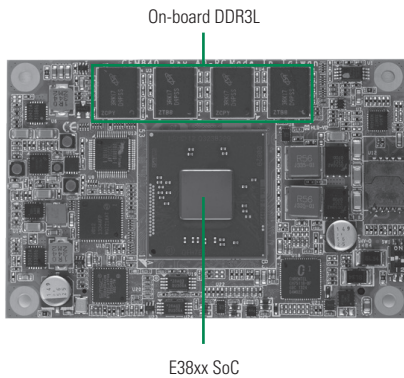


# CEM840

Intel® Atom™ E3800 Family COM Express Type 10 Mini Module



On-board DDR3L

E38xx SoC

## System

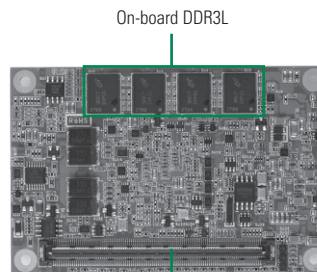
CPU	Intel® Atom™ processor E3845 1.91 GHz quad core, E3827 1.75 GHz dual core and E3815 1.46 GHz single core onboard
System Memory	On-board extended temperature DDR3L chips up to 4 GB
Chipset	Integrated in CPU
BIOS	AMI uEFI
SSD	N/A
Watchdog Timer	255 levels, 1~255 sec.
Expansion Interface	4 x PCIe x1 devices (3 x 1 while internal MAC is connected)
Battery Lithium	N/A
Power Requirements	DC input: 4.75V ~ 20V
Size	84 x 55 mm
Board Thickness	2.0 mm
Temperature	-40°C ~ +85°C, operation
Operation Humidity	10% ~ 95% relative humidity, non-condensing

## I/O

MIO	1 x LPC interface 2 x TX/RX UARTs (optional)
SATA	2 x SATA-300 support
Hardware Monitoring	N/A
Ethernet	1 port as 10/100/1000Mbps supports Wake-on-LAN, RPL/PXE Boot ROM with Intel® i210IT
Audio	HD link interface to baseboard for Codec
USB	8 x USB 2.0 ports and 1 x USB 3.0 ports
TPM	N/A
SMBus	Yes
Digital I/O	4 channels IN & 4 channels OUT

## Features

- Intel® Quad/ Dual/ Single Core™ Atom™ processors
- Max. up to 4 GB DDR3L on-board memory
- Max. up to 4 lanes of PCIe
- 2 SATA-300
- 8 USB 2.0 and 1 USB 3.0 ports



On-board DDR3L

COM Express Interface Connector

▲ Rear view

## Display

Chipset	Intel® HD graphics (Gen 7 Gfx) display engine Gfx APIs – DX11, OCL 1.2, OGL 3.2 2 independent displays
Display Interface	1 x VGA (optional) 1 x LVDS; 18/24-bit single channel 1 x DDI (DP, HDMI, DVI)

## Packing List

Quick installation guide, user's manual/utility CD

## Ordering Information

Standard	
CEM840	COM Express Type 10 Mini Module with Intel® Atom™ E3800 Series, DP/LVDS, 10/100/1000Mbps Ethernet and USB 3.0

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Accessories

Appendix