

UATX-DNV0 Series

Preliminary

Industrial Motherboard in Micro-ATX Form Factor
with Intel® Denverton Processors



- Intel® Denverton Processor, Atom™ C3000 Series
- 4x DDR4 UDIMM / RDIMM Socket
- up to 4x RJ-45 GbE LAN for copper Ethernet connection
- 4x SFP+ 10GbE LAN for optical Ethernet connection
- 2x USB3.0, 2x USB2.0 for USB devices
- 2x RS-232/422/485, 2x RS-232, 1x 16-bit DIO for other peripherals
- up to 6x SATA3.0, optional 32GB eMMC for storage
- 1x PCIe8 for expansion

Product Overview

UATX-DNV0 Series is a Micro-ATX industrial motherboard equipped with dual core up to hexadeca-core Intel® Denverton SoC processors, Atom™ C3000 Series, which is specially suitable for dense low-power network, storage, and IoT applications.

It has up to six SATA3.0 sockets and optional 32GB eMMC drive soldered on-board for storage as well as a PCIe8 slot for other specific functions. In addition, It supports up to four GbE LAN copper ports and four 10GbE LAN optical ports to deliver sufficient traffic flow for huge data volumes.

Technical Information

CPU Support
Intel® Atom™ C3000 Series (Dual Core up to Hexadeca Core, 24W TDP)
Memory
4x DDR4 2133 UDIMM / RDIMM
Ethernet
up to 4x GbE LAN (RJ-45 on rear, Intel® I210-AT) 4x 10GbE LAN (SFP+ on rear)
USB
2x USB3.0 (Type A on rear) 2x USB2.0 (by header)
Serial Ports
2x RS-232/422/485 (1x DB9 on rear, 1x by wafer) 4x RS-232 (by wafer)
Other I/O Ports
1x 16-bit DIO (by header)
Storage & Expansion
up to 6x SATA3.0 32GB eMMC (on board, optional) 1x PCIe8
Power Supply
2x24-pin ATX Wafer for power DC input 2x4-pin Wafer for CPU Core Power Supply

Firmware
BIOS: AMI uEFI BIOS w/ 128Mb SPI Flash Watchdog: Programmable WDT to generate system reset event H/W Monitor: Voltages, Temperatures Real Time Clock: Processor integrated RTC TPM: optional (Infineon SLB9665 TPM 2.0)
System Control & Monitoring
1x Header for Reset button, HDD LED 1x Header for Power button, Power LED & SM bus 1x Header for mPCIe Activity LED
Cooling
1x Wafer for CPU Smart Fan 1x Wafer for System Smart Fan 1x Wafer for AUX Smart Fan
Dimensions (L x W)
Micro-ATX (244 x 244 mm / 9.61" x 9.61")
Environmental Characteristics
Operation Temp.: 0°C ~ 60°C / 32°F ~ 140°F Storage Temp.: -20°C ~ 80°C / -4°F ~ 176°F Humidity: 0% ~ 95%
Certification
CE, FCC Class A

UATX-DNV0 Series Rear I/O Ports

