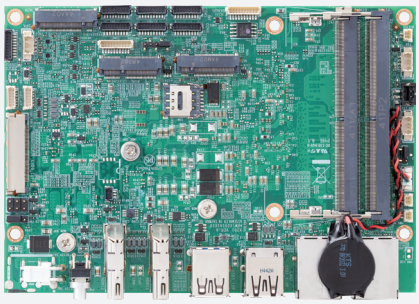
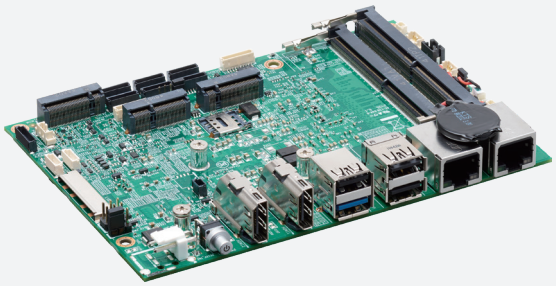
X203

3.5" Embedded Computing Board
Powered by Intel® Core™ Ultra Mobile Processor (Series 2)





Main Features

- Intel® Core™ Ultra mobile processor (Series 2)
- Support Intel® AMT technology
- 2 x DDR5 SO-DIMM, up to 96GB
- 2 x HDMI® 2.0 output, up to 4096x2160@60Hz
- 2 x Intel® LAN port
- 1 x USB 3.2 Gen 1x1, 3 x USB 2.0
- TPM 2.0 for security
- 1 x M.2 Key B 3052/2242 for an optional 5G/LTE module
- 1 x M.2 Key E 2230 for an optional Wi-Fi module
- 1 x M.2 Key M 2280 for an optional SSD
- Support DC +12V power input

Product Overview

The X203 board, Duro Edge Computer harnesses the power of Intel® Core™ Ultra 7 and 5 processors, featuring an integrated NPU for AI inference. This advanced architecture optimizes workloads across the CPU, GPU, and NPU, enabling up to 22.5 TOPS of AI computing power with exceptional energy efficiency. Dual HDMI® 2.0 ports deliver exceptional visuals, and a variety of I/O interfaces support a wide range of AI applications. Designed to operate in extreme temperatures from -20°C to 70°C, the X203 is ideal for semi-outdoor applications such as self-service kiosks, recycling machines, and intelligent parking systems

Specifications

Processor

- Intel® Core™ Ultra 7 processor 265U, PBP 15W
- Intel® Core™ Ultra 7 processor 255U, PBP 15W
- Intel® Core™ Ultra 5 processor 235U, PBP 15W
- Intel® Core™ Ultra 5 processor 225U, PBP 15W

* Only 265U/235U supports the Intel® AMT

Memory

- 2 x DDR5 5600 SO-DIMM, non-ECC, unbuffered, up to 96GB

Integrated Graphics

- Intel® Graphics

Display Interface

- 2 x HDMI® 2.0, up to 4096x2160@60Hz

Storage

- 1 x M.2 Key M 2280 for an optional SSD (PCIe 4.0 x4, SATA 3.0)

Expansion Slot

- 1 x M.2 Key E 2230 for an optional Wi-Fi module (PCIe 4.0 x1, USB 2.0)
- 1 x M.2 Key B 3052/2242 for an optional 5G/LTE module (PCIe 4.0 x1, USB 3.2, USB 2.0)

I/O Interface Side

- 1 x Power button with LED
- 2 x HDMI® 2.0, up to 4096x2160@60Hz
- 1 x 2.5GbE RJ45 port, Intel® I226
- 1 x GbE RJ45 port, Intel® I219
- 1 x USB 3.2 Gen 1x1, Type-A
- 3 x USB 2.0
- DC +12V power input

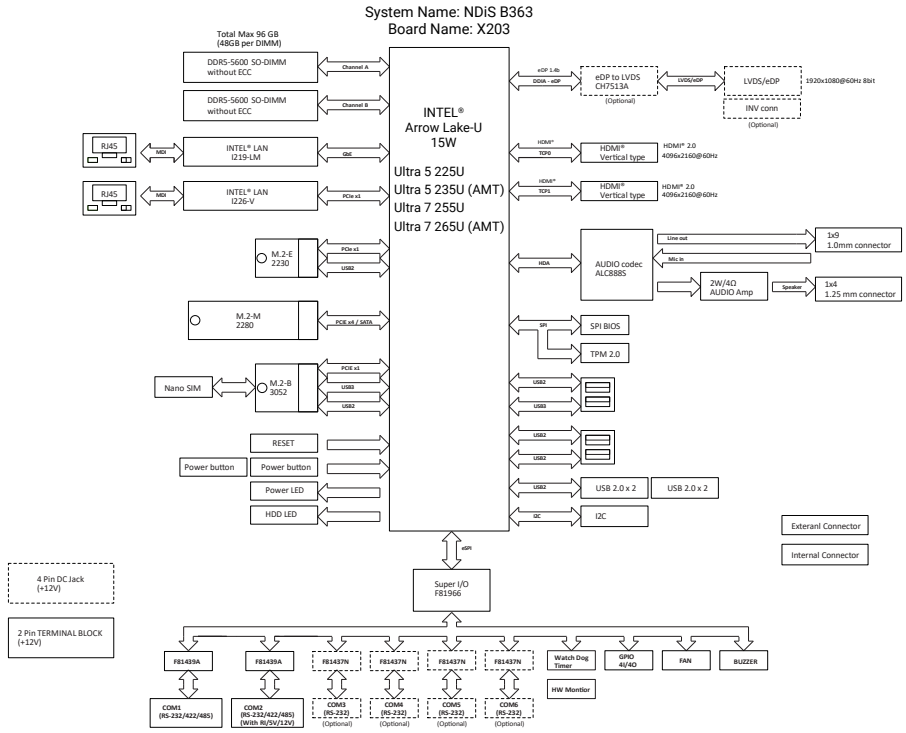
I/O Interface Internal

- 1 x eDP/LVDS connector, resolution up to 1920x1200@60Hz
- 2 x 6-pin header for USB 2.0 ports
- 2 x 9-pin header for COM port, RS-232/422/485
- 4 x 9-pin header for COM port, RS-232
- 1 x 10-pin header for GPIO, 4 x DI, 4 x DO
- 1 x 4-pin header for 2W/4Ω speaker out
- 1 x 9-pin header, supports mic in and line out
- 1 x 2-pin header for reset
- 3 x Antenna hole

Mechanical

- Dimensions: 146mm (W) x 102mm (D) (5.7" (W) x 4.0" (D))

Block Diagram



Power Supply

- Nominal voltage: DC +12V power input

Environment

- Temperature
  - Ambient with air flow: -20°C~70°C
  - Storage temperature: -20°C~85°C
- Relative humidity: 0%~90% (non-condensing)
- Shock protection: 50G peak acceleration, 11ms according to IEC 60068-2-27
- Vibration protection
  - Random: 2Grms@5Hz~500Hz, IEC 60068-2-64
  - Sinusoidal: 2G@5Hz~500Hz, IEC 60068-2-6

Operating System

- Windows 11
- Windows 10, 64bit
- Linux

Certifications

- CE approval (EN 50035 + EN 50032)
- FCC Class A (Part 15B)

Ordering Information

- **X203-225U (P/N: 10W10X20300X0)**
  Main board with Intel® Core™ Ultra 5 processor 225U
- **X203-235U (P/N: 10W10X20301X0)**
  Main board with Intel® Core™ Ultra 5 processor 235U
- **X203-255U (P/N: 10W10X20302X0)**
  Main board with Intel® Core™ Ultra 7 processor 255U
- **X203-265U (P/N: 10W10X20303X0)**
  Main board with Intel® Core™ Ultra 7 processor 265U