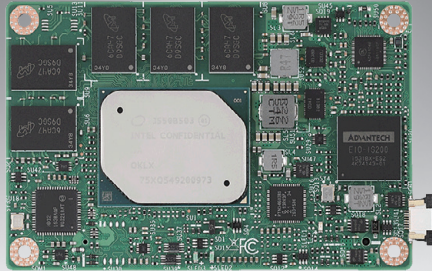


# SOM-7569

## Intel® Atom™ E3900 & Pentium™ and Celeron™ N Series Processors COM-Express Mini Module

NEW



### Features

- COM R.2.1 Type 10 Mini Module
- Intel® Atom™ E3900 & Pentium™ and Celeron™ N Series Processors
- Max 8GB DDR3L onboard memory (support ECC, E3900 SKU only)
- Dual Display: LVDS, HDMI/DisplayPort
- onboard eMMC (default 32GB), TPM2.0
- Supports H.264/AVC, H.265/HEVC, VP9, VP8 HW DECODE
- Supports -40 ~ 85 °C industrial operating temperature
- iManager and Embedded Software APIs

#### Software APIs:



#### Utilities:

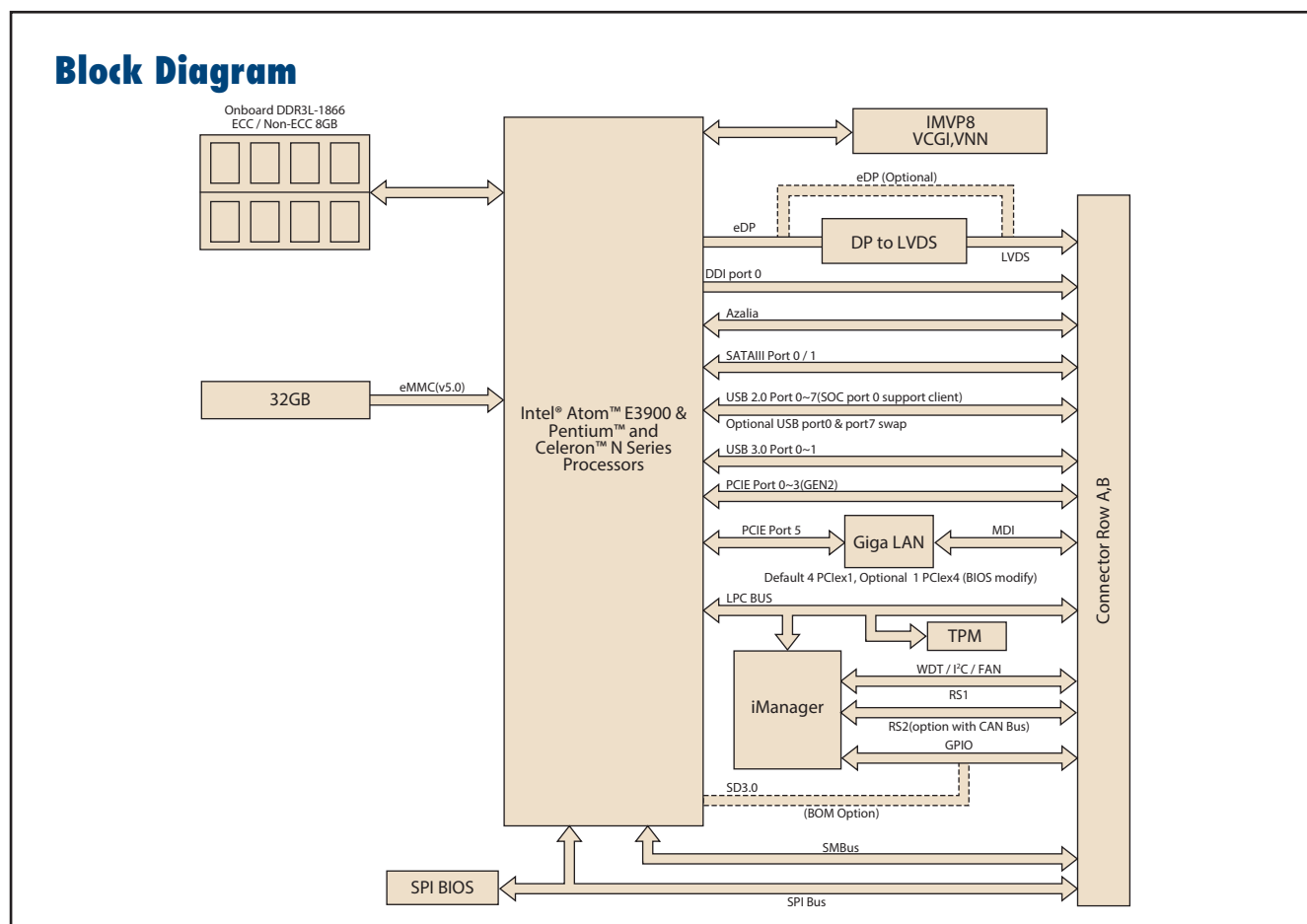


### Specifications



|                        |                          |   |  |                        |                        |                        |
|------------------------|--------------------------|---|--|------------------------|------------------------|------------------------|
| Form Factor            | Form Factor              | COM-Express 2.1   |  |                        |                        |                        |
|                        | Pin-out Type             | Mini Module, Type 10 Pin-out  |  |                        |                        |                        |
| Processor System       | SoC                      | Atom X7-E3950   | Atom X5-E3940  | Atom X5-E3930          | Pentium N4200E         | Celeron N3350E         |
|                        | Base Frequency           | 1.6GHz  | 1.6GHz   | 1.3GHz                 | 1.1GHz                 | 1.1GHz                 |
|                        | Burst Frequency          | 2GHz  | 1.8GHz   | 1.8GHz                 | 2.5GHz                 | 2.4GHz                 |
|                        | Core/Thread              | 4 / 4   | 4 / 4  | 2 / 2                  | 4 / 4                  | 2 / 2                  |
|                        | LLC                      | 2MB   | 2MB  | 2MB                    | 2MB                    | 2MB                    |
|                        | CPU TDP                  | 12W   | 9.5W   | 6.5W                   | 6W                     | 6W                     |
|                        | Chipset                  | integrated in CPU   |  |                        |                        |                        |
| Memory                 | BIOS                     | AMI UEFI BIOS @ 64Mb  |  |                        |                        |                        |
|                        | Technology               | One channel, DDR3L up to 1866(non-ECC), up to 1600(ECC)   |  |                        |                        |                        |
|                        | ECC Support              | Yes (E3900 SKU only)  |  |                        |                        |                        |
|                        | Max. Capacity            | 8GB   |  |                        |                        |                        |
| Graphics               | Socket                   | Memory down   |  |                        |                        |                        |
|                        | Controller               | Intel® HD Graphics 505  | Intel® HD Graphics 500   | Intel® HD Graphics 500 | Intel® HD Graphics 505 | Intel® HD Graphics 500 |
|                        | Graphics Burst Frequency | 650MHz  | 600MHz   | 550MHz                 | 750MHz                 | 650MHz                 |
|                        | Graphic Memory           | Intel DMVT5.0   |  |                        |                        |                        |
|                        | 3D/HW Acceleration       | DX (9.3, 10, 11.3, 12), OpenGL 4.3, OGL ES 3.0, OpenCL 2.0<br>HEVC (H.265) @L5, H.264 @ 5.2, MVC, MPEG2, VP8, VP9, VC-1, WMV9, JPEG/MJPEG HW Decode, HEVC (H.265) @L4, H.264 @ 5.2, MVC, VP8, VP9, JPEG/MJPEG HW Encode |  |                        |                        |                        |
|                        | Display                  | LCD (LVDS/eDP)  | LVDS: Single-channel 18/24-bit, up to 1366 x 768<br>eDP: Up to 4096 x 2160 @ 60 Hz |                        |                        |                        |
| DD0 (HDMI/DisplayPort) |                          | HDMI 1.4b: Upto 3840 x 2160 @ 30 Hz<br>DP 1.2: Upto 4096 x 2160 @ 60 Hz   |  |                        |                        |                        |
| Dual Display           |                          | LVDS, HDMI/DisplayPort<br>eDP, HDMI/DisplayPort (optional)  |  |                        |                        |                        |
| Expansion              | PCI Express x1           | 4 PCIe x1, 1 PCIe x4 (optional)   |  |                        |                        |                        |
|                        | Audio Interface          | HD Audio  |  |                        |                        |                        |
|                        | LPC                      | Yes   |  |                        |                        |                        |
| Serial Bus             | SMBus                    | Yes   |  |                        |                        |                        |
|                        | I <sup>2</sup> C Bus     | Yes   |  |                        |                        |                        |
|                        | Ethernet                 | Controller  | Intel® i210IT/i210AT   |                        |                        |                        |
| Speed                  |                          | 10/100/1000 Mbps  |  |                        |                        |                        |
| I/O & Features         | SATA                     | 2 Ports, Support Gen 1 (1.5 Gb/s) or Gen2 (3 Gb/s) and Gen3.1 (6Gb/s)   |  |                        |                        |                        |
|                        | Onboard Storage          | 32GB eMMC 5.0 interface   |  |                        |                        |                        |
|                        | USB3.0                   | 2 Ports   |  |                        |                        |                        |
|                        | USB2.0                   | 8 Ports   |  |                        |                        |                        |
|                        | Audio                    | Intel® HD Audio   |  |                        |                        |                        |
|                        | GPIO                     | 8-bit GPIO  |  |                        |                        |                        |
|                        | SDIO                     | Optional  |  |                        |                        |                        |
|                        | Watchdog                 | 65536 level, 0 ~ 65535 sec  |  |                        |                        |                        |
|                        | COM Port                 | 2 Ports (2-Wire)  |  |                        |                        |                        |
|                        | CAN Bus                  | 1 CAN Bus (option)  |  |                        |                        |                        |
|                        | Express Card             | Yes   |  |                        |                        |                        |
| Power                  | TPM                      | TPM2.0  |  |                        |                        |                        |
|                        | Smart Fan                | 2 Ports; 1 Port on COM Module, Support 12V Fan, 1 Port on Carrier Board   |  |                        |                        |                        |
|                        | Type                     | ATX, AT   |  |                        |                        |                        |
|                        | Supply Voltage           | ATX (Vin 4.75-20V, Vsb 4.75-5.25V)<br>AT (Vin 4.75-20V)   |  |                        |                        |                        |
| Environment            | Power Consumption (Max.) | Burn in: (E3950)14.73W; (N4200)12.89W   |  |                        |                        |                        |
|                        | Power Consumption (Idle) | Idle: (E3950) 4.68W; (N4200) 2.56W  |  |                        |                        |                        |
|                        | Temperature              | Operating: 0 ~ 60 °C (32 ~ 140 °F), Storage: -40 ~ 85 °C (-40 ~ 185 °F)<br>Extend: -40 ~ 85 °C (-40 ~ 185 °F) (E3900 SKU only)  |  |                        |                        |                        |
| Mechanical             | Humidity                 | Operating: 40 °C @ 95% relative humidity, non-condensing<br>Storage: 60 °C @ 95% relative humidity, non-condensing  |  |                        |                        |                        |
|                        | Vibration Resistance     | 3.5 Grms  |  |                        |                        |                        |
|                        | Dimensions               | 84 x 55 mm (3.3" x 2.17")   |  |                        |                        |                        |

## Block Diagram



## Ordering Information

| Part No.           | CPU      | Core | Base Freq. | CPU TDP | LLC | Onboard DDR3L | ECC support | Onboard eMMC | Power  | Thermal solution | Operating Temp. |
|--------------------|----------|------|------------|---------|-----|---------------|-------------|--------------|--------|------------------|-----------------|
| SOM-7569CCBCC-S6B2 | X7-E3950 | 4    | 1.6GHz     | 12W     | 2MB | 8GB i-grade   | ECC         | 32GB         | AT/ATX | Passive          | 0 ~ 60 °C       |
| SOM-7569BCBCC-S6B2 | X7-E3950 | 4    | 1.6GHz     | 12W     | 2MB | 4GB           | ECC         | 32GB         | AT/ATX | Passive          | 0 ~ 60 °C       |
| SOM-7569BC0CC-S3B2 | X5-E3930 | 2    | 1.3GHz     | 6.5W    | 2MB | 4GB           | ECC         | N/A          | AT/ATX | Passive          | 0 ~ 60 °C       |
| SOM-7569CCBXC-S6B2 | X7-E3950 | 4    | 1.6GHz     | 12W     | 2MB | 8GB i-grade   | ECC         | 32GB         | AT/ATX | Passive          | -40 ~ 85 °C     |
| SOM-7569CBXC-S5B2  | X5-E3940 | 4    | 1.6GHz     | 9.5W    | 2MB | 4GB           | ECC         | 32GB         | AT/ATX | Passive          | -40 ~ 85 °C     |
| SOM-7569BC0XC-S3B2 | X5-E3930 | 2    | 1.3GHz     | 6.5W    | 2MB | 4GB           | ECC         | N/A          | AT/ATX | Passive          | -40 ~ 85 °C     |
| SOM-7569BNBCC-S2B2 | N4200E   | 4    | 1.1GHz     | 6W      | 2MB | 4GB           | non ECC     | 32GB         | AT/ATX | Passive          | 0 ~ 60 °C       |
| SOM-7569BN0CC-S1B2 | N3350E   | 2    | 1.1GHz     | 6W      | 2MB | 4GB           | non ECC     | N/A          | AT/ATX | Passive          | 0 ~ 60 °C       |

Note: Any other sku or combination is project based support. Please contact sales for details.

## Packing List

| Part No.       | Description                                      | Quantity |
|----------------|--|----------|
| -              | SOM-7569 COM module                              | 1        |
| 1960079610T000 | Heat spreader (when use Atom E3900 SKU)          | 1        |
| 1960079608T010 | Heat spreader (when use Pentium & Celeron N SKU) | 1        |

## Optional Accessories

| Part No.       | Description                        |
|----------------|------------------------------------|
| 1960056280N001 | Semi-Heatsink 84L x 55W x 13.2H mm |
| 1960050950N001 | Semi-Heatsink 84L x 55W x 34H mm   |

## Development Board

| Part No.         | Description   |
|------------------|---|
| SOM-DB5800-U0A2E | Development Board for COM Express® R2.1 Type 10 Modules |

## Embedded OS

| OS    | Part Number    | Description                        |
|-------|----------------|------------------------------------|
| Win10 | 20706WX9HS0091 | img W10 19HL SOM-7569 64b 1809 ENU |
| Win10 | 20706WX9VS0095 | img W10 19VL SOM-7569 64b 1809 ENU |
| Win10 | 20706WX9ES0105 | img W10 19EL SOM-7569 64b 1809 ENU |

# Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.



## AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

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### PRŮMYSLOVÉ POČÍTAČE

*fanless embedded PC, do racku, ...*



### POČÍTAČE S DISPLEJEM

*panelové PC, terminály, do vozidel, ...*



### AUTOMATIZACE A SBĚR DAT

*převodníky, karty, moduly, switche, ...*



### PERIFERIE A KOMPONENTY

*monitory, klávesnice, desky, skříně, ...*



### NOTEBOOKY A TABLETY

*odolné, windows, android, IP65, ...*



### INFORMAČNÍ KIOSKY

*interiérové, venkovní, ...*



### MEDICÍNSKÁ TECHNIKA

*počítače, tablety, LCD, klávesnice, ...*



### SOFTWAREVÁ ŘEŠENÍ

*pro výrobu, zaměstnance, kiosky, ...*



### PŘEJÍT DO E-SHOPU

[eshop.autocont-ipc.cz](http://eshop.autocont-ipc.cz)



### DOPRAVA ZDARMA

Doprava zdarma v ČR a SR při objednávce nad 10 000 Kč bez DPH nebo nad 400 EUR.



### PRODLOUŽENÁ ZÁRUKA

Záruka 2 roky na vyráběné počítače s možností jejího prodloužení až na 5 let.



### ODMĚNA ZA VĚRNOST

Pravidelní zákazníci u nás nakupují za nižší ceny. Výše slevy se odvíjí od realizovaného obrátu.



### SERVIS ON-SITE A IN-TIME

K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.