

# UNO-2172/2182

**Intel® Core™ 2 Duo/ Pentium® M/  
 Celeron® M Automation Computers  
 with 2 x GbE, 4 x COM, DVI**



UNO-2172

UNO-2182



## Features

- Onboard Intel Core 2 Duo 1.5 GHz (L7400)/ Pentium M 1.6 GHz/ Celeron M 1.5 GHz processors
- Onboard 512 KB battery-backup SRAM
- 2 x RS-232 and 2 x RS-232/422/485 ports with automatic flow control
- 2 x 10/100/1000 Base-T Ethernet
- DVI-I supports dual display
- Audio with Mic in, Line in, Line out
- 2 x USB 2.0 ports
- PCI-104 expansion
- Windows® WES 2009, WES 7 ready solution
- Supports one SATA HDD and one external eSATA devices
- Onboard system status LED indicators
- Supports wake on LAN and boot from LAN function
- Fanless design with no internal cabling
- Isolation between chassis and power ground

## Introduction

UNO-2172 and UNO-2182 are high-performance Pentium M/ Core 2 Duo grade controllers that support PCI-104 expansion, serial communication ports and several other networking interfaces. They support Windows WES2009 OS, which offers a pre-configured image with optimized onboard device drivers. Windows WES2009 delivers the power of the Windows operating system in componentized form. You can seamlessly integrate your applications into Windows WES2009 and speed up your system development with application-ready platforms that provide rich networking interfaces to fulfill diverse requirements.

## Specifications

### General

- Certifications** CE, FCC Class A, UL, CCC
- Dimensions (W x D x H)** 255 x 152 x 69 mm (10" x 6.0" x 2.7")
- Enclosure** Aluminum
- Mounting** DIN-rail, Wallmount, VESA
- Industrial Grounding** Isolation between chassis and power ground
- Power Consumption** UNO-2182: 35W (Typical)  
UNO-2172: 45W (Typical)
- Power Requirements** 9 ~ 36 V<sub>DC</sub> (e.g. +24V @ 2A) (Min. 48W), ATX
- Weight** 3.0 kg
- OS Support** Windows 2000/XP, WES7, WES-2009, XPe, CE 5.0 & 6.0, Linux, QNX
- System Design** Fanless with no internal cabling
- Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE / WES2009 / WES7

### System Hardware

- CPU** UNO-2182: Core 2 Duo L7400 1.5GHz  
UNO-2172: Pentium M 1.6GHz, Celeron M 1.5GHz
- Memory** UNO-2182: 2GB DDR2 SDRAM built-in  
UNO-2172: 1GB DDR2 SDRAM built-in
- Indicators** LEDs for Power, IDE, Alarm for battery backup SRAM, LAN (Active, Status) and Serial (Tx, Rx)
- Battery Backup SRAM** 512 KB
- Keyboard/Mouse** 1 x PS/2
- PC/104 Slot** PCI-104 slot, supports +5 & 3.3V power
- Storage** CF: 1 x external type I/II CompactFlash® slot  
HDD: Build-in one 2.5" SATA/IDE HDD bracket
- Display** DVI-I supports DVI and VGA for dual display
- Audio** Mic in, Line in, Line out
- SATA** 1 x internal, 1 x external SATA 1.0
- Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec

### I/O Interface

- Serial Ports** 2 x RS-232, 2 x RS-232/422/485 with DB9 connectors  
Automatic RS-485 data flow control
- Serial Port Speed** RS-232: 50 ~ 115.2 kbps  
RS-422/485: 50 ~ 921.6 kbps (Max.)
- LAN** 2 x 10/100/1000 Base-T RJ45 ports (supports wake on LAN and built-in boot ROM in flash BIOS)
- USB Ports** 2 x USB, EHCI, Rev. 2.0 compliant

### Environment

- Humidity** 95% @ 40° C (non-condensing)
- Operating Temperature** IEC 60068-2-2, 100% CPU/ I/O loading)  
UNO-2182: -10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH.  
UNO-2172: -20 ~ 50°C (-4 ~ 122°F) @ 5 ~ 85% RH.
- Shock Protection** IEC 60068-2-27  
CompactFlash: 50 G @ wall mount, half sine, 11 ms  
HDD: 20 G @ wall mount, half sine, 11 ms
- Vibration Protection** IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.)  
CompactFlash: 2 Grms @ 5 ~ 500 Hz,  
HDD: 1 Grms @ 5 ~ 500 Hz

## Ordering Information

- UNO-2172-C22BE** Celeron M 1.5 GHz, 1GB RAM Automation Computer
- UNO-2172-P22BE** Pentium M 1.6 GHz, 1GB RAM Automation Computer
- UNO-2182-D13BE** Core 2 Duo 1.5GHz, 2GB RAM Automation Computer

### Accessories

- UNO-PCM22-AE** 2 x PC/104 expansion kit for UNO-2100 series
- UNO-FPM21-AE** UNO-2000 series VESA mount kit
- PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility