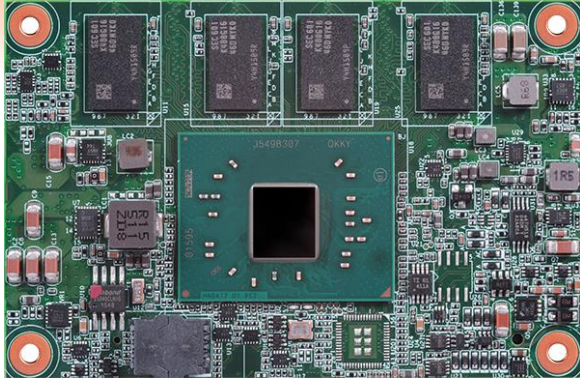


# H6840

## Intel® Atom™ E3900 COM Express® Mini



H6840 is a COM Express® Mini based on the 5<sup>th</sup> generation Intel® Atom™ Processor (Apollo Lake).

The Intel® Atom™ Processor (Apollo Lake) processors offer low power consumption with enhanced graphical capabilities that include up to 4K resolution (4096x2160 @ 60 Hz) and extensive support for Video Encoding and Video Decoding.

The processor options include Atom™, Celeron® and Pentium® alternatives. The Atom™ processor (E3900-series) are specified with a wide operating temperature and are intended for more rugged applications.

The H6840 is designed with Soldered DDR3L RAM on-board and it can also be configured with an optional soldered SATA Solid State Drive.

The module is available as Standard Grade or Industrial Grade.



## FEATURES

- Intel® Atom™ Processor E3900 Series
- 9<sup>th</sup> generation Intel® HD Graphics Engine
- Industrial temperature (-40 to +85) as option
- Up to 8GB soldered Memory on-board
- Up to 4K resolution: 4096x2304 @ 60Hz
- Industrial Grade: -40°C to +85°C

## LOOKING FOR SOMETHING SLIGHTLY DIFFERENT?

In most cases standard products can be customized to your specification. With small modifications to hardware and software, you can have the qualities and functions you need.

Call us. We will be happy to suggest and implement changes in standard products to meet your requirements exactly.

# H6840 – Technical Specifications

## PROCESSOR OPTIONS

Intel® Atom™x7-E3950 Processor, Quad Core, 2M Cache, 1.6GHz (2.0GHz), 12W

Intel® Atom™x5-E3940 Processor, Quad Core, 2M Cache, 1.6GHz (1.8GHz), 9W

Intel® Atom™x5-E3930 Processor, Dual Core, 2M Cache, 1.3GHz (1.8GHz), 6W

Intel® Pentium® Processor N4200, Quad Core, 2M Cache, 1.1GHz (2.5GHz), 6W

Intel® Celeron® Processor N3350, Dual Core, 2M Cache, 1.1GHz (2.4GHz), 6W

## SYSTEM MEMORY

Up to 8GB on-board soldered RAM

Dual Channel DDR3L 1600MHz

## INTEGRATED GRAPHICS

9<sup>th</sup> generation integrated Intel® HD Graphics

1 x DDI (HDMI/DVI/DP++)

1 x LVDS/eDP

Highest resolution: 4096x2160 @ 60 Hz

Supports: OpenGL 5.0, DirectX 12, OpenCL 2.1

Supports HW Encode: HEVC/H.265, AVC/H.264, VP9, VP8, MVC, JPEG/MJPEG

Supports HW Decode: HEVC/H.265, AVC/H.264, VP9, VP8, MVC, VC1/WMV9, MPEG2, JPEG/MJPEG

## STORAGE INTERFACES

2 x SATA 3.0 (up to 6Gb/s)

Integrated Advanced Host Controller Interface (AHCI)

## ONBOARD STORAGE (OPTIONAL)

4GB/8GB/16GB/32GB/64GB SATA SSD

## ETHERNET

1 x Intel® I210IT (10/100/1000Mbps) (-40°C to 85°C)

## AUDIO

HD Audio

## EXPANSION INTERFACES

4 x PCIe x1 (Gen 3)

2 x USB 3.0

8 x USB 2.0

1 x LPC

1 x I2C

1 x SMBus

1 x SPI

1 x SDIO/GPIO

2 x UART (Tx/Rx)

## WATCHDOG TIMER

Programmable between 1 to 255 seconds

## BIOS

AMI SPI 128Mbit

## TPM

Available as option

## POWER

4.75V~20V, 5VSB, VCC\_RTC (ATX mode)

4.75V~20V, VCC\_RTC (AT mode)

## OPERATING TEMPERATURE

Standard Grade: 0°C to +60°C

Industrial Grade: -40°C to +85°C (option with E3900 processors)

## HUMIDITY

5 to 90% (operating)

5 to 90% (storage)

## FORM FACTOR

COM Express® Mini R2.1, Type 10