



SB686BX

Single Board Computer



Features

Your choice of Intel Pentium or Celeron processor (See www.icsadvent.com for available processor speeds)

industry applications:

telecom infrastructures

industrial automation

enhanced services

machine control

broadcasting

convergence

IP telephony

call centers

medical

CPE

IVR



formerly Industrial Computer Source

Mission Critical Applied Computing Solutions

features

Intel® Pentium® or Celeron™ processors
(See www.icsadvent.com for available processor speeds.)

Intel 440 BX AGP chipset

82443BX PCI/AGP controller (PAC)

82371EB PCI/ISA/IDE accelerator chip (PIIX4E)

Windows®95, 98, NT, Solaris, SCO, Linux, and QNX

Enhanced EPP and ECP modes

All ICS Advent products are covered by a 2-year warranty

benefits

Next-generation processors provide superior PC performance for advanced media and communications applications

Proven compatibility and performance

Industry-leading expandability and reliability

Industry-leading 2D and 3D graphics performance

Supports prevalent operating system

Support for emerging technologies

No expansion slot required

Comprehensive service and support for top quality products

specifications

Processor Support

Intel Pentium or Celeron (See www.icsadvent.com for available processor speeds.)

CPU Socket: Intel Pentium II Slot 1 right-angle connector

Chipset: Intel 440BX AGP chipset

Cache: L2 cache onboard (dependent on Pentium processor)

Memory

Capacity: 16MB minimum to 256MB (non-ECC) or 512MB (ECC)

Form factor: 168-pin DIMM

DIMM socket: gold contacts

DRAM types: 64/72-bit EDO

DRAM, 64/72-bit SDRAM (PC100, 100MHz)

DRAM data integrity types: BIOS configurable EC, ECC, and non-ECC

DRAM type detection: Autodetection algorithm, serial presence detect mechanism

Bus Support

ISA-AT Bus: 64 mA IOL with 32mA IOH

PCI: 33MHz PCI 2.1 compliant

GTL+: 100 MHz or 66MHz switch selectable to match the

Pentium used (see Processor Support for additional details)

AGP: Accelerated Graphics Port with 100MHz local memory interface

Graphics Controller

Intel740 AGP SVGA 3D Accelerated Graphics controller

8MB high-speed, 64bit SGRAM with 100MHz interface

DB15 connector at rear panel

Peak data transfers up to 533MB/s

Integrated 24-bit 220MHz RAMDAC

Display resolutions up to 1600x1200

Graphic functionality disabled and all resources free if option not installed

Can be disabled by BIOS

Dual Serial Ports

16C550 compatible dual serial port controller

16 byte receive and transmit FIFO buffers

Serial 1 RS-232 Port to DB9 at rear panel

Serial 2 RS-232 Port 10-pin shrouded

ESD protected to ±15kV

Can be disabled by BIOS

Parallel Port

Single parallel port controller with bidirectional capability

Enhanced EPP and ECP modes

Connected to 26-pin shrouded header

Can be disabled by BIOS

Keyboard Connector

Controller connected to header connector

Power supplied through +5VDC self-healing fuse

Note: You may configure the keyboard as absent or present by system BIOS. If absent, you can boot the system without a keyboard attached.

EIDE Controller

Integrated enhanced IDE fixed disk controller on PCI local bus

Supports up to four drives: primary master and slave, secondary master and slave

Supports PIO Mode 4 and Ultra DMA/33

Can be disabled by BIOS

Dual Floppy Drive Controller

Supports 1.44MB, 1.2MB, 720K, and 360K floppy drives

Can be disabled by BIOS

Universal Serial Bus

Universal Host Controller Interface (UHCI) configuration

Dual USB connectors at the chassis rear panel via separate optional cable and bracket assembly

Watchdog Timer

Forces reset if decoded I/O space is not written to within specified timeout period

+5VDC monitor: If VCC falls below 4.5VDC, a reset occurs

Programmable via software to 100ms, 250ms, or 500ms

Enable and disable by jumper or software

Note: Prefail detect IRQ signal output can be routed to IRQ10 or IRQ11 via jumper. This option triggers ISA bus IRQ if decoded I/O space is not written to within half of specified timeout period.

Real-Time Clock

Motorola MC146818A compatible

256 bytes of battery-backed RAM

Up to seven years of battery-backup protection

Clock source at 14.318MHz accurate to ±1720Hz

CMOS Battery

Onboard lithium 3.0V battery with diode protection circuitry

AMI Hi Flex BIOS

Plug-n-Play compatible

2MB flash upgradeable with support for BIOS upgrade via software

Operating Systems, 32 Bit

Windows 95, Windows 98 Second Edition – full support

Windows NT V4.0 and later, server or workstation – full support

Solaris 2.5.1 and later

QNX V4.24-video support limited to a maximum of 800 x 600 by operating system

Red Hat Linux V5.2 – video support limited to 80 x 25 text mode by operating system

Operating Environment

Temperature: 0 to 60° C

Humidity: 5 to 95% RHNC

Shock: 2G, any axis

Vibration: 0.5G, 10 to 2000Hz, any axis

Altitude: to 10,000 ft (3,048m) pressure altitude

MTBF

110,000POH@25 C



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