

Features

- EBX-compatible SBC with dual core 1.80GHz Intel® Atom™ D525 processor
- Up to 4GB of DDR3 SODIMM system memory
- CompactFlash socket
- Supports simultaneous 18-bit LVDS and CRT video
- LED backlights supported
- Full-featured I/O includes
 - One PATA channel and two SATA channels
 - Eight USB 2.0 ports
 - Four serial RS-232/422/485 ports
 - Two 10/100/1000 Mbps ENET channels
 - 48 lines of GPIO
 - LPT, PS/2 keyboard and mouse controller
 - MiniPCI, PC/104, and PC/104-Plus connectors
 - WDT, RTC, LPT, status LEDs, and beeper
 - Hi-definition audio
- Requires only +5V for operation
- Fanless operation available



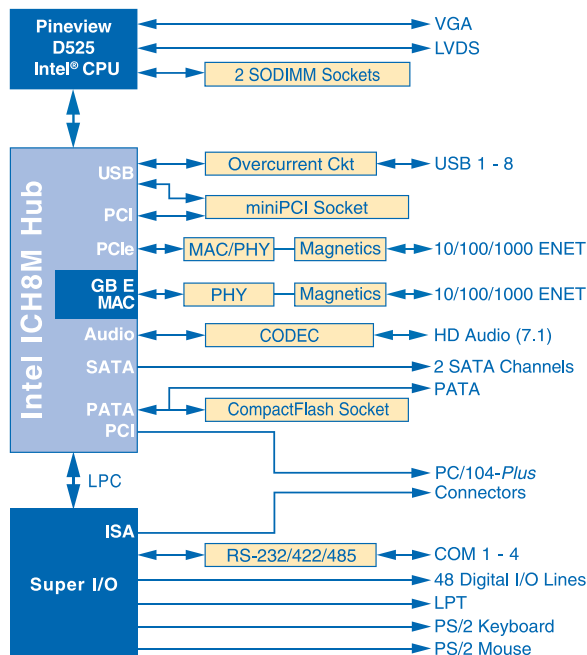
Product Description

WinSystems' EBC-C384-D is an EBX-compatible Single Board Computer (SBC) which uses Intel's Atom D525 dual core 1.80GHz processor paired with the ICH8M I/O controller hub. It includes two SODIMM sockets for DDR3 system memory and one CompactFlash socket.

This SBC is a full-featured unit with onboard I/O that supports CRT/LVDS video simultaneously, dual Gigabit Ethernet ports, eight USB 2.0 ports, four serial RS-232/422/485 COM channels, 48 digital I/O lines, HD audio, watchdog timer, PS/2 keyboard and mouse controllers, and LPT. Plus it has a MiniPCI socket, both PC/104 and PC/104-Plus connectors for additional I/O expansion by plugging modules on the board.

The EBC-C384-D supports Linux, Windows® Embedded Standard 7 (WES7), and other x86-compatible real-time operating systems. Drivers are available from the WinSystems' website.

The EBC-C384-D is designed for long-term availability. This board replaces and is a performance upgrade to WinSystems' EBC-855 and EBC-C3Plus. It is designed for high-performance industrial, medical, communications, and Mil/COTS applications.



EBC-C384-D Block Diagram

EBC-C384-D EBX Single Board Computer

Technical Specifications

Processor

Intel Atom D525 dual core @ 1.80GHz

Memory

512KB of L2 cache

Two SODIMM memory sockets for up to 4GB of DDR3

CompactFlash Type II memory socket

Display

VGA supports up to SXGA 1400 x 1050 @ 60Hz

LVDS supports 18-bit single channel and up to

WXGA 1366 x 768 or 1280 x 800

Network Interface

One 1000 Mbps using the ICH8M internal LAN supports

Wake on LAN

One 1000 Mbps using the 82583V LAN controller

Onboard I/O

One PATA channel shared with CompactFlash socket

Two SATA 2.0 channels

Eight USB 2.0 ports with overcurrent protection

Four 16C550-compatible RS-232/422/485 serial channels
with speeds up to 115.2kbps

48 lines of general purpose digital I/O

LPT interface with EPP support

High definition audio (7.1)

PS/2 keyboard and mouse controller

Speaker output for beep tones

Status LEDs on both Ethernet controllers plus
a status activity LED

RTC with optional battery back up

Watchdog timer adjustable from 1 second to 255 minutes

Expansion Bus

PC/104 and PC/104-Plus connectors

One MiniPCI connector

Power

	Typical	Maximum	Standby (S3)
5V @	2.9A	3.5A	300mA

Software

Phoenix BIOS in SPI Flash device

Compatible with Linux, Windows, and most x86 operating
systems as well as DOS

Environmental

Operational from -40° to +75°C

RoHS compliant

Mechanical

Dimensions 5.75 x 8.00 inches (146 x 203 mm)

Weight 16 oz (453.6 gm) with heatsink

PC Board thickness 0.078 inches



Front and Back Picture of EBC-C384-D2-1

Ordering Information

SBC

EBC-C384-D2-1

Dual core Single Board Computer
with fan

Cables

CBL-SET-384-2

EBC-C384-D cable and accessories
set, includes:

ADP-IO-USB-001

Dual 8-pin, 2mm, four USB ports

BAT-LTC-E-36-16-1

External 3.6V, 1650 mAH battery

with plug-in connector

CBL-173-G-1-1.0

Serial COM3 and COM4 cable

CBL-234-G-1-1.375

Video CRT cable

CBL-236-G-2-1.5

EBC power cable

CBL-247-G-1-1.0

Multi-I/O cable

CBL-343-G-1-1.375

PS/2 cable

CBL-AUDIO2-102-12

Audio 2x 15 cable

CBL-RST-402-18

Reset harness

CBL-USB4-002-12

Four USB ports with two, 8-pin

2mm connectors

Optional Battery

BAT-LTC-E-36-16-1

External 3.6V, 1650 mAH

BAT-LTC-E-36-27-1

External 3.6V, 2700 mAH

CompactFlash (CF)

CF-DC-A-xG-I

1 - 16GB High Speed CF cards

CFLASH-G-xxx-I

128MB - 8GB CF cards

Please visit www.IndustrialCompactFlash.com for details

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