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

1 Automation Software
2 Touch Panel PC
3 Industrial Panel PC
4 Industrial Monitor
5 Fanless Box PC
6 Ethernet Switch
7 Device Server
8 Serial Comm. Card
9 DAQ
10 Signal Conditioning
11 USB DAQ
12 Motion Control I/O
13 PC-based Controller
14 PAC
15 RS-485 I/O
16 Ethernet I/O
17 Building Automation
18 Video Surveillance

NEW

UNO-3082   UNO-3084

RoHS COMPLIANT 2002/65/EC   CCC   CE   FCC   c(UL)us LISTED E180881 I.T.E.

Features

- Onboard 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/ 1000 Base-T RJ-45 ports with teaming function support
- Up to three PCI and one PCIe x 1 board 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

Advantech's UNO-3082/3084 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. It also equipped two IEEE 1394b bilingual interfaces which allow users to connect their own devices for machine vision application. Critical data can be saved in UNO-3082/3084 on the battery backup SRAM. It also support two HDD bays with RAID 0/1.

Specifications

General

- **Certifications** CE, FCC class A, UL, CCC
- **Dimensions (W x H x D)** 157 x 238 x 177 mm (6.2"x 9.3"x 7") (UNO-3082)
  195 x 238 x 177mm (7.6"x 9.3"x 7") (UNO-3084)
- **Enclosure** Aluminum + SECC
- **Mounting** Panel / Stand / Wall
- **Industrial Grounding** Isolation between chassis and power ground
- **Power Consumption** 40 W (Typical, no add-on card)
- **Power Requirement** 9 ~ 36 V_{DC} (e.g +24 V @ 5 A), ATX, AT/ATX power Jumper selection and BIOS AT simulation (support system reboot automatically after power recovery)
- **Weight** 4.5 kg (UNO-3082); 5 kg (UNO-3084)
- **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 DDRII SDRAM built-in (4GB optional)
- **Battery Backup SRAM** 512 KB
- **Expansion Slots** Two PCI V2.2 slots (UNO-3082)
  One PCIex1 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 × 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 DI0 ~ DI3
  Wet contact: Logic 0: -3 ~ 3 V_{DC}; Logic 1: ±10 ~ 50 V_{DC}
  Dry contact: Logic 0: open; Logic 1: close to GND
  isolation and ESD protect 1500 V_{DC}, 50~70 V_{DC} over voltage protection
  Opto-Isolator Response: 25µs- Interrupt capable channel: DI0 ~ DI3
- **Digital Output** 4 ch. DO0 ~ DO3
  1,500 V_{DC} 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 68 2-27
  CompactFlash: 50 G @ wall mount, half sine, 11 ms
  HDD: 20 G @ wall mount, half sine, 11 ms
- **Vibration Protection** IEC 68 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
- **PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility