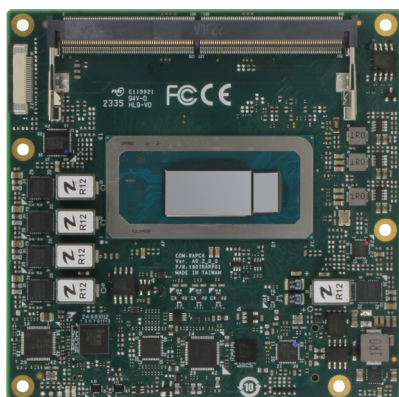


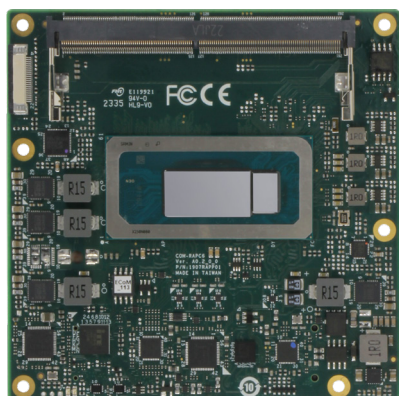
# COM-RAPC6

COM Express Type 6 Compact Size with 13th Generation Intel® Core™ i7/i5/i3 Processor SoC

COM-RAPC6-H series CPU



COM-RAPC6-P/U series CPU



## Features

- 13th Generation Intel® Core™ i7/i5/i3 Processor SoC, max TDP 45W
- DDR5 SODIMM x 2, up to 64GB (non-ECC)
- Intel i226 2.5GbE x 1
- SATA 6.0Gbps x 2
- USB3.2 Gen2 x 4, USB2.0 x 8
- Up to 6 PCIe devices
- 12V DC input
- COM Express Type 6, Compact size, 95 x 95mm



| Power                       |                                                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Requirement           | +12V and +5VSB for ATX, +12V for AT                                                                                                                                       |
| Power Type                  | AT/ATX                                                                                                                                                                    |
| Power Consumption (Typical) | Intel® Core™ i7-13800HE, DDR5 32GB x 2, 8.30A@ +12V                                                                                                                       |
| Display                     |                                                                                                                                                                           |
| Graphics Controller         | Intel® Iris® Xe Graphics<br>Intel® UHD Graphics                                                                                                                           |
| Video Output                | 4 Simultaneous Displays:<br>DDI x 3, up to 3840 x 2160<br>18/24-bit Single/Dual-Channel LVDS/eDP x 1, up to 1920 x 1080 / 3840 x 2160 @60Hz<br>VGA x 1, up to 1920 x 1080 |
| I/O                         |                                                                                                                                                                           |
| Ethernet                    | Intel® Ethernet Controller I226, 2.5GbE x 1                                                                                                                               |
| Audio                       | High Definition Audio Interface                                                                                                                                           |
| USB Port                    | USB 2.0 x 8, USB 3.2 Gen 2 x 4                                                                                                                                            |
| Serial Port                 | 2-Wire UART x 2 (Tx/Rx)                                                                                                                                                   |
| HDD Interface               | SATA 6.0Gbps x 2                                                                                                                                                          |
| Expansion                   | PCIe[x1] x 4 (Configurable by BIOS)+<br>PCIe[x4] x 1+PCIe[x8] x 1<br>(PCIe[x8] for H series CPU only)                                                                     |
| GPIO                        | 8-bit                                                                                                                                                                     |
| SMBus/I2C                   | I2C x 1, SMBus x 1                                                                                                                                                        |
| Environment                 |                                                                                                                                                                           |
| Operating Temperature       | 32°F ~ 140°F (0°C ~ 60°C)<br>WITAS 2: -40°F ~ 185°F (-40°C ~ 85°C) on selected CPU SKU                                                                                    |
| Storage Temperature         | -40°F ~ 185°F (-40°C ~ 85°C)                                                                                                                                              |
| Operating Humidity          | 0% ~ 90% relative humidity, non-condensing                                                                                                                                |
| EMC                         | CE/FCC Class A                                                                                                                                                            |
| OS Support                  | Windows® 10 (64-bit)<br>Linux Ubuntu 23.10.1/Kernel 6.5                                                                                                                   |
| Weight                      | 0.25 lb. (0.12Kg)                                                                                                                                                         |

## Specifications

| System          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor     | COM Express, Type 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CPU             | 13th Intel® Core™ Processor:<br>Intel® Core™ i7-13800HRE Processor (14C/20T, 2.5GHz, 45W, In-Band ECC)<br>Intel® Core™ i7-13800HE Processor (14C/20T, 2.5GHz, 45W)<br>Intel® Core™ i5-13600HE Processor (12C/16T, 2.7GHz, 45W)<br>Intel® Core™ i3-13300HE Processor (8C/12T, 2.1GHz, 45W)<br>Intel® Core™ i7-1370PE Processor (14C/20T, 1.9GHz, 28W)<br>Intel® Core™ i5-1340PE Processor (14C/16T, 1.8GHz, 28W)<br>Intel® Core™ i3-1320PE Processor (8C/12T, 1.7GHz, 28W)<br>Intel® Core™ i3-1315UE Processor (6C/8T, 1.2GHz, 15W) |
| Chipset         | Integrated with Intel® SoC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Memory          | DDR5 SODIMM Socket x 2, non-ECC, up to 64GB (U Processor up to 4800MT/s, H/P Processor up to 5200 MT/s)                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Onboard Storage | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| BIOS            | AMI UEFI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Wake on LAN     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Watchdog Timer  | 255 Levels                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Dimension       | 3.75" x 3.75" (95mm x 95mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Security        | TPM 2.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## Packing List

- COM-RAPC6

## Optional Accessories

| Part Number       | Description                                                                   |
|-------------------|-------------------------------------------------------------------------------|
| COM-RAPC6-FAN01   | Cooler.95 x 95 x 45.4mm.4pin                                                  |
| ECB-920A-A11-0001 | COMe Type 6/10.Carrier Board.ATX.2.5GbE.8USB.2COM.4SATA.PCie.AT/ATX. Rev.A1.1 |



ES France - Mobilité & Systèmes Embarqués  
127 rue de Buzenval BP 26 - 92380 Garches

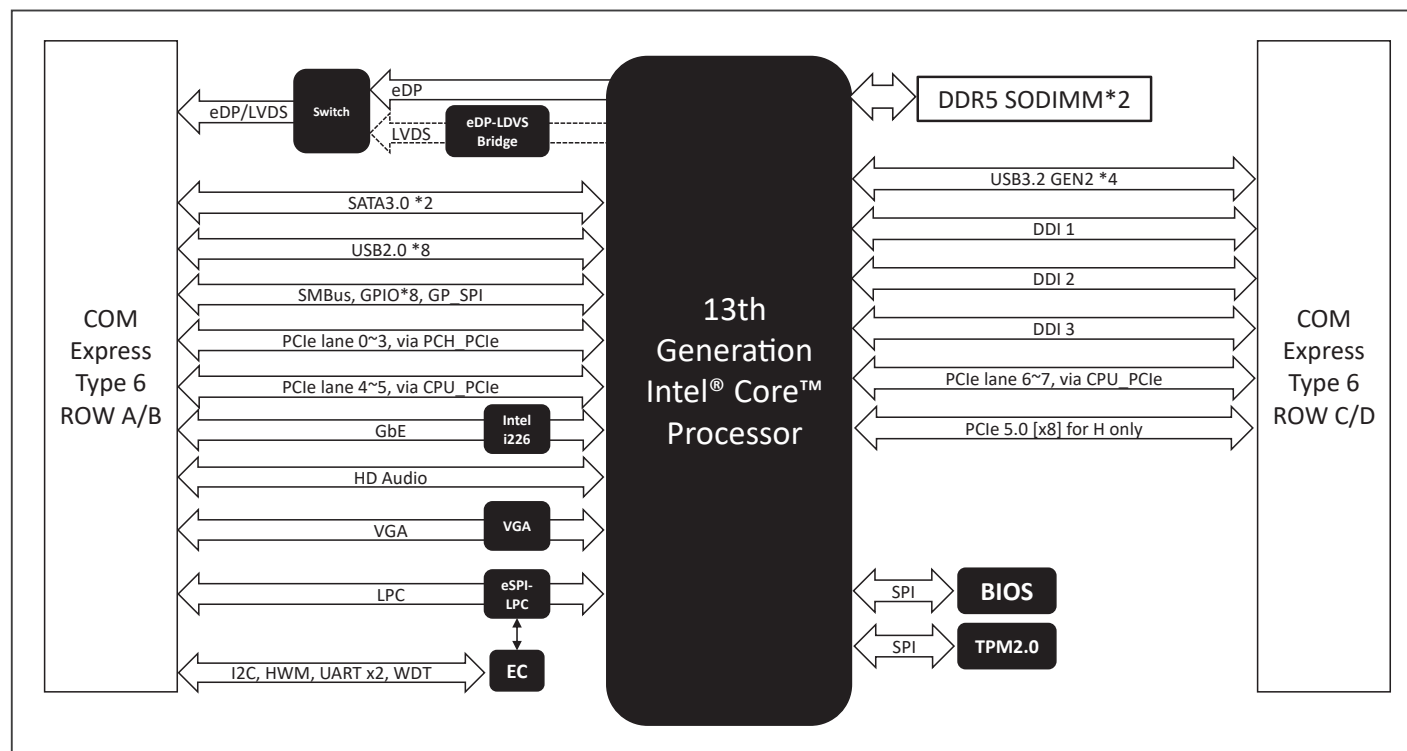


Tél. 01 47 95 99 80  
Fax. 01 47 01 16 22

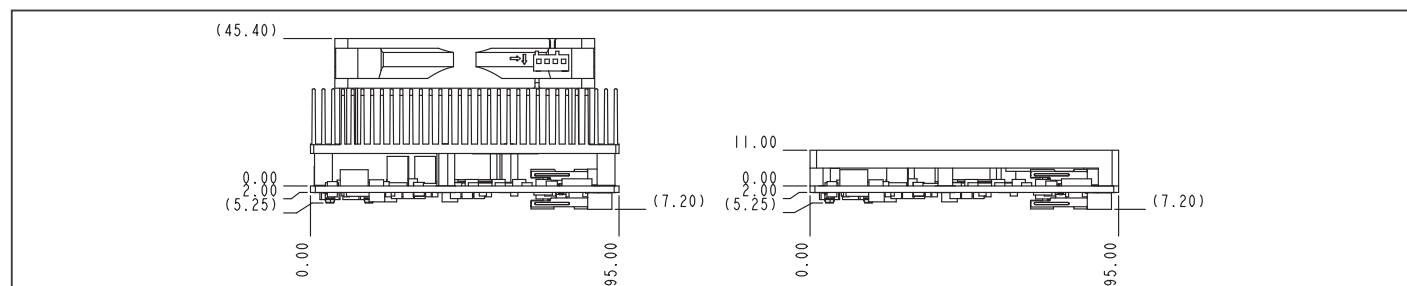


e-mail : mse@es-france.com  
Site Web : www.es-france.com

## Block Diagram Unit: mm



## Dimension Unit: mm



## Ordering Information

| Part Number          | COM Express Type | CPU                      | Memory         | ECC support | Display          | LVDS               | Storage          | LAN       | USB                           | UART                    | Expansion                                                                         | Power | Temp         | Others                      |
|----------------------|------------------|--------------------------|----------------|-------------|------------------|--------------------|------------------|-----------|-------------------------------|-------------------------|-----------------------------------------------------------------------------------|-------|--------------|-----------------------------|
| COM-RAPC6-A10-0001   | Type 6           | Intel® Core™ i7-13800HE  | DDR5 SODIMM x2 | —           | VGA x 1, DDI x 3 | 18/24bits 2CH LVDS | SATA 6.0Gbps x 2 | I226-ITx1 | USB 2.0 x 8, USB3.2 Gen 2 x 4 | 2-Wire UART x 2 (Tx/Rx) | PCIe x 4 lanes ([x1] x 4 or [x2] x 2 or [x4] x 1) + PCIe [x4] x 1 + PCIe [x8] x 1 | 12V   | 0°C ~ 60°C   | LPC, GPIO 8-bit, I2C, SMBus |
| COM-RAPC6-A10-0002   | Type 6           | Intel® Core™ i5-13600HE  | DDR5 SODIMM x2 | —           | VGA x 1, DDI x 3 | 18/24bits 2CH LVDS | SATA 6.0Gbps x 2 | I226-ITx1 | USB 2.0 x 8, USB3.2 Gen 2 x 4 | 2-Wire UART x 2 (Tx/Rx) | PCIe x 4 lanes ([x1] x 4 or [x2] x 2 or [x4] x 1) + PCIe [x4] x 1 + PCIe [x8] x 1 | 12V   | 0°C ~ 60°C   | LPC, GPIO 8-bit, I2C, SMBus |
| COM-RAPC6-A10-0003   | Type 6           | Intel® Core™ i3-1320PE   | DDR5 SODIMM x2 | —           | VGA x 1, DDI x 3 | 18/24bits 2CH LVDS | SATA 6.0Gbps x 2 | I226-ITx1 | USB 2.0 x 8, USB3.2 Gen 2 x 4 | 2-Wire UART x 2 (Tx/Rx) | PCIe x 4 lanes ([x1] x 4 or [x2] x 2 or [x4] x 1), PCIe [x4] x 1                  | 12V   | 0°C ~ 60°C   | LPC, GPIO 8-bit, I2C, SMBus |
| COM-RAPC6-A10-0005   | Type 6           | Intel® Processor U300E   | DDR5 SODIMM x2 | —           | VGA x 1, DDI x 3 | 18/24bits 2CH LVDS | SATA 6.0Gbps x 2 | I226-ITx1 | USB 2.0 x 8, USB3.2 Gen 2 x 4 | 2-Wire UART x 2 (Tx/Rx) | PCIe x 4 lanes ([x1] x 4 or [x2] x 2 or [x4] x 1), PCIe [x4] x 1                  | 12V   | 0°C ~ 60°C   | LPC, GPIO 8-bit, I2C, SMBus |
| COM-RAPC6W2-A10-0001 | Type 6           | Intel® Core™ i7-13800HRE | DDR5 SODIMM x2 | —           | VGA x 1, DDI x 3 | 18/24bits 2CH LVDS | SATA 6.0Gbps x 2 | I226-ITx1 | USB 2.0 x 8, USB3.2 Gen 2 x 4 | 2-Wire UART x 2 (Tx/Rx) | PCIe x 4 lanes ([x1] x 4 or [x2] x 2 or [x4] x 1) + PCIe [x4] x 1 + PCIe [x8] x 1 | 12V   | -40°C ~ 85°C | LPC, GPIO 8-bit, I2C, SMBus |

