

# COMX-315

## Compact COM Express Module

■ Embedded Computing for  
Business-Critical Continuity™

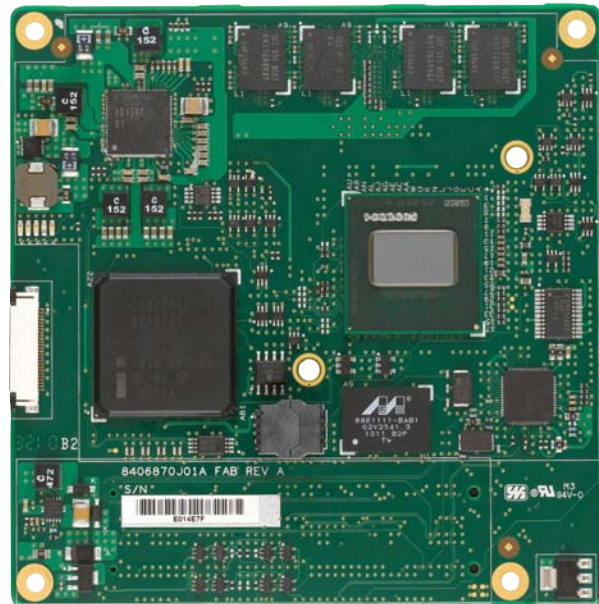
### PRELIMINARY DATA SHEET

**With ultra low power consumption, the COMX-315 is ideal for portable and hand held applications**

- COM Express® Type 2 compatible module
- 1.0 GHz Intel® Atom™ processor E640
- Intel® Platform Controller Hub EG20T
- Compact size (95 mm x 95 mm)
- XDP debug header

The Emerson Network Power COMX-315 is a Compact COM Express® module based on the Intel® Atom™ processor E640 for deeply embedded, low power applications. At 95 mm x 95 mm, compact format COM Express modules are designed to integrate all the core components of a common PC in a form factor small enough for specific embedded applications on a carrier board. COMX-315 includes graphics, sound, storage, network and multiple USB ports. The COMX-315 will be Type 2 compatible to fit on existing Type 2 carriers, but will not include the legacy PCIbus and IDE parallel interfaces.

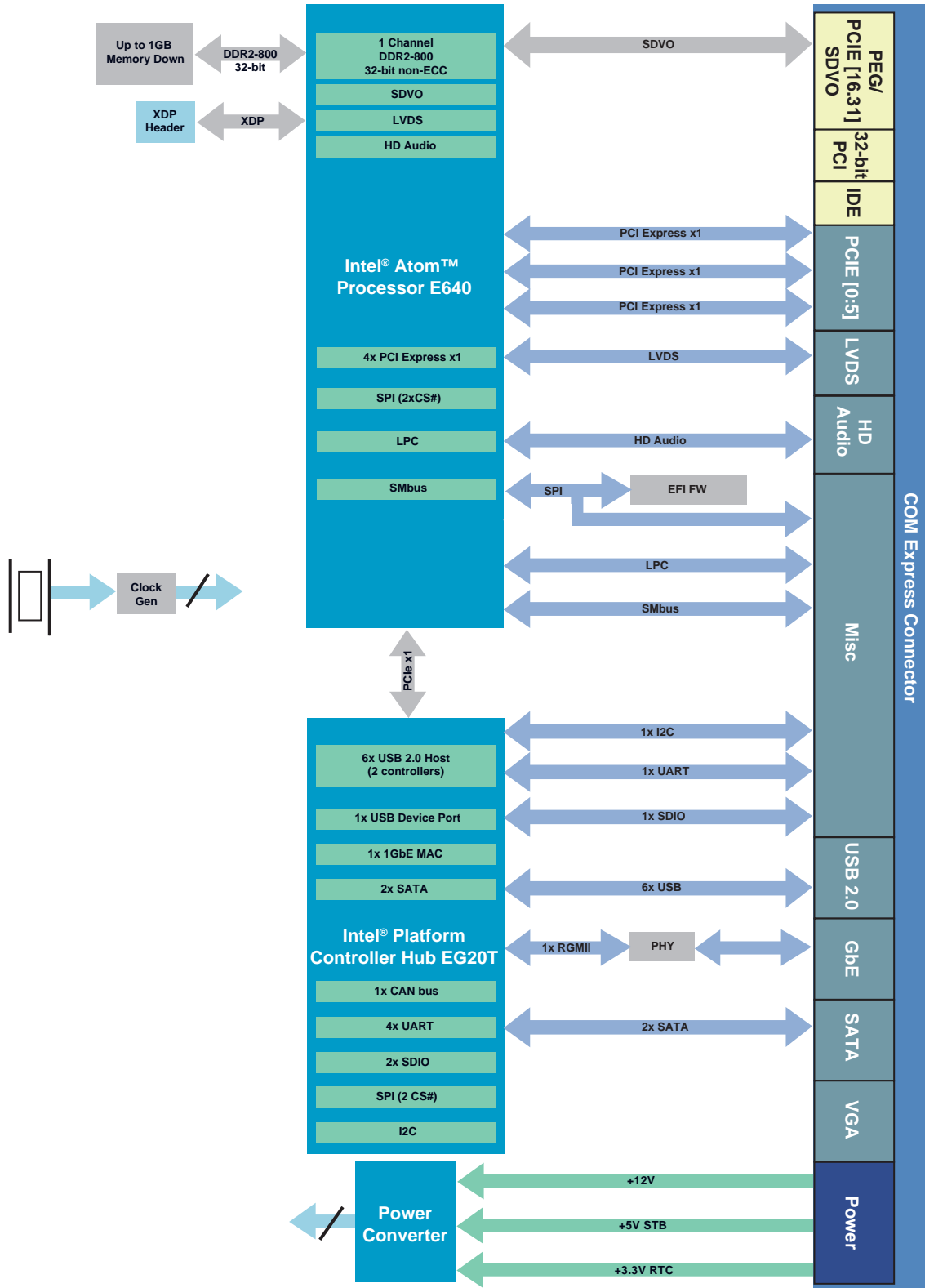
Based on the Intel Atom processor E640, the COMX-315 module is a highly reliable and long lifecycle product with ultra low power consumption, making it ideal for portable and hand held applications that do not require forced-air cooling. Typical applications for COMX-315 include portable test equipment, handheld devices and mobile based applications.



COM  Express®

  
**EMERSON**™  
Network Power

Block Diagram



## Hardware Specifications

### PROCESSOR

- Intel® Atom™ processor E640 @ 1.0 GHz

### MEMORY

- 1GB soldered-down memory

### SLOT I/O

- Three (3) PCI Express x1
- 1x Gigabit Ethernet, 2x SATA
- LPC and SPI
- HD Audio
- LVDS and SDVO graphics
- 6x USB 2.0
- SDIO
- RS-232 serial

### MODULE FORMAT

- COM Express
- Compact format 95 mm x 95 mm
- Type 2 (PCIbus and IDE not enabled)

### CONNECTIVITY THROUGH COM EXPRESS CONNECTORS

- LVDS
- SDVO
- 3x PCI Express x 1
- HD audio
- LPC SPI
- SDIO (for carrier mounted memory card)

## Software and Firmware Specifications

### BIOS

- UEFI BIOS with option to boot from SATA disk or USB CD-ROM

### COM EXPRESS API

- Supports COM.0 R2.0 Embedded API for standard control of:
  - ▲ System information
  - ▲ Watchdog timer
  - ▲ I2C bus
  - ▲ Flat panel brightness
  - ▲ User storage area
  - ▲ GPIO

### OPERATING SYSTEM

- Microsoft® Windows® 7 32-bit
- Windows® Embedded Standard 7
- Microsoft Windows XP
- Fedora 12 Linux

## Compliance and Certification Information

### ENVIRONMENTAL COMPLIANCE

- Standard variant is designed for deployment in 0 °C to 55 °C environments

### EMC COMPLIANCE

- Industry standard requirements: Class B (FCC, VCCI, CE, KC, AS/NZ)

### MEDICAL COMPLIANCE

- Designed to comply with IEC 60601
- ISO13485

### SAFETY STANDARDS

- Designed to comply with UL/CSA 60950-1, EN 60950-1 and IEC 60950-1 CB Scheme including all National and Group Differences. Safety of Information Technology Equipment.
- Certified to UL/CSA No. 60950-1 with no deviations and shall bear the Mark of an NRTL for US and Canada.

## Industry Standards

- PICMG® COM.0 R2.0

Note: COMX-315 will not support PCIbus and IDE

Ordering Information	
Product	Description
COMX-315	COM Express module with 1.0 GHz Intel® Atom™ processor E640 with 1GB memory, 0°C to 55 °C operating temperature
COMX-315-DEVKIT	COM Express Starter Kit with COMX-315, heatsink and carrier













**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.

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