Multiple IO Compact SBC

Advantech announces the release of the MI/O (Multiple I/O) Extension Single Board Computer MIO-5250. MIO-5250 SBC's designed with the MI/O Extension form factor (146 x 102 mm) and powered by Intel® Atom™ Dual Core processors. MIO-5250 not only features an ultra low power processor and rich I/O capability, but is also equipped with flexible multiple I/O expansion which helps deliver faster time-to-market using less development resources. These features can help system integrators develop market-sensitive flexible solutions.

Advantech's innovative MI/O Extension form factor with integrated multiple I/O helps system integrators to provide optimized solutions in a more cost-effective way. With this new design, MI/O Extension SBC's incorporate the MIOe unified extended interface connector that integrates: DisplayPort, PCIe x1, LPC, SMBus, USB 2.0/USB 3.0, audio line-out and power. Customers receive the best current I/O choices to meet their vertical application development needs, as well as helping them retain their specialist domain knowhow. The MI/O Extension spec also unified screw mounting holes to make it easier for system maintenance and platform upgrades, and concentrated thermal design on the top-side via a heat sink/spreader to prevent thermal problems, plus reduced cabling cuts down on assembly efforts. MIO-5250 takes advantage of MI/O Extension by saving up to 20% of system space as well as providing flexibility for future I/O expansion and upgrades.

MIO-5250 is powered by Intel® Atom™ N2600 1.6GHz/ D2700 2.13GHz dual core processors with NM10 chipset, and DDR3 memory up to 4 GB. Although MIO-5250 only supports dual core processors, it still delivers ultra low-power consumption. The TDP on MIO-5250 is between 7.3 ~ 10.7 Watts. The fanless design also makes MIO-5250 more reliable, and gives it a longer MTBF without dust or noise issues. Advantech's MIO-5250 is a rugged design using specially selected components,

such as 100% solid capacitors with better MTBF and better stability compared with electrolytic capacitors. It has a wide-temperature design and uses a TG-150 hi-temp PCB. MIO-5250 is super reliable and can endure extreme environments.

MIO-5250 features multiple display types such as: 18/24-bit LVDS1, 48-bit LVDS2, HDMI, and VGA display capability. The graphic engine has DirectX 9, H/W format decode/ Acceleration, MPEG2 (H/W acceleration), H.264/ VC1/ WMV9 (H/W Decode/Acceleration).

- 18/24-bit LVDS1: up to 1366 x 768 (for N2600), 1440 x 900 (for D2700)
- 48-bit LVDS2: up to 1600x1200 (for N2600), 2560 x 1600 (for D2700)
- VGA: up to 1920 x 1200
- HDMI: supports 1920 x 1200, max data rate up to 1.65 Gb/s, and HDMI v1.3 up to 1080p

MIO-5250 supports all these different display types, and it’s also possible to support additional display types through MIOe expansion.

MIO-5250 comes with value-added software services like iManager & SUSIAccess. iManager is an intelligent self-management cross platform tool that monitors system status for problems and reacts to take action if something is abnormal. iManager offers a boot up guarantee in critical, low temperature environments so systems can automatically recover when voltages dip. iManager makes the whole system more reliable and more intelligent. In addition, MIO-5250 supports Advantech’s own SUSIAccess which provides easy remote management so users can monitor, configure, and control a large number of terminals to make maintenance and system recovery simpler.

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