

## MSC C6B-SLH

Intel® Core™ 6th Generation



125 x 95



35 / 55 W



0 +60



IoT Solutions  
Alliance

COM Express

## Description

The MSC C6B-SLH module is based on Intel's 6th generation Core processor family with a new processor architecture based on 14 nm process technology. The Intel two-chip solution allows highest performance in graphics and computing on a COM Express module in basic form factor.

The new MSC C6B-SLH brings triple independent display support with up to 4k x 2k resolution, highest level graphics acceleration and hardware based video en-/decoding. Fast DDR4 memory with optional error correction (ECC) and multiple USB 3.0/2.0 interfaces complete the compact and powerful module.

Different dual- and quad-core processors are supported by this design. Besides an extensive set of interfaces and features, the MSC C6B-SLH optionally offers hardware based security compliant to the requirements of TCG (Trusted Computing Group).

The Type 6 pin-out allows direct access to the latest digital display interfaces like DisplayPort 1.3, HDMI 1.4b and DVI as well as up to four USB 3.0 interfaces supporting the fastest peripherals currently available.

## Highlights

- Intel® Core™ i7-6820EQ (quad-core, 2.8/3.5GHz),
- Intel® Core™ i7-6822EQ (quad-core, 2.0/2.8GHz),
- Intel® Core™ i5-6440EQ (quad-core, 2.7/3.4GHz),
- Intel® Core™ i5-6442EQ (quad-core, 1.9/2.7GHz),
- Intel® Core™ i3-6100E (dual-core, 2.7GHz),
- Intel® Core™ i3-6102E (dual-core, 1.9GHz),
- Intel® Celeron® G3900E (dual-core, 2.4GHz),
- Intel® Celeron® G3902E (dual-core, 1.6GHz),
- Intel® Xeon® E3-1505Mv5 (quad-core, 2.8/3.7GHz),
- Intel® Xeon® E3-1505Lv5 (quad-core, 2.0/2.8GHz)
- Intel® HD Graphics 530, P530
- Intel® chipsets QM170, HM170 or CM236
- Up to 32GB DDR4-2133 SDRAM, dual channel (ECC optional)
- Four SATA 6Gb/s mass storage interfaces
- Three DisplayPort/HDMI/DVI interfaces
- Embedded DisplayPort interface
- LVDS (24 Bit, dual channel) interface
- Triple independent display support
- DirectX 12, OpenGL 4.4, OpenCL 2.x
- Resolution up to 4096 x 2304
- Eight PCI Express™ x1 lanes; PEG x16
- Four USB 3.0/2.0 and four USB 2.0 interfaces
- UEFI Firmware

## Technical Data - MSC C6B-SLH

|                           |   |
|---------------------------|---|
| <b>Technology</b>         | x86   |
| <b>Formfactor</b>         | COM Express Basic   |
| <b>CPU</b>                | <p>Intel® Core™ i7-6820EQ (4 cores, 2.8/3.5GHz, 8MB cache, 45W),<br/> Intel® Core™ i7-6822EQ (4 cores, 2.0/2.8GHz, 8MB cache, 25W),<br/> Intel® Core™ i5-6440EQ (4 cores, 2.7/3.4GHz, 6MB cache, 45W),<br/> Intel® Core™ i5-6442EQ (4 cores, 1.9/2.7GHz, 6MB cache, 25W),<br/> Intel® Core™ i3-6100E (2 cores, 2.7GHz, 3MB cache, 35W),<br/> Intel® Core™ i3-6102E (2 cores, 1.9GHz, 3MB cache, 25W),<br/> Intel® Celeron® G3900E (2 cores, 2.4GHz 2MB cache, 35W),<br/> Intel® Celeron® G3902E (2 cores, 1.6GHz 2MB cache, 25W),<br/> Intel® Xeon® E3-1505M v5 (4 cores, 2.8/3.7GHz, 8MB cache, 45W, 35W cTDP),<br/> Intel® Xeon® E3-1505L v5 (4 cores, 2.0/2.8GHz, 8MB cache, 25W)</p> <p>Intel® Technologies: Intel® vPro*, Intel® 64, Intel® Virtualization Technology (VT-x)*, Intel® Virtualization Technology for Directed I/O (VT-d)*, Intel® Trusted Execution Technology*, Intel® Adv. Encryption Standard AES-NI*, Intel® Turbo Boost Technology 2.0*</p> <p>* not on all models</p> |
| <b>Chipset</b>            | Intel® Platform Controller Hubs (PCH) QM170, HM170 or CM236   |
| <b>RAM</b>                | 2x 260-pin SO-DIMM socket for up to 2x 16GB DDR4 SDRAM (DDR4-2133); dual channel operation; ECC option  |
| <b>Storage Interfaces</b> | 4x SATA channels (up to 6Gb/s)  |
| <b>USB</b>                | 4x USB 3.0/2.0,<br>4x USB 2.0   |
| <b>Serial Interfaces</b>  | 2x high-speed serial ports from PCH   |
| <b>Bus Interfaces</b>     | 8x PCI Express x1 Gen 3,<br>1x PCI Express Graphics (PEG) x 16 Gen. 3<br>LPC bus (Low Pin Count bus; no DMA support)  |
| <b>Display Controller</b> | <p>Integrated Intel HD graphics Gen. 9<br/> 3D Acceleration: DirectX® 11/12, OpenGL 4.3/4.4, OpenGL ES 2.0, OpenCL 2.x;<br/> Video Decode: H.264 @ Level 5.2, H.265/HEVC @ level 5 (GPU-accelerated),<br/> MPEG2, VC1/WMV, JPEG, VP8, VP9 GPU-accelerated;<br/> Video Encode: H.263, H.264, VP8, AVC JPEG, VP9 GPU-accelerated.</p> <p>Triple independent display support</p>   |
| <b>Display Interfaces</b> | <p>Display Port and HDMI/DVI:<br/> 3x Digital Display Interface, usable as DisplayPort 1.2 (up to 4096 x 2304 @ 60Hz),<br/> also usable as HDMI 1.4b or DVI (up to 4096x2160 @ 24Hz)<br/> 1x Embedded DisplayPort 1.3 (on variants without LVDS only); 4096 x 2304 @ 60Hz</p> <p>LCD:<br/> LVDS 24bit, dual-channel (not on all variants); 1920 x 1200 @ 60Hz</p>   |
| <b>Network Interface</b>  | 10/100/1000Base-TX (integrated in PCH, Intel® i219LM PHY)   |

|                          |  |
|--------------------------|--|
| <b>Audio Interface</b>   | High Definition Audio  |
| <b>Security Device</b>   | TPM 1.2  |
| <b>Miscellaneous</b>     | Watchdog Timer:<br>Initiates system reset, programmable<br><br>Fan Supply:<br>4-pin header for 12V CPU fan, PWM speed controlled<br>and PWM speed control for system fan supported<br><br>RTC battery: External<br><br>System Monitoring: Voltage, temperature, CPU fan, system fan  |
| <b>Firmware</b>          | UEFI Firmware: AMI Aptio® V<br><br>Security: TPM 1.2 support, TCG compliant<br><br>Power Management:<br>ACPI<br>Active fan control<br><br>USB:<br>USB legacy support (keyboard, mouse, storage)<br><br>Monitoring:<br>System Monitoring<br>Health Monitoring<br><br>MSC Adv. Boot Device Selection:<br>Boot device priority setting based on physical interfaces |
| <b>OS Support</b>        | Windows 7, 8, 8.1, 10 (embedded)<br>BSP for Linux on request<br>EAPI (HW Programming Interface)  |
| <b>Power Requirement</b> | Voltage:<br>+12V +/-10%, 5V Stby optional,<br><br>Power Consumption:<br>35 W to 55 W (typ.)  |
| <b>Environment</b>       | Ambient Temperature;<br>0° ... 60°C (operating),<br>-25° ... 85°C (storage)<br><br>Humidity:<br>5 ... 95% (operating, non-condensing),<br>5 ... 95% (storage, non-condensing)  |
| <b>Dimensions</b>        | 125mm x 95mm x 13mm  |
| <b>Certificates</b>      | UL   |

## Order Reference - MSC C6B-SLH

| Order Number | Description   | Reference                 | Cat |
|--------------|---|---------------------------|-----|
| 68302        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Celeron G3902E, dual-core, 1.6GHz, 25W TDP;<br>Chipset: HM170;<br>Graphics: integrated Intel HD Gen 9 (GT1); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 SO-DIMM.  | MSC C6B-SLH-001<br>PCBFTX | OR  |
| 68304        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Celeron G3900E, dual-core, 2.4GHz, 35W TDP;<br>Chipset: HM170;<br>Graphics: integrated Intel HD Gen 9 (GT1); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM.     | MSC C6B-SLH-002<br>PCBFTX | PV  |
| 68306        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i3-6102E, dual-core, 1.9GHz, 25W TDP;<br>Chipset: HM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM.      | MSC C6B-SLH-003<br>PCBFTX | PV  |
| 68308        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i3-6100E, dual-core, 2.7GHz, 35W TDP;<br>Chipset: HM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM.      | MSC C6B-SLH-004<br>PCBFTX | OR  |
| 68310        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i5-6442EQ, quad-core, 1.9/2.7GHz, 25W TDP;<br>Chipset: QM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM. | MSC C6B-SLH-005<br>PCBFTX | PV  |
| 68312        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i5-6440EQ, quad-core, 2.7/3.4GHz, 45W TDP;<br>Chipset: QM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM. | MSC C6B-SLH-006<br>PCBFTX | PV  |

## Order Reference - MSC C6B-SLH

| Order Number | Description   | Reference                 | Cat |
|--------------|---|---------------------------|-----|
| 68314        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i7-6822EQ, quad-core, 2.0/2.8GHz, 25W TDP;<br>Chipset: QM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM.                       | MSC C6B-SLH-007<br>PCBFTX | PV  |
| 68316        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i7-6820EQ, quad-core, 2.8/3.5GHz, 45W TDP;<br>Chipset: QM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM.                       | MSC C6B-SLH-008<br>PCBFTX | PV  |
| 68318        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Xeon E3-1505Lv5, quad-core, 2.0/2.8GHz, 25W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 or DDR4ECC SO-DIMM.           | MSC C6B-SLH-009<br>PCBFTX | PV  |
| 68320        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Xeon E3-1505Mv5, quad-core, 2.8/3.7GHz, 45W TDP, 35W cTDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 or DDR4ECC SO-DIMM. | MSC C6B-SLH-010<br>PCBFTX | OR  |
| 68784        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Xeon E3-1515Mv5, quad-core, 2.8/3.7GHz, 45/35W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT4e); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA, 4x USB3, 4x USB2, 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 or DDR4ECC SO-DIMM.      | MSC C6B-SLH-011<br>PCBFTX | OR  |
| 68886        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Celeron G3902E, dual-core, 1.6GHz, 25W TDP;<br>Chipset: HM170;<br>Graphics: integrated Intel HD Gen 9 (GT1); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 SO-DIMM.                         | MSC C6B-SLH-021<br>PCBFTX | OR  |

## Order Reference - MSC C6B-SLH

| Order Number | Description  | Reference                 | Cat |
|--------------|--|---------------------------|-----|
| 68888        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Celeron G3900E, dual-core, 2.4GHz, 35W TDP;<br>Chipset: HM170;<br>Graphics: integrated Intel HD Gen 9 (GT1); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM.     | MSC C6B-SLH-022<br>PCBFTX | OR  |
| 68890        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i3-6102E, dual-core, 1.9GHz, 25W TDP;<br>Chipset: HM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM.      | MSC C6B-SLH-023<br>PCBFTX | OR  |
| 68788        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i3-6100E, dual-core, 2.7GHz, 35W TDP;<br>Chipset: HM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM.      | MSC C6B-SLH-024<br>PCBFTX | OR  |
| 68790        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i5-6442EQ, quad-core, 1.9/2.7GHz, 25W TDP;<br>Chipset: QM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM. | MSC C6B-SLH-025<br>PCBFTX | PV  |
| 68792        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i5-6440EQ, quad-core, 2.7/3.4GHz, 45W TDP;<br>Chipset: QM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM. | MSC C6B-SLH-026<br>PCBFTX | OR  |
| 68794        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i7-6822EQ, quad-core, 2.0/2.8GHz, 25W TDP;<br>Chipset: QM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM. | MSC C6B-SLH-027<br>PCBFTX | PV  |

## Order Reference - MSC C6B-SLH

| Order Number | Description  | Reference                 | Cat |
|--------------|--|---------------------------|-----|
| 68796        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i7-6820EQ, quad-core, 2.8/3.5GHz, 45W TDP;<br>Chipset: QM170;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 SO-DIMM.                       | MSC C6B-SLH-028<br>PCBFTX | OR  |
| 68798        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Xeon E3-1505Lv5, quad-core, 2.0/2.8GHz, 25W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 or DDR4ECC SO-DIMM.           | MSC C6B-SLH-029<br>PCBFTX | OR  |
| 68800        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Xeon E3-1505Mv5, quad-core, 2.8/3.7GHz, 45W TDP, 35W cTDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 or DDR4ECC SO-DIMM. | MSC C6B-SLH-030<br>PCBFTX | OR  |
| 68786        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Xeon E3-1515Mv5, quad-core, 2.8/3.7GHz, 45W TDP, 35W cTDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3; 2x socket for DDR4 or DDR4ECC SO-DIMM. | MSC C6B-SLH-031<br>PCBFTX | OR  |
| 69385        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Celeron G3902E, dual-core, 1.6GHz, 25W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT1); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 or DDR4ECC SO-DIMM.             | MSC C6B-SLH-121<br>PCBFTX | OR  |
| 69387        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Celeron G3900E, dual-core, 2.4GHz, 35W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT1); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 or DDR4ECC SO-DIMM.             | MSC C6B-SLH-122<br>PCBFTX | OR  |

## Order Reference - MSC C6B-SLH

| Order Number | Description   | Reference                 | Cat |
|--------------|---|---------------------------|-----|
| 69389        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i3-6102E, dual-core, 1.9GHz, 25W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 or DDR4ECC SO-DIMM.   | MSC C6B-SLH-123<br>PCBFTX | OR  |
| 69391        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i3-6100E, dual-core, 2.7GHz, 35W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT2); eDP; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 or DDR4ECC SO-DIMM.   | MSC C6B-SLH-124<br>PCBFTX | PV  |
| 69377        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Celeron G3902E, dual-core, 1.6GHz, 25W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT1); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 or DDR4ECC SO-DIMM. | MSC C6B-SLH-101<br>PCBFTX | OR  |
| 69379        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Celeron G3900E, dual-core, 2.4GHz, 35W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT1); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 or DDR4ECC SO-DIMM. | MSC C6B-SLH-102<br>PCBFTX | OR  |
| 69381        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i3-6102E, dual-core, 1.9GHz, 25W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 or DDR4ECC SO-DIMM.  | MSC C6B-SLH-103<br>PCBFTX | OR  |
| 69383        | COM Express Type 6 Basic module (125mm x 95mm);<br>CPU: Intel Core i3-6100E, dual-core, 2.7GHz, 35W TDP;<br>Chipset: CM236;<br>Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 3x DP/HDMI/DVI;<br>Ethernet: Intel i219 Gbit;<br>HD audio; 4x SATA; 4x USB3/2, 4x USB2; 8x PCIe x1 Gen 3; PEG x16 Gen 3;<br>2x socket for DDR4 or DDR4ECC SO-DIMM.  | MSC C6B-SLH-104<br>PCBFTX | OR  |



## Accessories

| Order Number           | Description   | Reference               |
|------------------------|---|-------------------------|
| <b>Carrier Options</b> |   |                         |
| 41886                  | COM Express Type 6 Small Test and Evaluation Board with one PCI Express socket, USB 3.0, GbE, SATA, DisplayPort, HDMI, VGA and HD audio interfaces  | MSC C6-AD-T6T2 PCBFTX   |
| 67295                  | COM Express Type 6 Evaluation Carrier Board with PCI Express x4/x16 slot, USB 3.0/2.0, GbE, SATA, DisplayPort, eDP/LVDS, VGA and HD audio interfaces; Mini PCI Express socket, SD card slot, ATX power connector and single 12V power jack. Dimensions: 170mm x 170mm (Mini-ITX form factor)      | MSC C6-MB-EV-001 PCBFTX |
| 41857                  | COM Express Type 6 Evaluation Carrier Board with various PCI Express x1, x4 and x16 slots, USB 3.0/2.0, GbE, SATA, DisplayPort, HDMI, LVDS, eDP, VGA, HD audio interfaces; mSATA and Mini PCI Express sockets, POST code display, ATX power connector. Dimensions: 305 x 244 mm (ATX form factor) | MSC C6-MB-EVA PCBFTX    |
| <b>Cooling Options</b> |   |                         |
| 1131080                | Active Heatsink for C6B-SLH, C6B-KLH, C6B-CFLH and C6B-CFLR, consisting of a single-piece aluminum profile with fins, pressed in standoffs without thread (2.7mm inner diameter), screws and thermopads for the thermal contact to CPU and chipset. PWM fan 80x80x15mm.                           | MSC C6B-SLH-01 HSF-001  |
| 1131081                | Passive Heatsink for C6B-SLH, C6B-KLH, C6B-CFLH and C6B-CFLR, consisting of a single-piece aluminum profile with fins, pressed in standoffs without thread (2.7mm inner diameter), screws and thermopads for the thermal contact to CPU and chipset.  | MSC C6B-SLH-01 HSI-001  |
| 1131082                | Heatspreader for C6B-SLH, C6B-KLH, C6B-CFLH and C6B-CFLR. Single-piece aluminum profile, pressed in standoffs without thread (2.7mm inner diameter), screws and thermopads for the thermal contact to CPU and chipset. No fan, no SO-DIMM cutout.   | MSC C6B-SLH-01 HSP-001  |
| 1131083                | Heatspreader for C6B-SLH, C6B-KLH, C6B-CFLH and C6B-CFLR. Single-piece aluminum profile, pressed in standoffs with M2.5 thread, screws and thermopads for the thermal contact to CPU and chipset. No fan, no SO-DIMM cutout.  | MSC C6B-SLH-02 HSP-001  |
| <b>Memory Options</b>  |   |                         |
| 83003                  | 4GB DDR4-2400 SoDimm, 1.2V, ECC   | M4DI-4GSSPCSJ-F         |
| 83001                  | 8GB DDR4-2400 SoDimm, 1.2V, ECC   | M4DI-8GS1PCSJ-C         |
| 83002                  | 4GB DDR4-2400 SoDimm, 1.2V  | M4SI-4GSSNCSJ-F         |
| 81883                  | 8GB DDR4-2400 SoDimm, 1.2V  | M4SI-8GSSOCSJ-F         |
| 1138365                | 16GB DDR4-2400 SoDimm, 1.2V   | M4SS-AGS1OC0J-B         |

## Accessories

| Order Number        | Description   | Reference                         |
|---------------------|---|-----------------------------------|
| <b>Starter Kits</b> |   |                                   |
| 68752               | Starterkit for COM Express Type 6 modules MSC C6B-SLH with Intel 6th generation Core processors. Consists of Mini-ITX platform board, suitable Heatsink with fan and two DDR4 memory modules.<br>Please order separately the COM Express C6B-SLH module of your choice. | MSC C6-SK-SLH-EV-KIT001<br>SETPAC |

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