

AMAX-5570

Ultra Compact Control Platform with Intel Atom Processor, 64GB eMMC, 2 x LAN, 2 x USB, 2 x CAN, 2 x COM, and AMAX-5000 I/O expansion



Features

- Intel® Atom® quad-core x6413E processor
- 4/8 GB DDR4 onboard memory
- 64GB eMMC on board storage
- Optimized I/O with 2 x GbE, 2 x USB, 2 x CAN, 2 x COM, 1 x HDMI
- AMAX-5000 EtherCAT Slice IO expansion
- Full-size mPCIe and M.2 B key slot expansion
- Industrial fieldbus communication for EtherCAT and CAN bus
- COM/CAN port Isolation design
- System Ground Isolation design
- IEC 61010 certified for industrial applications

Introduction

AMAX-5570 is specially designed for machine and equipment builders, with efficient Intel Atom® 4 cores CPU and optimized local expansion slots for general IT and OT applications. On board eMMC storage design minimizes the overall size and allows scalable local expansion with mPCIe and M.2 B key ports for further storage or wireless communication requirements. Extra Wi-Fi or cellular modules can be installed for uploading data to cloud servers.

Specifications

General

- **Certification** CE, FCC, UL, BSMI
- **Dimensions (W x D x H)** 48.8 x 70 x 100 mm/1.9 x 2.8 x 3.9 in (A version)
65.3 x 68.8 x 100 mm/2.5 x 2.7 x 3.9 in (B version)
- **Enclosure** Aluminum
- **Mount Options** DIN-rail
- **Net Weight** 0.48kg/1.06lb
- **Power Requirement** 24V_{DC}
- **Power Consumption** 15.8W (typical w/o expansion), 72W (max.)
- **Operating System** Windows 10 LTSC, A2V Embedded Linux (Ubuntu 20.04)

System Hardware

- **BIOS** AMI EFI X64
- **Watchdog Timer** Programmable timer with 255 intervals (1 ~ 255 sec)
- **Processor** Intel® Atom® x6413E quad-core, 1.5 GHz
- **Memory** 4 / 8 GB DDR4 2666 MHz onboard
- **Graphics Engine** Intel® UHD Graphics
- **Ethernet** 2 x Realtek RTL8119i GbE (LAN)
1 x Realtek RTL8119i GbE (Slice IO)
- **LED Indicators** Power, Run (programmable), LAN (Active, Status)
- **Storage** 64 GB eMMC onboard
mSATA shared with mPCIe slot
2242 SATA shared with M.2 B key
- **Expansion** 1 x Full-size mPCIe slot (SATA/PCIe/USB2.0 signal)
1 x M.2 B key slot (SATA/USB3.0 signal)
AMAX-5000 series IO module expansion
(1A supply without power module)
- **Hardware Security** TPM2.0

I/O Interfaces

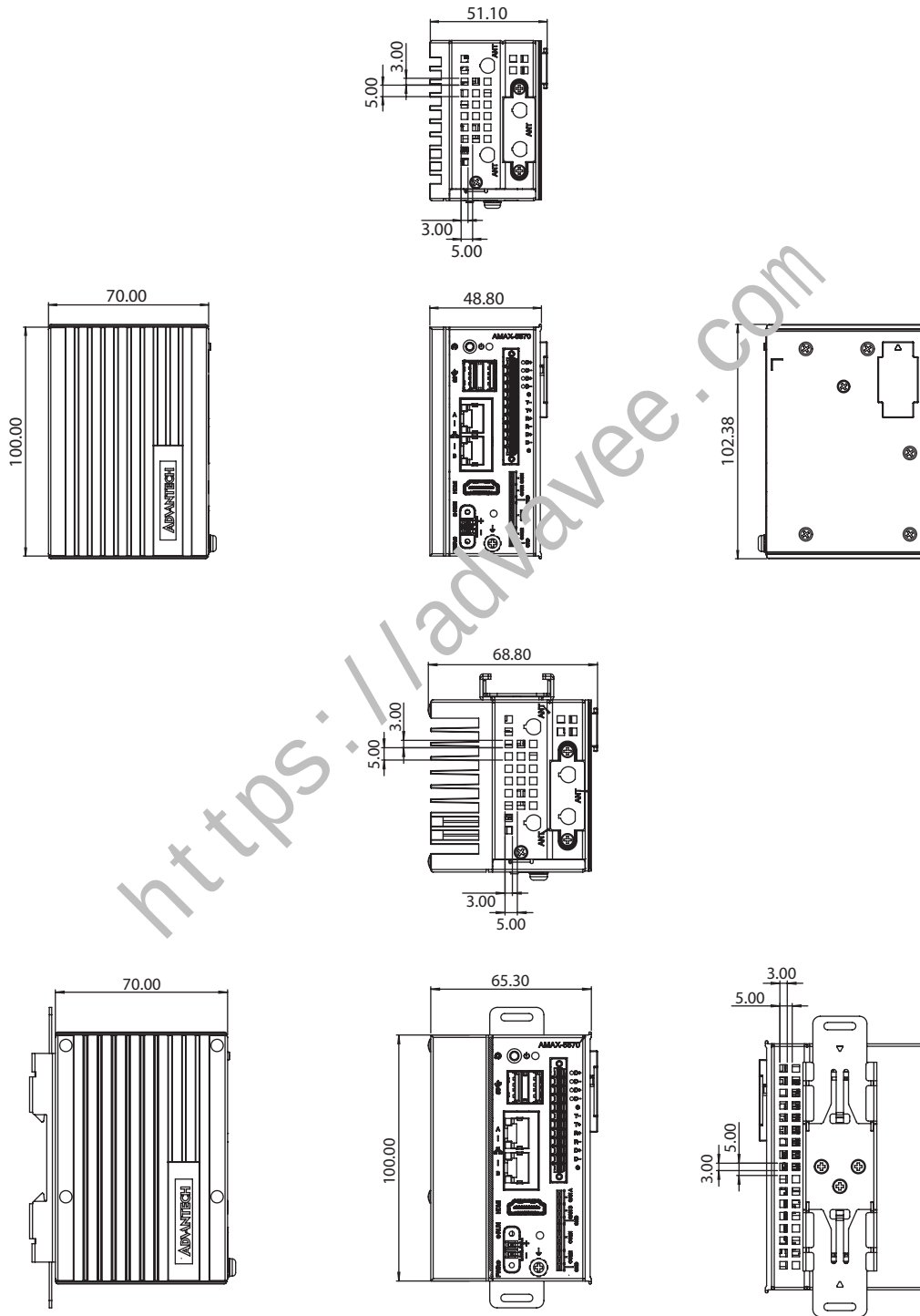
- **LAN** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- **Serial Port** 1 x RS-232/422/485 and 1 x RS-485, 50bps~115.2 kbps (terminal block) Isolated voltage 2500V_{DC}
- **CAN bus** 2 x CAN port, Adjustment up to 1Mbps (terminal block)
Hardware support CAN 2.0 A/B
Linux support Socket CAN, advCAN
Isolated voltage 2500V_{DC}
- **USB** 2 x USB 3.2 (Gen 1)
- **Display Output** 1 x HDMI (1920 x 1080 @60Hz)
- **Power Connector** 1 x 2-pin terminal block

Environment

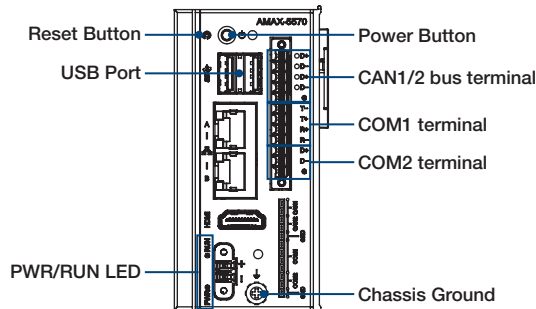
- **Operation Temperature (A version)** -20 ~ 60 °C/-4 ~ 140 °F @ 5 ~ 85% RH with 0.7 m/s (without expansion)
-20 ~ 55 °C/-4 ~ 131 °F @ 5 ~ 85% RH with 0.7 m/s (with mPCIe +M.2 B key+ AMAX-5000 expansion)
- **Operating Temperature (B version)** -20 ~ 60 °C/-4 ~ 140 °F @ 5 ~ 85% RH with 0.7 m/s (with mPCIe+M.2+AMAX-5000 expansion)
- **Storage Temperature** -40 ~ 85 °C/-40 ~ 185 °F
- **Relative Humidity** Operating, 95% RH@40°C, Non-Condensing
Non-Operating, 95% RH@60°C, Non-Condensing
- **Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- **Vibration Resistance** Operating, IEC 60068-2-64, 2 Grms, random, 5 ~ 500 Hz, 1hr/axis
- **IP Rating** IP20

Dimensions

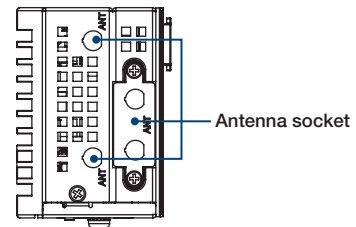
Unit: mm



Front I/O



Top I/O



Ordering Information

- **AMAX-5570-E2200A** Intel® Atom® x6413E control platform, 4G/64G, 2 x GbE, 2 x CAN, 2 x COM
- **AMAX-5570-E2300A** Intel® Atom® x6413E control platform, 4G/64G, 2 x GbE, 2 x CAN, 2 x COM
- **AMAX-5570-E2200B** Intel® Atom® x6413E control platform, 4G/64G, 2 x GbE, 2 x CAN, 2 x COM, 60C operating temperature
- **AMAX-5570-E2300B** Intel® Atom® x6413E control platform, 8G/64G, 2 x GbE, 2 x CAN, 2 x COM, 60C operating temperature

Embedded O/S

- **20704WX1ES0016** Img W10LTSC v6.08 B038 AMAX-5570 Entry
- **20704U20DS0009** Img AdvLinuxTu-IOTG_x64 V3.4.1 for AMAX series
- **20701WX1ES0010** Img W10LTSC v6.09 B014 AMAX-5570(E)
- **20701U20DS0006** Image AdvLinuxTu-IOTG_x64 V3.4.4 for AMAX Series

Optional Accessories

DIN-Rail Power Supply

- **96PSD-A120W2 I-M-N** A/D 100-240V 120W 24V NDR DIN RAIL

Adapters & Power Cords

- **PWR-247-L-E** 100-240V 60W 24V 2.5A Power supply
- **170202600** Power cable US plug 1.8 M
- **170202605** Power cable EU plug 1.8 M
- **1702031801** Power cable UK plug 1.8 M
- **1700000596-11** Power cable China/Australia plug 1.8 M

Wi-Fi Module (mPCIe) and Antenna

- **EWM-W193H01E** Wifi 802.11ac/a/b/g/n, Bluetooth 5.0
- **9656EWMG00E** Half-to-full-size mPCIe bracket
- **1750009360-01** Cable Ant. SMA/F-R-BH MHF4/113 BLK L100mm
- **1750008717-01** Antenna L=10.9 cm 50 Ohm

LTE Module (mPCIe) and Antenna

- **968AD00589** Quectel EG25G LTE Module Cat. 4 with sim holder
- **1750007990-01** Antenna 4G/LTE full band L=11 cm 50 Ohm
- **1750009360-01** Cable Ant. SMA/F-R-BH MHF4/113 BLK L100mm