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

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 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 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 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
1960048293N000	Top cover of UNO-3082 with venting hole
1960045707N010	Top cover of UNO-3084 with venting hole