

# NISE 3110-M

Intel® Core™ 2 Duo, Core™ Duo, Celeron® M Fan-less System  
with 1 x PCI Expansion Slot for medical Application



## Main Features

- ◆ Support Intel® Core™ 2 Duo /Core™ Duo/ Celeron® M processors
- ◆ Intel® 945GME Chipsets
- ◆ Dual 1000/100/10Mbps LAN ports
- ◆ 6 x USB2.0/ VGA / DVI
- ◆ 3 x RS232 and 1 x RS232/422/485 via DB44 Connector
- ◆ On-board DC to DC power design to support +12V to 30VDC power input
- ◆ Support ATX power mode and PXE / WOL
- ◆ One PCI Expansion Slot
- ◆ Medical grade 120W power adapter

## Product Overview

Featuring Intel® 945GME & ICH7-M chipsets, the NISE 3110-M fan-less computer supports Intel's Core™ 2 Duo / Celeron® M processor with 533/667 MHz FSB and DDR2 667/533 memory. The rugged NISE 3110-M fan-less computer is designed for space-critical application requires extreme reliability, low-power consumption and versatile I/O configuration. For added flexibility, the NISE 3110-M also boasts three RS232 ports, one RS232/422/485 port and one PCI Expansion Slot.

For data storage, the NISE 3110-M provides one CompactFlash socket and one 2.5" HDD drive bay. The system supports ATX mode power feature and can accept a wide range of power supplies from 12 V DC to 30 V DC. House in a compact 195mm x 268mm x 80mm heavy-duty aluminum chassis, the NISE 3110-M is designed for reliable, maintenance-free industrial computing. Attached with external medical-grade 120W power adapter with wide input range from 90 ~ 264V AC and compliant with EN/UL 60601-1. Taking the benefits from medical grade power adapter, the low leakage current and over voltage/current protection, NISE 3110-M is a reliable solution for medical application including diagnostic and imaging equipment.

## Specifications

### Main Board

- ◆ EBC 576FL
- ◆ Support Intel® Core™ 2 Duo, Core™ Duo, Celeron® M family processors
- ◆ Support 533/667 MHz FSB CPU
- ◆ Intel® Embedded Processor Reference List (Intel® Longevity CPU):  
Core™ Duo Processor (T2500) 2.0G  
Celeron® M 440 1.86G

### Chipset

- ◆ Intel® 945GME Graphics Memory Controller Hub (GMCH)
- ◆ Intel® 82801 ICH7-M

### Main Memory

- ◆ 2 x 240-pin DDR2 533/667 DIMM sockets, up to 4 GB, dual channel unbuffered non-ECC

*Note: Maximum 4GB. Actual memory size is dynamic based on the OS I/O resource allocation.*

### Expansion

- ◆ Supports one 32-bit/ 33MHz PCI card
- ◆ PCI Length support:  
Max. 160mm with 2.5" HDD installed  
Max. 240mm without 2.5" HDD installed

### I/O Interface-Front

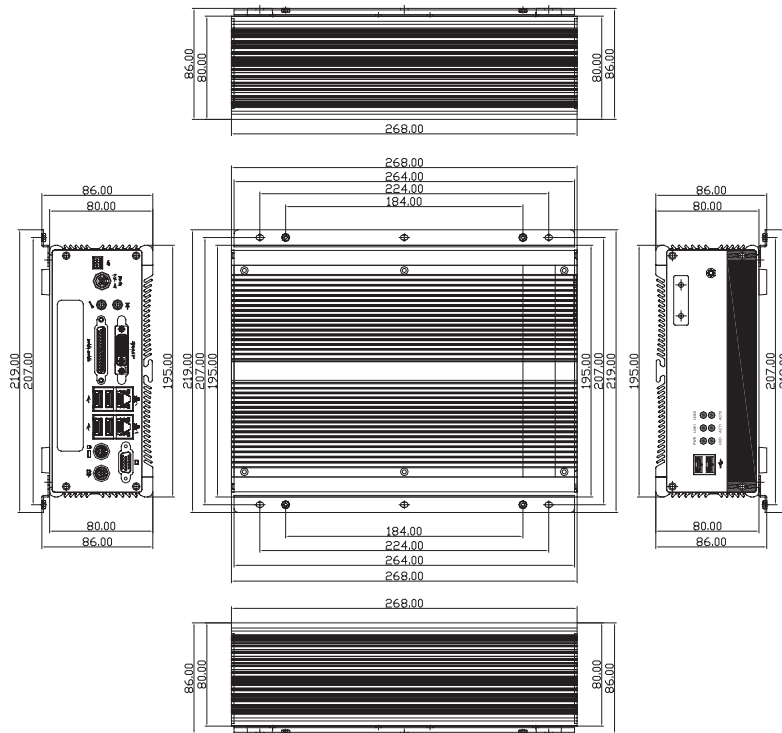
- ◆ Customized logo(Optional)
- ◆ HDD Access/Power/LAN status LEDs
- ◆ 2 x USB 2.0 ports
- ◆ ATX power on/off switch

### I/O Interface-Rear

- ◆ 2 x PS/2 Keyboard/Mouse
- ◆ 1 x VGA connector
- ◆ 4 x USB 2.0 ports
- ◆ 2 x GbE LAN Ports
- ◆ 1 x DVI interface



## Dimension Drawing



- 4 x Serial Ports, with 1x DB44 connector (Three ports support RS232; COM2 supports RS232/422/485)
- 1 x Mic-in and 1 x Speaker-out
- 1 x 2-pin connector output for remote power on/off switch
- DC-in power connector for +12V ~+30V DC power input

### Device

- 1 x On-board CompactFlash socket
- 1 x Internal 2.5" HDD drive bay

### Power Requirements

- DC to DC power on-board to support 12 to 30 VDC (Max: 120 Watts)
- 1 x External 120W AC/DC Medical grade power adapter (lockable):
  - a. Input voltage: 90 to 264V AC
  - b. Input current: max. 1.6A for 115V AC; Max. 0.8A for 230V AC
  - c. Output voltage: 19V DC, 6.32A, 120W

### Dimensions

- 195 mm (W) x 268 mm (D) x 80 mm (H) (7.6" x 10.5" x 3.1")

### Construction

- Aluminum chassis with fan-less design

### Environment

- Operating temperature:
  - Ambient with air flow: -5°C ~ 55°C
  - (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)

### Certifications

- NISE 3100M system
- CE approval
- FCC Class A

- External 120W AC/DC Medical Power Adapter
  - EN60601-1
  - EN55011/ EN55022 Class B
  - UL60601-1, 60950-1
  - FCC Class B

## Ordering Information

### • Barebone

#### **NISE 3110-M (P/N: TBD)**

Intel® Core™ 2 Duo, Core™ Duo, Celeron® M Fan-less Bare-Bone System, with one PCI Expansion Slot

### • w/Core™ 2 Duo 1.5 GHz 4M L2 (BGA)

#### **NISE 3110-M (P/N: TBD)**

Intel® Core™ 2 Duo 1.5 GHz CPU W/4M L2 Fan-less System, 1 x PCI Expansion Slot