COM Express® Type 6/7/10
STANDARD COMPUTER-ON-MODULES

- COM HPC
- COM EXPRESS® BASIC
- COM EXPRESS® COMPACT
- COM EXPRESS® MINI
- COM EXPRESS® CARRIER
## COMPUTER-ON-MODULE
### for High Performance Computing

<table>
<thead>
<tr>
<th>COMPLIANCE</th>
<th>COMh-sdID</th>
<th>COMh-caAP</th>
<th>COMh-ccAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COM-HPC® Server, Size D</td>
<td>COM HPC® Client, Size A</td>
<td>COM HPC® Client, Size C</td>
</tr>
<tr>
<td>DIMENSIONS</td>
<td>160 x 160 mm</td>
<td>95 x 120 mm</td>
<td>160 x 120 mm</td>
</tr>
<tr>
<td>CPU (SoC)</td>
<td>Intel® Xeon® D-2700 Processor Series</td>
<td>Intel® Core™ processors (formerly Alder Lake P)</td>
<td>Intel® Core™ S processors (formerly Alder Lake S)</td>
</tr>
<tr>
<td>CHIPSET</td>
<td>–</td>
<td>On-Package Platform Controller Hub</td>
<td>On-Package Platform Controller Hub</td>
</tr>
<tr>
<td>MAIN MEMORY</td>
<td>4x DDR4 DIMM sockets for up to 256 Gbyte RDIMM (312 Gbyte planned)</td>
<td>2x DDR5 SDDIMM dual-channel up to 64 Gbyte ECC or non ECC</td>
<td>2x DDR5 SDDIMM for up to 64 Gbyte ECC / non ECC</td>
</tr>
<tr>
<td>GRAPHICS CONTROLLER</td>
<td>–</td>
<td>Intel® Iris Xe Graphics architecture with up to 96 EUs, 4 Independent Displays (up to 64)</td>
<td>Intel® UHD Graphics 770 driven by Xe architecture, with up to 32 EUs, 4 Independent Displays (up to 64)</td>
</tr>
<tr>
<td>ETHERNET</td>
<td>1x 1.25 Gb Ethernet with TSN &amp; WOL support, 8x Ethernet port supporting versatile configurations: 100GbE/2x 50GbE/4x 25GbE/2x 25GbE + 4x 10GbE</td>
<td>Up to 2x 2.5 Gb Ethernet with TSN &amp; WOL support (depending on SKU)</td>
<td>2x 2.5 Gb Ethernet with TSN &amp; WOL support</td>
</tr>
<tr>
<td>STORAGE</td>
<td>2x SATA 6Gb/s</td>
<td>2x SATA 6Gb/s</td>
<td>2x SATA 6Gb/s</td>
</tr>
<tr>
<td></td>
<td>Flash Board</td>
<td>Flash Board</td>
<td>Flash Board</td>
</tr>
<tr>
<td>CHIP EXPRESS®</td>
<td>32x PCIe Gen 2 (4x, 8x, 16x)</td>
<td>2x PCIe Gen 4 (4x) - With shared on board NVMe 6+4x PCIe Gen 3.0 via HSIO (shared with SATX)</td>
<td>6+2x PCIe Gen 4.0 via HSIO (shared with SATX)</td>
</tr>
<tr>
<td>DISPLAY</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>AUDIO</td>
<td>4x Soundcard LV5</td>
<td>4x Soundcard LV5</td>
<td>Groundplane</td>
</tr>
<tr>
<td>USB</td>
<td>4x USB 3.0 / USB 2.0</td>
<td>2x USB 2.0 / Thunderbolt 1.0, 2x USB 3.2, 8x USB 2.0</td>
<td>4x (2x) USB 3.2</td>
</tr>
<tr>
<td>SERIAL</td>
<td>2x serial interface</td>
<td>2x serial interface</td>
<td>2x serial interface</td>
</tr>
<tr>
<td>SPECIAL FEATURES</td>
<td>TPM 2.0, Fail-Safe via 2nd SPI Flash</td>
<td>TPM 2.0, Fail-Safe via 2nd SPI Flash</td>
<td>TPM 2.0, Fail-Safe via 2nd SPI Flash</td>
</tr>
<tr>
<td>FEATURES ON REQUEST</td>
<td>NVMe 512</td>
<td>uPD (AMT/TFT/IES Support), up to 3x PCIe x1 additional as w/ Ethernet &amp; SATA, NVMe 512</td>
<td>uPD (AMT/TFT/IES Support), up to 3x PCIe x1 additional as w/ Ethernet &amp; SATA, NVMe 512</td>
</tr>
<tr>
<td>POWER MANAGEMENT</td>
<td>ACPI 6.0</td>
<td>ACPI 6.0</td>
<td>ACPI 6.0</td>
</tr>
<tr>
<td>POWER SUPPLY</td>
<td>12V DC</td>
<td>8.5 V – 20 V Wide Range, Single Supply Power</td>
<td>12V ATX and/or Single Supply Power</td>
</tr>
<tr>
<td>BIOS</td>
<td>AMI UEFI</td>
<td>AMI UEFI</td>
<td>AMI UEFI</td>
</tr>
<tr>
<td>OPERATING SYSTEM</td>
<td>Windows® 10, Linux, VxWorks (on request)</td>
<td>Windows® 10, Linux, VxWorks (on request)</td>
<td>Windows®10, Linux, VxWorks (on request)</td>
</tr>
<tr>
<td>TEMPERATURE</td>
<td>Commercial temperature: 0°C to +40°C operating, -30°C to +80°C non-operating Industrial temperature: 0°C to +80°C operating, -40°C to +80°C non-operating</td>
<td>Commercial temperature: 0°C to +60°C operating, -30°C to +85°C non-operating Optional E1: -25°C to +70°C operating, -40°C to +85°C non-operating Optional E2 (with Screaming): -40°C to +78°C operating, -80°C to +85°C non-operating</td>
<td>Commercial temperature: 0°C to +60°C operating, -30°C to +85°C non-operating Optional E1: -25°C to +75°C operating, -40°C to +85°C non-operating Optional E2 (with Screaming): -40°C to +78°C operating, -80°C to +85°C non-operating</td>
</tr>
<tr>
<td>HUMIDITY</td>
<td>93% relative Humidity at ±40°C, non-condensing (according to IEC 60608-2-78)</td>
<td>93% relative Humidity at ±40°C, non-condensing (according to IEC 60608-2-78)</td>
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</tbody>
</table>
**COM EXPRESS® basic**

**Tech Specs At-a-Glance**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>125 x 95 mm</th>
<th>125 x 95 mm</th>
<th>125 x 95 mm</th>
</tr>
</thead>
</table>

**CPU**
- Intel® 11th Generation Xeon®/Core™/Celeron® Family: 3.5 GHz, 4x 3.5 GHz, 45/35 W
- Intel® Xeon® W-11865M, 8x 2.6/4.2 GHz, 45/35 W
- Intel® Xeon® W-11555M, 6x 2.6/4.1 GHz, 45/35 W
- Intel® Xeon® W-11155M, 4x 2.4/4.0 GHz, 35/25 W
- Intel® Core™ i7-11850H, 8x 2.6/4.2 GHz, 45/35 W
- Intel® Core™ i5-11500H, 6x 2.6/4.1 GHz, 45/35 W
- Intel® Core™ i3-11100H, 4x 2.4/4.0 GHz, 35/25 W
- Intel® Celeron® 6600H, 2x 2.6 GHz, 35 W

**Chipset**
- Intel® Mobile RM590E/Intel® Mobile QM580E/Intel® Mobile HM570E

**Main Memory**
- 2x DDR4 SO-DIMM with up to 32 GByte per channel
- (non-ECC/ECC) (3rd socket on request)

**Graphics Controller**
- Intel® LHD Graphics

**Ethernet Controller**
- Intel® I225LM

**Hard Disk**
- Up to 2.5 Gb Ethernet with TSN support (depending on SKU)
- Up to 1.1 Gb Ethernet with XVL support
- 4x SATA 6Gb/s

**Flash Disk**
- Up to 1.1 Gb Ethernet with XVL support
- Up to 1.1 Gb Ethernet with XVL support
- 2x SATA 6Gb/s

**PCI Express / PCI Support**
- 8x PCIe x1, 1x PCIe x4
- 4x PCIe x1, 2x PCIe x1

**Panel Signal**

**Audio**
- Intel® High Definition Audio

**BIOS**
- AMI Aptio V

**On Request**
- Up to 1.1 Gb Ethernet with XVL support
- 8x PCIe x1, 1x PCIe x4

**Power Management**
- ACPI 6.0

**Power Supply**
- 8.5 V - 20 V Wide Range, Single Supply Power

**Special Features**
- PCI Express 3.0/4.0, 16x PCIe x16

**Operating System**
- Windows® 10, Linux, vVirtWSX
## COM EXPRESS® basic

### Tech Spec At-a-Glance

<table>
<thead>
<tr>
<th>Feature</th>
<th>COM Express® Basic, Pin-out Type 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel® Xeon® D-1715, 4 core, 2.2 GHz</td>
</tr>
<tr>
<td><strong>DIMENSIONS (H x W)</strong></td>
<td>26 x 45 mm</td>
</tr>
<tr>
<td><strong>COMPLIANCE</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>GRAPHICS CONTROLLER</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>POWER SUPPLY</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>SOFTWARE</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>COMMUNICATIONS CONTROLLER</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>SPECIAL FEATURES</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>POWER MANAGEMENT</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>OPERATING SYSTEM</strong></td>
<td>Linux, Windows 10 IoT Enterprise, Windows Server 2022</td>
</tr>
</tbody>
</table>

### COMe-bID7

<table>
<thead>
<tr>
<th>Feature</th>
<th>COMe-bID7, Pin-out Type 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel® Xeon® D-1738, 8 core, 2.6 GHz</td>
</tr>
<tr>
<td><strong>DIMENSIONS (H x W)</strong></td>
<td>42 x 45 mm</td>
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<tr>
<td><strong>COMPLIANCE</strong></td>
<td>-</td>
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<tr>
<td><strong>GRAPHICS CONTROLLER</strong></td>
<td>-</td>
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<tr>
<td><strong>POWER SUPPLY</strong></td>
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<tr>
<td><strong>OPERATING SYSTEM</strong></td>
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</table>

### COMe-bEP7

<table>
<thead>
<tr>
<th>Feature</th>
<th>COMe-bEP7, Pin-out Type 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel® Xeon® D-1749NT, 10 core, 3.0 GHz</td>
</tr>
<tr>
<td><strong>DIMENSIONS (H x W)</strong></td>
<td>125 x 95 mm</td>
</tr>
<tr>
<td><strong>COMPLIANCE</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>GRAPHICS CONTROLLER</strong></td>
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<td><strong>POWER SUPPLY</strong></td>
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<td><strong>POWER MANAGEMENT</strong></td>
<td>-</td>
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<tr>
<td><strong>OPERATING SYSTEM</strong></td>
<td>Linux, Windows 10 IoT Enterprise, Windows Server 2022</td>
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</table>

### COMe-bBD7/-bBD7R E2

<table>
<thead>
<tr>
<th>Feature</th>
<th>COMe-bBD7/-bBD7R E2, Pin-out Type 7</th>
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</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel® Xeon® D-1749NT, 10 core, 3.0 GHz</td>
</tr>
<tr>
<td><strong>DIMENSIONS (H x W)</strong></td>
<td>125 x 95 mm</td>
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<tr>
<td><strong>COMPLIANCE</strong></td>
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</tr>
<tr>
<td><strong>GRAPHICS CONTROLLER</strong></td>
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<tr>
<td><strong>POWER SUPPLY</strong></td>
<td>-</td>
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<tr>
<td><strong>SOFTWARE</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>COMMUNICATIONS CONTROLLER</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>SPECIAL FEATURES</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>POWER MANAGEMENT</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>OPERATING SYSTEM</strong></td>
<td>Linux, Windows 10 IoT Enterprise, Windows Server 2022</td>
</tr>
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</table>

### COMe-bDV7/-bDV7R E2

<table>
<thead>
<tr>
<th>Feature</th>
<th>COMe-bDV7/-bDV7R E2, Pin-out Type 7</th>
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</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel® Xeon® D-1749NT, 10 core, 3.0 GHz</td>
</tr>
<tr>
<td><strong>DIMENSIONS (H x W)</strong></td>
<td>125 x 95 mm</td>
</tr>
<tr>
<td><strong>COMPLIANCE</strong></td>
<td>-</td>
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<tr>
<td><strong>GRAPHICS CONTROLLER</strong></td>
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<tr>
<td><strong>POWER SUPPLY</strong></td>
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<tr>
<td><strong>SOFTWARE</strong></td>
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<tr>
<td><strong>COMMUNICATIONS CONTROLLER</strong></td>
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<tr>
<td><strong>SPECIAL FEATURES</strong></td>
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<tr>
<td><strong>POWER MANAGEMENT</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>OPERATING SYSTEM</strong></td>
<td>Linux, Windows 10 IoT Enterprise, Windows Server 2022</td>
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</table>

### COM Express® Basic, Pin-out Type 7

<table>
<thead>
<tr>
<th>Feature</th>
<th>COM Express® Basic, Pin-out Type 7</th>
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</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel® Xeon® D-1739, 8 core, 2.6 GHz</td>
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<tr>
<td><strong>DIMENSIONS (H x W)</strong></td>
<td>42 x 55 mm</td>
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<tr>
<td><strong>COMPLIANCE</strong></td>
<td>-</td>
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<tr>
<td><strong>GRAPHICS CONTROLLER</strong></td>
<td>-</td>
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<tr>
<td><strong>POWER SUPPLY</strong></td>
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<td><strong>SPECIAL FEATURES</strong></td>
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<tr>
<td><strong>POWER MANAGEMENT</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>OPERATING SYSTEM</strong></td>
<td>Linux, Windows 10 IoT Enterprise, Windows Server 2022</td>
</tr>
</tbody>
</table>

### Commercial temperature

-40 °C to +85 °C operating, -40 °C to +85 °C non-operating

### Industrial temperature

-40 °C to +85 °C operating, -40 °C to +85 °C non-operating
COM EXPRESS® compact
low power mobile

COM EXPRESS® compact
COMe-cAP6

COMExpress® Compact Pin-out Type 6
95 x 95 mm

CPU
- Intel® 12th Generation Core™/ Celeron® family
- Intel® 10th Generation Core™/ Celeron® family
- Intel® Core™ i7-1265UE, 8x 1.2/3.5 GHz, 28/15/12 W
- Intel® Core™ i5-1245UE, 8x 1.1/3.3 GHz, 28/15/12 W
- Intel® Core™ i3-12300HE, 4x 1.5/3.3 GHz, 45/35 W
- Intel® Core™ i7-1270PE, 8x 1.2/3.3 GHz, 45/35 W

GRAPHICS CONTROLLER
- Intel® XE Graphics architecture
- Intel® Iris® Xe Graphics on i7/i5 processors
- Integrated AMD Vega Graphics (GFX9)

MEMORY
- 1x DDR5-SO DIMM up to 32 GByte, 2nd channel DDR4 memory down to 16 GByte
- 2x SLC Memory

FLASH MEMORY
- Up to 1 TByte NVMe SSD (on request)
- Up to 2x SATA 6Gb/s (on request)

POWER SUPPLY
- AC/DC Power Module 5.0
- AC/DC Power Module 6.0

BIOS
- AMI Aptio V
- AMD UEFI

EXTRA FEATURES
- vPro (AMT/TXT/AES Support), eDP instead of LVDS, 1x PCIe x1 additional w/o onboard LAN, PCIe Switch

MODULARITY
- 10/100/1000 MBit Ethernet
- 2x SATA 6Gb/s
- Integrated Intel® UHD Graphics on i3/Celeron® processors

DIMENSIONS (H x W)
- 95 x 95 mm

COMmunication Express Compact Pin-out Type 6
COMExpress® compact Pin-out Type 6

COM EXPRESS® compact
COMe-cTL6 (E2)

COMExpress® Compact Pin-out Type 6
95 x 95 mm

CPU
- Intel® 11th Generation Core™/Celeron® family
- Intel® Core™ i7-1270PE, 8x 1.2/3.3 GHz, 45/35 W
- Intel® Core™ i5-1245UE, 8x 1.1/3.3 GHz, 28/15/12 W

GRAPHICS CONTROLLER
- Intel® XE Graphics architecture
- Intel® Iris® Xe Graphics on i7/i5 processors

MEMORY
- 1x DDR5-SO DIMM up to 32 GByte, 2nd channel DDR4 memory down to 16 GByte
- 2x SLC Memory

FLASH MEMORY
- Up to 1 TByte NVMe SSD (on request)
- Up to 2x SATA 6Gb/s (on request)

POWER SUPPLY
- AC/DC Power Module 5.0
- AC/DC Power Module 6.0

BIOS
- AMI Aptio V
- AMD UEFI

EXTRA FEATURES
- vPro (AMT/TXT/AES Support), eDP instead of LVDS, 1x PCIe x1 additional w/o onboard LAN, PCIe Switch

MODULARITY
- 10/100/1000 MBit Ethernet
- 2x SATA 6Gb/s
- Integrated Intel® UHD Graphics on i3/Celeron® processors

DIMENSIONS (H x W)
- 95 x 95 mm
COM EXPRESS® compact
low power mobile

COMe-cWL6 (E5S)

COM Express® compact Pin-out Type 6
95 x 95 mm

CPU
Intel® Core™ i7-8665UE, 4x 1.7 GHz, GT2, 15 W
Intel® Core™ i5-8365UE, 4x 1.6 GHz, GT2, 15 W
Intel® Core™ i5-8665U, 4x 1.9 GHz, GT2, 15 W
Intel® Core™ i5-8251U, 2x 2.6 GHz, GT2, 15 W
Intel® Core™ i7-8550U, 4x 1.8 GHz, GT3, 15 W
Intel® Celeron® 3955U, 2x 2.0 GHz, GT1, 15 W

CHIPSET
Integrated SoC

MAIN MEMORY
1x DDR4 SO-DIMM up to 32 GByte, 2nd channel DDR4-memory down to 16 GByte

GRAPHICS CONTROLLER
Intel® UHD Graphics 630

ETHERNET CONTROLLER
Intel® I219LM

ETHERNET
1G/100/1000 Mb/s Ethernet

MARDISK
2x SATA 6Gbs

FLASH DIMM/BOARD
Up to 1 TByte MxMx SSD (on request)

PCI EXPRESS® / PCI SUPPORT
5x PCIe Gen3 3 lane slots - PCIe lane configurations: 1x / 2x / 1x / 1x / 2x

POWER MANAGEMENT
ACPI 6.0

OPERATING SYSTEM
Windows® 10, Linux, xWallR

COM EXPRESS® compact
95 x 95 mm

CPU
Intel® Atom® x6212RE, 2x 1.2GHz, GT1, 6 W TDP (In-Band ECC)
Intel® Atom® x6425E, 4C, 2.0/3.0 GHz, 12 W TDP (In-Band ECC)
Intel® Atom® x6425RE, 4C, 2.0/3.0 GHz, 12 W TDP
Intel® Atom® x6413E, 4C, 1.5/3.0 GHz, 9 W TDP

GRAPHICS CONTROLLER
Intel® HD Graphics Gen11: 1x LVDS/eDP (3840 x 2160 @ 60 Hz) + 2x DP (+/-) on D01/D02 up to 4K

SECRET CHIP
- (excluding 4x 3.0 only)

BIOS
AMI Aptio V

POWER MANAGEMENT
ACPI 6.0

POWER SUPPLY
8.5 V – 20 V Wide Range, Single Supply Power

OPERATING SYSTEM
Windows® 10, Linux, xWallR

COMe-cEL6 (E2)

COM Express® compact Pin-out Type 6
95 x 95 mm

CPU
Intel® Atom® Processor 3955U, 2x 2.0 GHz, GT1, 15 W
Intel® Celeron® Processor 3955U, 2x 2.0 GHz, GT1, 15 W

GRAPHICS CONTROLLER
Intel® HD Graphics 510

BIOS
AMI Aptio V

POWER MANAGEMENT
ACPI 6.0

OPERATING SYSTEM
Windows® 10, Linux, xWallR

COM EXPRESS® compact
95 x 95 mm

CPU
Intel® Atom® x6000E Series, Pentium® and Celeron® Processors
Intel® Atom® x6414E, 4C, 1.5/3.0 GHz, 9 W TDP
Intel® Atom® x6413E, 4C, 1.5/3.0 GHz, 9 W TDP
Intel® Atom® x6211E, 2C, 1.3/3.0 GHz, 6 W TDP
Intel® Atom® x6300E, 2C, 1.5/3.0 GHz, 6 W TDP
Intel® Atom® x6305E, 2C, 1.6/3.0 GHz, 6 W TDP
Intel® Atom® x6250E, 2C, 1.6/3.0 GHz, 6 W TDP

GRAPHICS CONTROLLER
Intel® HD Graphics 520

BIOS
AMI Aptio V

POWER MANAGEMENT
ACPI 6.0

OPERATING SYSTEM
Windows® 10, Linux, xWallR

COM EXPRESS® compact
95 x 95 mm

CPU
Intel® Core™ i5-6300U, 2x 2.40 GHz, GT3, 15 W
Intel® Core™ i3-6100U, 2x 2.30 GHz, GT2, 15 W
Intel® Celeron® Processor 3867U, 2x 2.00 GHz, GT1, 15 W

GRAPHICS CONTROLLER
Intel® HD Graphics 520

BIOS
AMI Aptio V

POWER MANAGEMENT
ACPI 6.0

OPERATING SYSTEM
Windows® 10, Linux, xWallR
## TECH SPECS AT-A-GLANCE

### COMe-mEL10

**Dimensions (H x W):**
84 x 55 mm

**CPU:**
- Intel® Atom® x6000E Series, Pentium® and Celeron® Processors

**COM Express® mini, Pin-out Type 10**

**Operating System:**
- Windows® 10, Linux, VxWorks
- Windows® 10 Enterprise, Windows 10 IoT, Linux, VxWorks

**Main Features:**
- POSCAP capacitors, Trusted Platform Module TPM 2.0
  - Windows® 10, Linux, VxWorks

**Power Supply:**
- 4.75 V – 20 V Wide Range, Single Supply Power

**OS:**
- Windows® 10 Enterprise, Windows 10 IoT, Linux, WinWorks

**Temperature:**
- Commercial temperature: 0 °C to +40 °C operating, -40 °C to +85 °C non-operating
- Industrial temperature: -40 °C to +85 °C operating, -40 °C to +85 °C non-operating

### COMe-mAL10

**Dimensions (H x W):**
84 x 55 mm

**CPU:**
- Intel® Pentium® N4200, AC, 1.1/2.5 GHz, 6 W TDP
  - Windows® 10 Enterprise, Windows 10 IoT, Linux, VxWorks

**COM Express® mini, Pin-out Type 10**

**Operating System:**
- Windows® 10 Enterprise, Windows 10 IoT, Linux, VxWorks

**Main Features:**
- POSCAP capacitors, Trusted Platform Module TPM 2.0
  - Windows® 10, Linux, VxWorks

**Power Supply:**
- 4.75 V – 20 V Wide Range, Single Supply Power

**OS:**
- Windows® 10 Enterprise, Windows 10 IoT, Linux, WinWorks

**Temperature:**
- Commercial temperature: 0 °C to +40 °C operating, -30 °C to +85 °C non-operating
- Industrial temperature: -40 °C to +85 °C operating, -40 °C to +85 °C non-operating
### COMh Eval Carrier Server

- **COM-HPC Server Type Modules** - Size D and E
- **Dimensions (H x W)**: 305 mm x 330 mm (E-ATX)
- **Support Modules**:

### COMh Eval Carrier Client

- **COM-HPC Client Carrier - Size A, B and C**
- **Dimensions (H x W)**: 305 mm x 330 mm (E-ATX)
- **Support Modules**:

### COMe Eval Carrier T6

- **COM Express® Rev. 3.0, Pin-out Type 6**
- **Dimensions (H x W)**: 305 mm x 244 mm (ATX)
- **Supported Modules**: COM Express® mini with pin-out Type 10
- **Options**:
  - 4x SATA
  - 4x USB 3.1 (4x USB 2.0)

### COMe Eval Carrier T7 Gen2

- **COM Express® Rev. 3.0 or 3.1 Pin-out Type 7**
- **Dimensions (H x W)**: 305 mm x 244 mm (ATX)
- **Supported Modules**: COM Express® mini with pin-out Type 10
- **Options**:
  - 1x PCIe x16
  - 1x PCIe x16 (electrically x8)
  - 1x miniPCIe (with USB)

### COMe Eval Carrier T10

- **COM Express® Rev. 2.1 Pin-out Type 10**
- **Dimensions (H x W)**: 305 mm x 244 mm (ATX)
- **Supported Modules**: COM Express® mini with pin-out Type 10
- **Options**:
  - 1x PCIe x16
  - 1x PCIe x1

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### COMPLIANCE

- COM-HPC Server Type Modules: Size D and E
- COM-HPC Client Carrier: Size A, B and C

### HARD DISK

- COMh Eval Carrier:
  - 2x USB Gen 4 + 2x USB 3.2 Gen 2x1
  - 4x USB 2.0

- COMe Eval Carrier T6:
  - 4x USB 3.1 Gen2
  - 2x USB 3.0/2.0

- COMe Eval Carrier T7 Gen2:
  - 4x USB 3.1 Gen2
  - 2x USB 3.0/2.0

- COMe Eval Carrier T10:
  - 4x USB 3.1 Gen2
  - 2x USB 3.0/2.0

### USB

- COMh Eval Carrier:
  - 4x USB 3.2 Gen 2x1

- COMe Eval Carrier T6:
  - 4x USB 3.1 (2x USB 2.0) + 4x USB 2.0

- COMe Eval Carrier T7 Gen2:
  - 4x USB 3.1 Gen2

- COMe Eval Carrier T10:
  - 4x USB 3.1 Gen2

### AUDIO

- COMh Eval Carrier:
  - 1x Audio Connector Realtek ALC888 HD-Audio

- COMe Eval Carrier T6:
  - 1x GBE RJ45

- COMe Eval Carrier T7 Gen2:
  - 1x GBE RJ45 (10G-Base-T)

- COMe Eval Carrier T10:
  - 1x GBE RJ45 (10G-Base-T)

### OPTIONS

- COMh Eval Carrier:
  - Carrier EEPROM

- COMe Eval Carrier T6:
  - 1x UART on pin-header

- COMe Eval Carrier T7 Gen2:
  - 2x UART on pin-header

- COMe Eval Carrier T10:
  - 2x UART on pin-header

### POWER SUPPLY

- COMh Eval Carrier:
  - ATX power supply 24 + 8 pin

- COMe Eval Carrier T6:
  - ATX power supply 24 + 8 pin

- COMe Eval Carrier T7 Gen2:
  - ATX power supply 24 + 8 pin

- COMe Eval Carrier T10:
  - ATX power supply 24 + 8 pin
About Kontron

Kontron is a global leader in IoT/Embedded Computing Technology (ECT) and offers individual solutions in the areas of Internet of Things (IoT) and Industry 4.0 through a combined portfolio of hardware, software and services. With its standard and customized products based on highly reliable state-of-the-art technologies, Kontron provides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accelerated time-to-market, lower total cost of ownership, extended product lifecycles and the best fully integrated applications.

For more information, please visit: www.kontron.com

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