

COMX-430/440

COM Express Modules

■ Embedded Computing for
Business-Critical Continuity™

PRELIMINARY DATA SHEET

Type 2 COM Express modules provide easy-to-use embedded PC functionality

- Intel® Atom™ processor D410/D510 @ 1.66 GHz
- Up to 4GB DDR2 memory
- Gigabit Ethernet, SATA and PCI Express
- LVDS graphics for flat panel displays
- 8x USB 2.0 interfaces

The COMX-430 and COMX-440 from Emerson Network Power are 95 mm x 95 mm Type 2 COM Express® modules based on the Intel® Atom™ processor D410/D510 for low power consumption and scalable performance. They are designed for use in a variety of applications such as industrial control, kiosks, clinical display systems, panel PCs, diagnostic and test equipment and similar applications that require easy-to-use embedded PC functionality.

The COMX-430 and -440 modules are based on the most common format COM Express module - Type 2. This makes them suitable for both existing applications that are looking to use a new processing module from a trusted vendor as well as new applications that need to incorporate off-the-shelf PC controller functionality onto custom I/O baseboards. The latest generation Unified Extensible Firmware Interface (UEFI) BIOS from AMI manages the interaction between the low-level hardware and OS-level interfaces in a clean and efficient way for superior reliability.

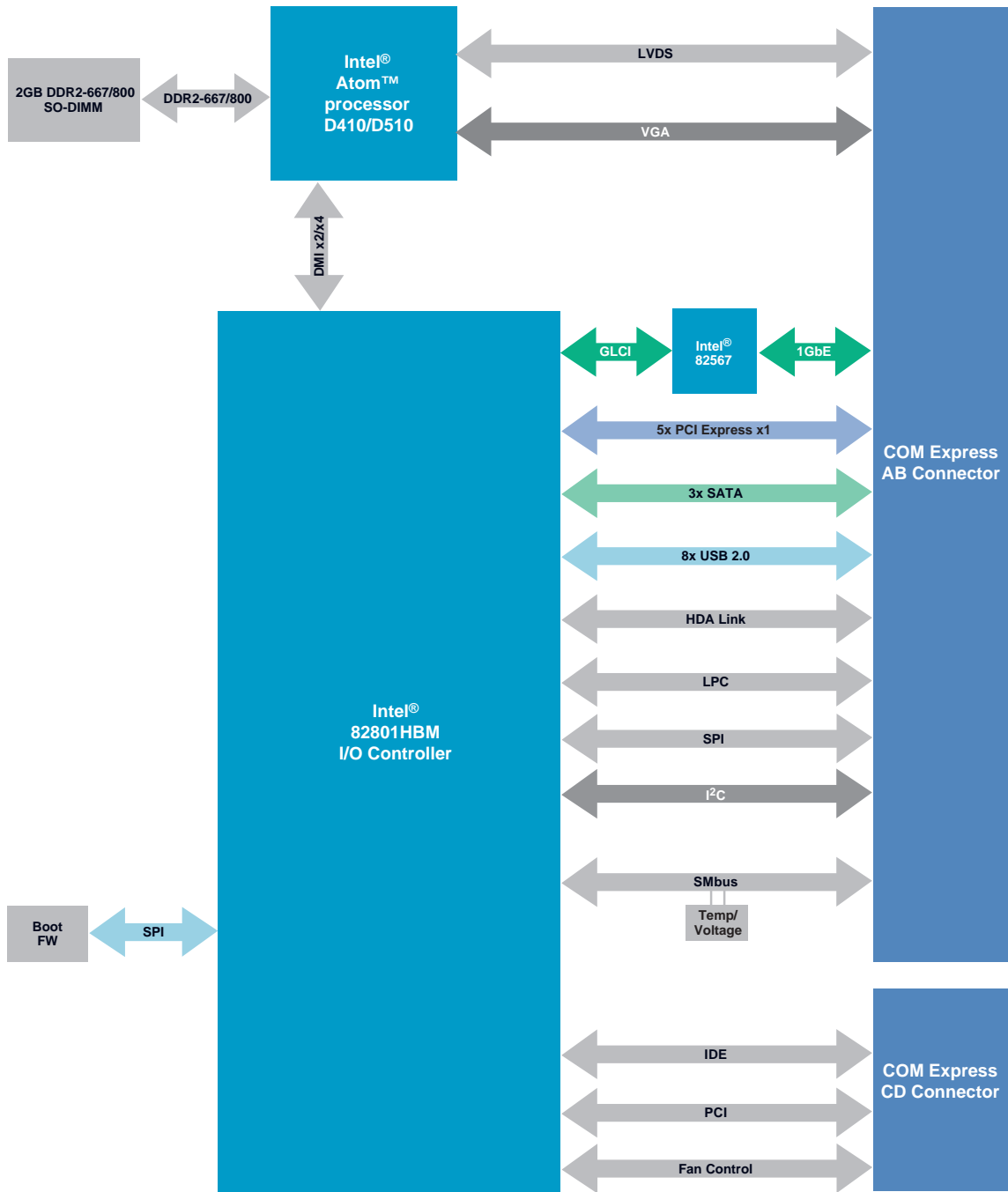
These COM Express modules have a wide range of built-in devices to connect to standard PC interfaces including LCD and CRT displays, both SATA and legacy PATA disks, PCI Express and PCI peripherals, USB devices and Gigabit Ethernet networks. They support a range of solid state disks via the SATA interface or CompactFlash via the IDE interface on the carrier.



COM  Express®


EMERSON™
Network Power

Block Diagram



Hardware Specifications

PROCESSOR

- Intel® Atom™ processor D410/D510 single/dual core @ 1.67 GHz with 512KB L2 cache

CHIPSET

- Intel® 82801HBM I/O Controller

MEMORY

- Two 200-pin DDR2 non-ECC SO-DIMM sockets. Maximum memory capacity is 4GB (2GB per SO-DIMM), minimum capacity is a single 512MB SO-DIMM.

VIDEO

- 400 MHz graphics engine
- Supports dual display outputs with single-channel LVDS and VGA connectivity. LVDS resolution up to 18bpp, XGA (1024x768) and WXGA (1366x768). VGA resolution up to QXGA 2048x1536 pixels, 32 bits, 60Hz.

BUS EXPANSION

- Five PCI Express x1
- One PCI

I/O

- (1) Gigabit Ethernet (Intel® 82567)
- (3) SATA
- (1) PATA
- (8) USB 2.0
- HD Audio
- LPC
- SPI

POWER CONSUMPTION

- 17W Typical for D410 variant (running Microsoft® Windows® XP and fitted with 1GB DRAM)

COMPLIANCE AND CERTIFICATION INFORMATION

- EMC and Safety
 - ▲ FCC, VCCI, AS/NZ Class B
 - ▲ EN 55024, EN 55022
 - ▲ UL/CSA 60950-1, EN 60950-1 and IEC 60950-1 compliant

Firmware and Operating System Support

BIOS

- AMI UEFI BIOS

OS COMPATIBILITY:

- Microsoft® Windows® XP
- Microsoft Windows 7
- Fedora 12 Linux

Package Contents

- (1) COMX-430/440 Module
- (1) Drivers CD
- (1) QuickStart Guide and Safety Manual

Ordering Information	
Product	Description
COMX-430	Type 2 COM Express module with Intel® Atom™ processor D410 single core at 1.67 GHz
COMX-440	Type 2 COM Express module with Intel Atom processor D510 dual core at 1.67 GHz
Accessories	
COMX-440-HP	Heat spreading plate
COMX-440-HTSNK	Active heatsink
COMX-CAR-210	Type 2 carrier card













SOLUTION SERVICES

Emerson Network Power provides a portfolio of solution services optimized to meet your needs throughout the product lifecycle. Design services help speed time-to-market. Deployment services include global 24x7 technical support. Renewal services enable product longevity and technology refresh.

Intel and Atom are trademarks of Intel Corporation or its subsidiaries in the United States and other countries. COM Express is a trademark of PICMG. Microsoft and Windows are registered trademarks of Microsoft Corporation. All other product or service names are the property of their respective owners.

This document identifies products, their specifications, and their characteristics, which may be suitable for certain applications. It does not constitute an offer to sell or a commitment of present or future availability, and should not be relied upon to state the terms and conditions, including warranties and disclaimers thereof, on which Emerson Network Power may sell products. A prospective buyer should exercise its own independent judgment to confirm the suitability of the products for particular applications. Emerson Network Power reserves the right to make changes, without notice, to any products or information herein which will, in its sole discretion, improve reliability, function, or design. Emerson Network Power does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent or other intellectual property rights or under others. This disclaimer extends to any prospective buyer, and it includes Emerson Network Power's licensee, licensee's transferees, and licensee's customers and users. Availability of some of the products and services described herein may be restricted in some locations.

Emerson Network Power.
The global leader in enabling
Business-Critical Continuity™.

-  AC Power
-  Embedded Power
-  Precision Cooling
-  Connectivity
-  Infrastructure Management & Monitoring
-  Racks & Integrated Cabinets
-  DC Power
-  Outside Plant
-  Services
-  **Embedded Computing**
-  Power Switching & Controls
-  Surge Protection

Emerson Network Power

Offices: Tempe, AZ U.S.A. 1 800 759 1107 or +1 602 438 5720
 Paris, France +33 1 60 92 31 20 • Munich, Germany +49 89 9608 2333 • Tel Aviv, Israel +972 9 9560361
 Hong Kong +852 2176 3540 • Shanghai, China +86 21 3395 0289 • Tokyo, Japan +81 3 5403 2730 • Seoul, Korea +82 2 3483 1500

EmersonNetworkPower.com/EmbeddedComputing

Emerson, Business-Critical Continuity and Emerson Network Power are trademarks of Emerson Electric Co. or one of its affiliated companies. ©2010 Emerson Electric Co.