



## Main Features

- Embedded Intel® Atom™ E3800 family processors with 4 core support
- Embedded controller built-in with EAPI support
- Support DDR3L with ECC/SO-DIMMs 1066/1333MHz up to 4GB
- Support 4 x PCIe1, 4 x USB3.0/7 x USB2.0/2 x SATA2.0 and GbE
- 2 x DP/VGA interfaces
- Dimension 95 x 95mm (W x L)

## Product Overview

The ICES 620X is a COM Express Type 6 compact size module that features Intel® Atom™ E3800 Quad-Core processor, and one DDR3L SO-DIMM memory socket with ECC support, up to 8GB 1066/1333MHz. The ICES 620X integrates with Intel® Gen7 Graphic engine to support dual displays of CRT resolution up to 2048 x 1536 resolutions and 2DPs link with HDMI1.4a/DP1.2 configurations. The high performance ICES 620X COM Express module supports SATA, USB2.0 & USB3.0/VGA/DP (HDMI)/PCIex1.

## Specifications

### CPU Support

- Intel® Atom™ E3800 Quad core processor up to 1.91GHz.

### Main Memory

- Dual DDR3L/SO-DIMMs, ECC support 1066/1333MHz memory up to 8GB

### BIOS

- AMI System BIOS
- Plug and play support
- Advanced power management and advanced configuration & power interface support

### Display

- Intel® HD graphics with DX9 support
- Two DPs interfaces down to the carried board
- Standard VGA interface

### COM Express Connector

- AB :  
VGA/HDA/2 x SATA/GbE/4 x PCIe1 (without Gbe)/7 x USB2.0

LPC bus/SDIO (without GPIO)/GPIO/SMBus (I2C)/SPI BIOS

- CD:  
4 x USB3.0/2 x DP (HDMI)

### Power Requirements

- +12V, +5VSB, +3.3V RTC power
- Support both AT and ATX power supply mode
- One 3 pins 90 degree edge-connector for DC +12V fan

### Dimensions

- 95mm (W) x 95mm (L)

### Environment

- Board level operating temperatures: -40°C to 85°C.
- Storage temperatures: -20°C to 80°C
- Relative humidity:  
10% to 90% (operating, non-condensing)  
5% to 95% (non-operating, non-condensing)

### Certifications

- Meet CE/FCC Class B

## Block Diagram

Coming Soon

## Ordering Information

- ♦ **ICES 620X-3845 (P/N: TBD)**  
COM Express Type 6 Compact Module Extended -40°C to + 85°C with  
Intel® Atom™ E3800 family processor/4C, 1.91GHz/DDR3L with ECC/  
PCIe/HDMI/VGA/SATA/GbE
- ♦ **ICES 620X-3826 (P/N: TBD)**  
COM Express Type 6 Compact Module Extended -40°C to + 85°C with  
Intel® Atom™ E3800 family processor/2C, 1.46GHz/DDR3L with ECC/  
PCIe/HDMI/VGA/SATA/GbE