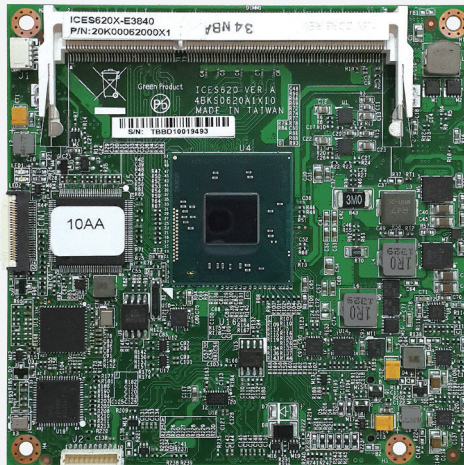


# ICES 620-HCAD1-USB

COM Express Type 6, COMPACT Size Module  
with Intel Atom® J1900 Family Processor DDR3L/  
GbE/2SATA/4 X PCIe and DP/USB3.0



## Main Features

- Embedded Intel Atom® J1900 family processors with 4 core support
- Embedded controller built-in with EAPI support
- Support DDR3L non-ECC/SO-DIMMs 1066/1333MHz up to 8GB
- Support 4 x PCIe x1, 4 x USB 3.0/7 x USB 2.0/2 x SATA2.0 and GbE, 2 x DP/VGA interfaces
- Dimension 95 x 95mm (W x L)

## Product Overview

The ICES 620 is a COM express type 6 compact size module that features Intel Atom® J1900 Quad-Core processor, and one DDR3L SO-DIMM memory socket with non-ECC support, up to 8GB 1066/1333MHz. The ICES 620 integrates with Intel® Gen7 graphic engine to support dual displays of CRT resolution up to 2048 x 1536 resolutions and 2DPs link with HDMI 1.4a/DP 1.2 configurations. The high performance ICES 620 COM express module supports SATA, USB 2.0 & USB 3.0/VGA/DP (HDMI)/PCIe x1.

## Specifications

### CPU Support

- Intel Atom® J1900 quad Core processor up to 1.91GHz.

### Main Memory

- Dual DDR3L/SO-DIMMs, non-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/ 2 x PCIe x1 (without Gbe)/7 x USB 2.0

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

- CD:  
4 x USB 3.0/2 x DP (HDMI)

### Power Requirements

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

### Dimensions

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

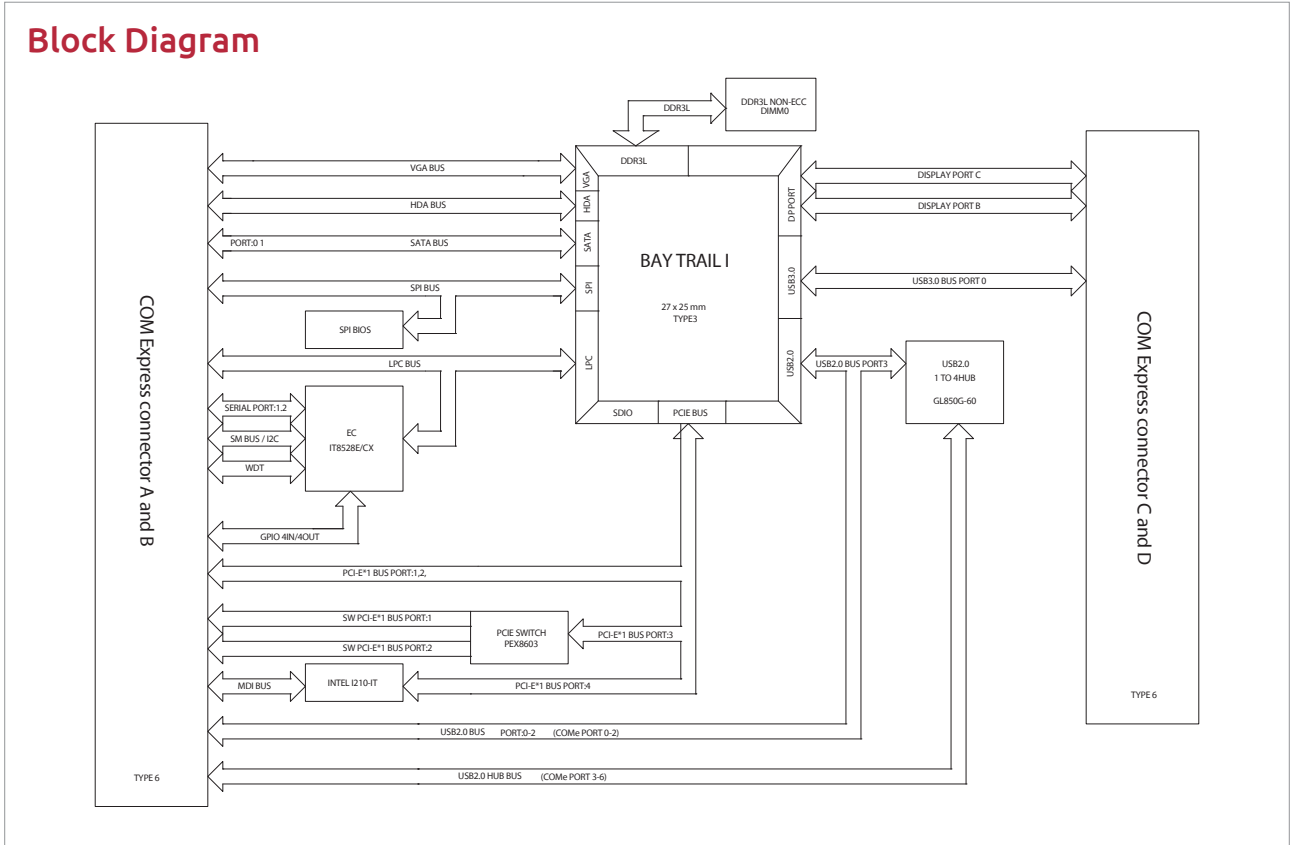
### Environment

- Board level operating temperatures: 0°C to +60°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



## Ordering Information

- ICES620-HCAD1-USB (P/N: 10K00062012X2)**  
 COM express type 6 compact module extended 0°C to +60°C with Intel Atom® J1900 family processor/4C, 2.00GHz/DDR3L with non-ECC/PCIe/HDMI/VGA/SATA/GbE