

# UNO-3082

# UNO-3084

Intel® Core™2 Duo Automation Computer  
with Dual DVI, 2 x PCI and FireWire

Intel® Core™2 Duo Automation Computer  
with Dual DVI, 1 x PCIe, 3 x PCI and FireWire

NEW



UNO-3082

UNO-3084



## Features

- Onboard Intel Core 2 Duo L7500 1.6 GHz processor
- Dual DVI-I to support up to 3 displays
- Dual IEEE-1394 for vision inspection devices
- AT/ATX power mode by jumper selection
- Onboard 512KB Battery- backup SRAM
- Two RS-232/422/485 ports with automatic flow control
- Two 10/100/1000Base-T RJ-45 ports with teaming function support
- Up to three PCI and one PCIe expansion
- 4-ch isolated DI, 4-ch isolated DO
- Dual SSD/HDD with onboard RAID 0/1 support
- Fanless design with no internal cables
- Isolation between chassis and power ground
- Front-accessible I/O design
- One internal USB for dongle and flash drive

## Introduction

UNO-3082 and UNO-3084 are high performance Core 2 Duo Embedded Automation Computers with up to four expansion slots for PCI express or PCI support. The Gigabit LAN on the UNO-3082/3084 supports Teaming function with fault tolerance, link aggregation, and load balance features. They are also equipped with two IEEE 1394b bilingual interfaces which allow users to connect their own devices for machine vision application. Critical data can be saved on the battery backup SRAM. They also support two HDD bays with RAID 0/1.

## Specifications

### General

- Certifications** CE, FCC class A, UL, CCC
- Dimensions (W x H x D)** UNO-3082: 157 x 238 x 177 mm (6.2"x 9.3"x 7")  
UNO-3084: 195 x 238 x 177 mm (7.6"x 9.3"x 7")
- Enclosure** Aluminum + SECC
- Mounting** Wallmount, Stand, Panel
- Industrial Grounding** Isolation between chassis and power ground
- Power Consumption** 40 W (Typical, no add-on card)
- Power Requirement** 9 ~ 36 V<sub>DC</sub> (e.g. +24 V @ 5 A), ATX, AT/ATX power Jumper selection and BIOS AT simulation (support system reboot automatically after power recovery)
- Weight** UNO-3082: 4.5 kg  
UNO-3084: 5.0 kg
- OS Support** WES, Windows XP Embedded, Windows Vista/XP, Windows 7, Windows CE 6.0, Linux, QNX
- System Design** Fanless with no internal cabling
- Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE/XPe

### System Hardware

- CPU** Intel Core 2 Duo L7500 1.6 GHz
- Memory** 2GB/4GB DDRII SDRAM built-in
- Battery Backup SRAM** 512 KB
- Expansion Slots** Two PCI v2.2 slots (UNO-3082)  
One PCIe plus three PCI v2.2 slots (UNO-3084)
- PCI Slot Power** 12 V @ 3 A, -12 V @ 0.8 A, +5 V @ 6 A,  
+3.3 V @ 6 A (total combined power consumption on the PCI slots should be less than 40W)
- Indicators** LEDs for Power, Standby, HDD, SRAM battery, Rx/Tx for COM ports
- Audio** AC 97, Line Out
- Storage** CF: 1x internal type I/II CompactFlash slot  
1x external type I/II CompactFlash slot  
HDD: Two built-in 2.5" SATA HDD brackets with support for RAID 0 and RAID 1  
One external SATA 2.0 (does not support hot swap)
- Display** Dual DVI-D independent,  
or DVI-D + Dual VGA cloned displays
- Watchdog Timer** Programmable 256 level timer interval, from 1-255 sec

### I/O Interface

- Clock** Battery-backup RTC for time and date
- LAN** 2 x 10/100/1000 Base-T RJ-45 ports (Intel 82574L, supports Wake on LAN, Teaming, built-in boot ROM, and IEEE1588 hardware support)
- Serial Ports** 2 x RS-232/422/485 with DB9 connectors, automatic RS-485 data flow control, 2 x RS-232 (optional)

- Serial Speed** RS-232 Speed: 50 bps ~ 115.2 kbps,  
RS-422/485 Speed: 300 bps ~ 921.6 kbps (Max)
- USB Ports** 5 x USB 2.0 (one internal), 2 x USB 2.0 pin header
- IEEE 1394 (Firewire)** 2 x type B (Bilingual)
- Optional I/O** PS/2 KB/MS, 2 x COM-232 (with packing), 2 x USB 2.0, LPT
- Digital Input** 4-ch. contact DIO ~ DI3  
Wet contact: Logic 0: -3 ~ 3 V<sub>DC</sub>; Logic 1: ±10 ~ 50 V<sub>DC</sub>  
Dry contact: Logic 0: open; Logic 1: close to GND  
isolation and ESD protect  
1500 V<sub>DC</sub>, 50-70 V<sub>DC</sub> over voltage protection
- Digital Output** Opto-Isolator Response: 25µs- Interrupt capable channel: DIO ~ DI3  
4 ch. DO0 ~ DO3  
1,500 V<sub>DC</sub> isolation, 200 mA max/channel sink current  
Keeps output status after system hot reset  
Open collector to 40V (200mA maximum sink current load) and 3 kHz speed

### Timer/Counter

- Counter Source** DI1 & DI3
- Pulse Output** DO2 & DO3
- Can be cascaded as one 32-bit counter/timer**
- Down counting, preset counting value**
- Timer Time Base** 100 kHz, 10 kHz, 1 kHz, 100 Hz

### Environment

- Operating Temperature** (IEC 60068-2-2, 100% CPU/ I/O loading)  
-10 ~ 55° C (14 ~ 131° F)
- Storage Temperature** -20 ~ 80° C (-4 ~ 176° F)
- Humidity** 95% @ 40° C (non-condensing)
- 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-3082-D23E** Core 2 Duo, 2 x PCI Automation Computer
- UNO-3084-D23E** Core 2 Duo, 3 x PCI/1 x PCIe Automation Computer
- UNO-3082-D24E** Core 2 Duo, 4G RAM, 2 x PCI Automation Computer
- UNO-3084-D24E** Core 2 Duo, 4G RAM, 3 x PCI/1 x PCIe Automation Computer

### Accessories

- PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility
- 1960048293N000** Top cover of UNO-3082 with venting hole
- 1960045707N010** Top cover of UNO-3084 with venting hole
- 9663308401E** USB x 2 for UNO-3000 Series
- 9663308402E** LPT x 1 for UNO-3000 Series
- 9663308403E** RS232 COM port x 2 and PS2 x 1 for UNO-3000 Series