WEBS-21D0

Embedded System Featuring Intel® Atom® Processor E3900 Series (Codenamed Apollo Lake) Built with Rugged, Compact and Fanless Design

AMI BIOS | Rugged | Fanless | SD 2.5" SATA | Wide Temperature | Mini-PCIe | DP | M2 | FC CE

The Portwell WEBS-21D0 fanless embedded system is designed with Intel® Atom® processor E3900 series (formerly Apollo Lake). The rugged and compact WEBS-21D0 supports a wide industrial temperature range from -20°C to 60°C, while at the same time, its fanless design ensures silent operation, reliability and low maintenance rate and costs. In addition, it integrates the latest M.2 type E interface to provide wireless connectivity, such as WiFi, Bluetooth and NFC (near-field communication) functionalities, and can ideally serve as an IoT gateway. Also, the WEBS-21D0's rugged, compact design plus low power consumption make it a perfect solution for applications in kiosk, digital signage, in-vehicle mobile video surveillance, medical, and the harsh environments of factory automation.

FEATURES

- Intel® Atom® processor E3900 series (formerly Apollo Lake
- 1x 204-pin SODIMM supports DDR3L up to 8GB
- 1x 2.5" SATA HDD/SSD, 1x mSATA, 1x microSD card
- 1x M.2 socket (Type E)
- 1x reserved cutout for wireless antenna
- Vibration: Operating, 5Grms, 5~500Hz
- Shock: Operating, 50G, 11msec
- IP40 International Protection rating

ORDERING GUIDE

WEBS-21D0-E3950	WEBS-21D0 embedded system with Intel® Atom® x7-E3950 processor
WEBS-21D0-E3940	WEBS-21D0 embedded system with Intel® Atom® x5-E3940 processor

System

Motherboard	NANO-6062 Nano-ITX embedded motherboard
CPU	Intel® Atom® processor E3900 series (formerly Apollo Lake) Atom x7-E3950, 1.6 GHz (2.00 GHz turbo), 2 MB, 12W TDP (4C/4T) Atom x5-E3940, 1.6 GHz (1.80 GHz turbo), 2 MB, 9.5W TDP (4C/4T)
Chipset	Integrated
BIOS	AMI UEFI BIOS
System Memory	DDR3L 1866/1600 MHz memory 1x 204-pin SODIMM socket, up to 8 GB
Storage	1x 2.5" SATA III HDD/SSD 1x mSATA 1x microSD
Watchdog Timer	Programmable 1 to 255 minutes/seconds interval
Hardware Status Monitoring	CPU & system temperature Onboard voltages (CPU Vcore, 12V, 5V, 3.3V, RAM)
Expansion Interface	1x M.2 socket (Type E) 1x full-size Mini-PCIe socket (co-layout with mSATA)

External I/O

Serial Port	1x RS-232/422/485 (selectable by BIOS)
Display	1x VGA for legacy support 1x DisplayPort, resolution up to 4096 x 2160 @ 60Hz
USB	2x USB 3.0
Audio	Intel® High Definition Audio Realtek® ALC892 High Definition Audio
Ethernet	2x Gigabit Ethernet (Intel® Ethernet Controller I210-IT)
Other	1x reserved cutout for wireless antenna

Power Supply Unit

Power Input	DC 12V~24V

Environmental

Operating Temp	-20°C to 60°C
Storage Temp	-40°C to 85°C
Relative Humidity	95%@40°C, non-condensing
Shock Protection	IEC 60068-2-64, 5Grms, 5-500Hz
Vibration Protection	IEC 60068-2-27, 50G, 11 msec

Mechanical

Dimension	150(W) x 150(D) x 60(H) mm; 5.9"(W) x 5.9"(D) x 2.36"(H)
Weight	1.3 kg (2.9 lbs)
Mounting	VESA, wall, DIN-rail

*All information provided is subject to change without notice. Last updated: Aug 18, 2017