

Main Features

- 11th Generation Intel® Core™ (Tiger Lake-UP3) processor SoC
- 3.5" embedded form factor
- Dual 4K @ 60Hz display output, DP++, HDMI 2.0
- Support 4K @ 60Hz eDP display output
- Dual LAN ports and USB 3.0 ports for easy connection
- Onboard M.2 2280 Key M (PCIe x4) for storage modules
- Onboard M.2 2230 Key E for optional Wi-Fi modules
- Support extended temperature and outdoor application

Product Overview

X200 series is under the 3.5" SBC series which is based on multi-core SoC Intel® Core™ processor (formerly codenamed "Tiger Lake"). X200 series operates with low power consumption. This series of 3.5-inch board is aimed at embedded applications. It supports a maximum memory of 32GB DDR4 SDRAM. Also, it offers two display outputs of 4K HDMI, DP++, and eDP in order to provide the flexibility of supporting a range of peripherals. The X200 series is ideal for battery-powered portable devices, multimedia eDP panels, home automation and thin clients.

Specifications

CPU Support

- Onboard 11th Generation Intel® Core™ i3-1115G4E processor, Dual Core, 2.2 GHz base Frequency, 6M Cach (15W)
- Onboard 11th Generation Intel® Core™ i5-1145G7E processor, Dual Core, 1.5 GHz base Frequency, 8M Cach (15W)
- Onboard 11th Generation Intel® Core™ i7-1185G7E processor, Quad Core, 1.8 GHz, 12M Cache (15W) (by request)

Chipset

- SoC (codenamed Tiger Lake-UP3)

Main Memory

- 1 x 260-pin DDR4 SO-DIMM, supports non-ECC, un-buffered memory up to 32G

Graphics & Display

- Intel® UHD graphics on i3 processor
- Intel® Iris® Xe graphics on i5 processor
- 1 x DP++, support 4096 x 2304 @ 60Hz
- 1 x HDMI 2.0, support 4096 x 2160 @ 60Hz
- 1 x eDP, support 4096 x 2160 @ 60Hz

LAN

- 1 x Intel® I219-LM GbE PHY
- 1 x Intel® I211-AT GbE LAN

Storage

- 1 x M.2 2280 Key M, support PCIe x4
- 1 x SATA 3 & SATA power connector for optional 2.5" SSD

I/O Function - Edge

- 1 x 12V DC Jack
- 2 x RJ45 Intel® Gigabit LAN port
- 1 x DP++
- 1 x HDMI 2.0
- 4 x USB 3.2 (Gen 2)

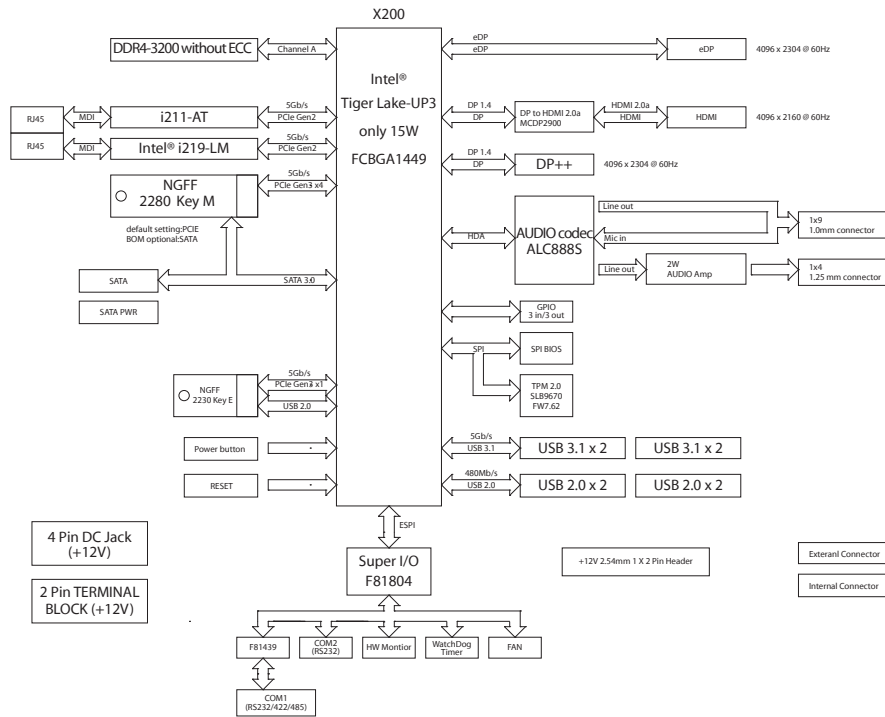
I/O Interface-Internal

- 4 x USB 2.0, internal connector
- 1 x Mic-in, 1 x Line-out, internal connector
- 1 x Speaker-out with 2W/4Ω amplifier, internal connector
- 6 x GPIO pin header for 3 x GPI and 3 x GPO
- 1 x 4-pin connector for PWM smart FAN
- 1 x 12V, 2A power output coming from main power source to additional module use
- 1 x eDP: support 4096 x 2160 @ 60Hz
- Onboard TPM 2.0 (for SKU X200-i5)
- 1 x RS232/422/485, internal pin header (COM1)
- 1 x RS232, internal pin header (COM2)

Expansion

- 1 x M.2 2230 Key E, support optional Wi-Fi modules

Block Diagram



Power Requirements

- 12V DC input via DC Jack
- 2-Pin internal DC input connector as the option

Environment

- Operating temperature: -20°C to 70°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification

- CE Approval
- FCC Class A

Dimensions

- 146mm (W) x 102mm (D)

Operating System Support

- Win10/Linux

Ordering Information

- **X200-i5 (P/N: 10W10X20000X0)**
Embedded board with Intel® Core™ i5-1145G7E processor
- **X200-i3 (P/N: 10W10X20002X0)**
Embedded board with Intel® Core™ i3-1115G4E processor