 2048x1536 pixels. AOpen Digital Engine DEX4502 can operate two displays simultaneously for more complex digital signage applications. AOpen Digital Engine DEX4502 is equipped with two DDRII SO-DIMM 800/667 memory slots supporting up to 4GB. The full range of AOpen digital engines is equipped with standard industrial PC features like, RS232, HDMI, 2 independent display ports and hardware controlled Watch Dog Timer (a tool to help the system to recover from fatal errors).



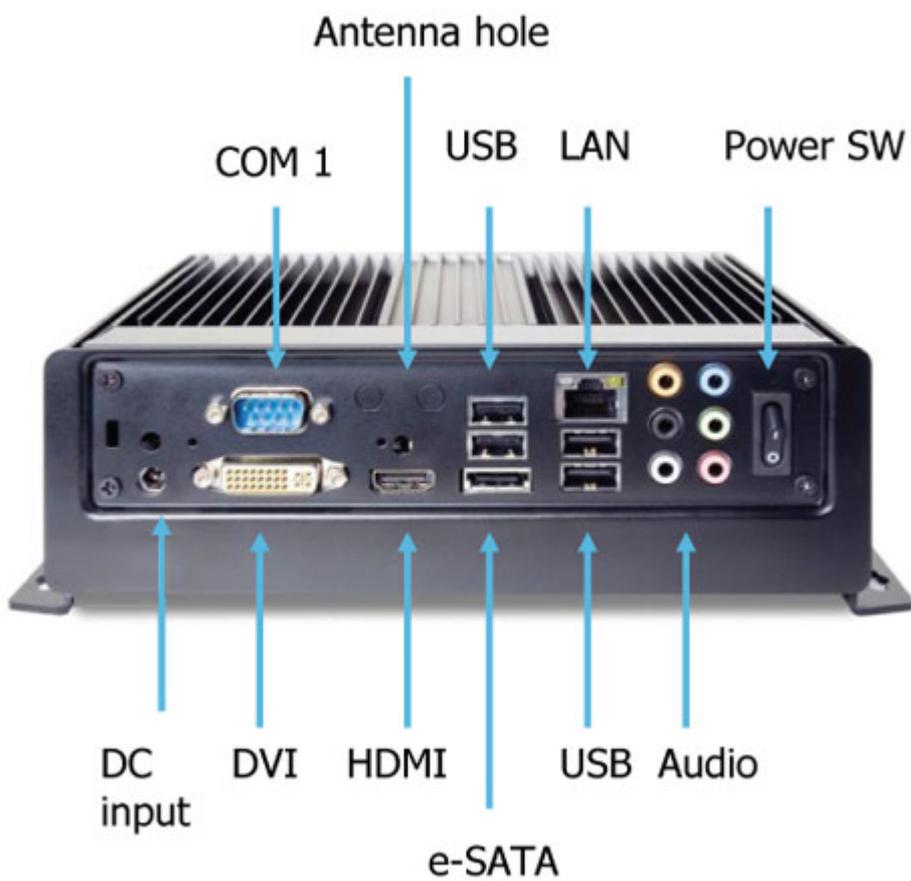
**Front Panel :**



Rear Panel :

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**Use ...**

For thanks of use handles box, it many possibilites to mount Digital Engines - for example: in factory halls, with LCD / LED monitors, hipermarkets, shops, under table top and cars.



## Empowered your Applications



Digital Entertainment



### Digital Engine



Game machine



Digital Health



POS



Digital Office



Digital Signage



KIOSK



## Recapitulation ...

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AOpen Digital Engine DEX 4502 is a complete solution for Digital Signage, Projector PC, Media Player, and Vehicle PC. AOpen is a compact system of 2,4L with Intel GM45 Express Chipset supporting Intel socket P Core 2 Duo processors. The AOpen DEX 4502 had 40,000 hour MTBF and passed shock and vibration operation tests. It can be installed both vertically and horizontally without having thermal issues. AOpen DEX 4502 adapts mobile CPU, chipset and memory to reduce heat. With less heat, the speed of the fans will drop and create a silent working condition.



## Accessory in Box ...

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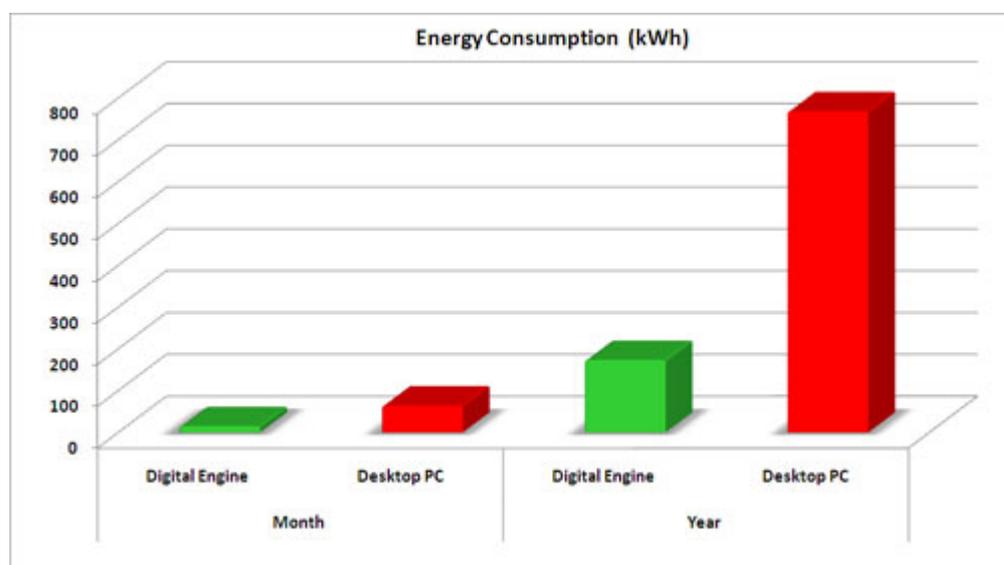
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**\*\* European Version Only**

## Energy saving and cost reducing

With energy cost saving in mind, AOpen Digital Engine DEX4502 supports the Intel Core™2 Duo Socket P “Penryn” series processor aiming for energy-efficiency. AOpen Digital Engine DEX4502 is one of the products from the AOpen Green Product range, complying with Energy Star 4.0. Energy Star is an officially recognized way to save money through energy efficiency and help the environment without sacrificing the performance. Energy Star standard has been developed to save energy at home and office. Through energy-efficient design of hardware and system components, there is a guarantee your system will use less energy to perform tasks, and will enter low-power modes, when not in use.



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|                                      |
|--------------------------------------|
| Assumption :                         |
| 1) computers work after 8 hour daily |
| 2) working 20 days in month          |
| 3) working 240 days in year          |

| number of computer | Work Time             |                    | Energy Saving<br>kWh |
|--------------------|-----------------------|--------------------|----------------------|
|                    | Day                   |                    |                      |
|                    | Digital Engine<br>kWh | Standard PC<br>kWh |                      |
| 1                  | 0,72                  | 3,20               | 2,48                 |
| 10                 | 7,20                  | 32,00              | 24,80                |
| 100                | 72,00                 | 320,00             | 248,00               |
| 1000               | 720,00                | 3200,00            | 2480,00              |
| 5000               | 3600,00               | 16000,00           | 12400,00             |
| number of computer | Month                 |                    | Energy Saving<br>kWh |
|                    | Digital Engine<br>kWh | Standard PC<br>kWh |                      |
|                    | Digital Engine<br>kWh | Standard PC<br>kWh |                      |
| 1                  | 14,40                 | 64,00              | 49,60                |
| 10                 | 144,00                | 640,00             | 496,00               |
| 100                | 1440,00               | 6400,00            | 4960,00              |
| 1000               | 14400,00              | 64000,00           | 49600,00             |
| 5000               | 72000,00              | 320000,00          | 248000,00            |
| number of computer | Year                  |                    | Energy Saving<br>kWh |
|                    | Digital Engine<br>kWh | Standard PC<br>kWh |                      |
|                    | Digital Engine<br>kWh | Standard PC<br>kWh |                      |
| 1                  | 172,80                | 768,00             | 595,20               |
| 10                 | 1728,00               | 7680,00            | 5952,00              |
| 100                | 17280,00              | 76800,00           | 59520,00             |
| 1000               | 172800,00             | 768000,00          | 595200,00            |
| 5000               | 864000,00             | 3840000,00         | 2976000,00           |