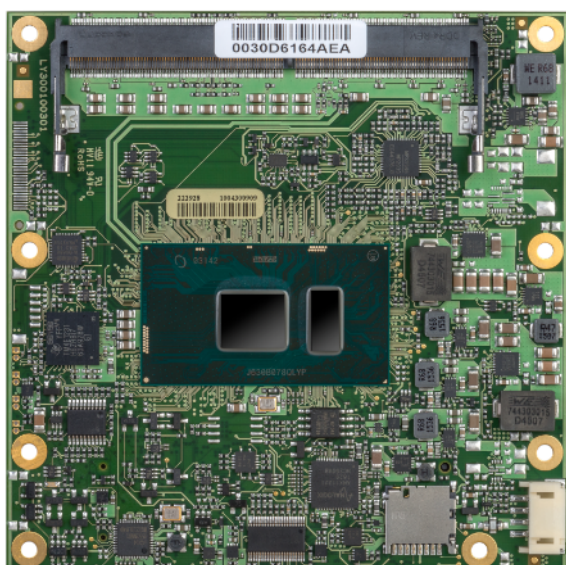


TRIA C6C-KLU

Intel® Core™ 7th Generation



95 x 95

17 / 19W

0-+60

COM 
Express



Highlights

- Intel Core i7-7600U dual-core 2.8/3.9GHz, 4MB L2, 15W TDP
- Intel Core i5-7300U dual-core 2.6/3.5GHz, 3MB L2, 15W TDP
- Intel Core i3-7100U dual-core 2.4GHz, 3MB L2, 15W TDP
- Intel Celeron 3965U dual-core 2.2GHz, 2MB L2, 15W TDP
- Integrated Intel® HD Graphics 610, 620
- Up to 32 GB DDR4-2133 SDRAM, dual-channel
- Three SATA 6Gb/s mass storage interfaces
- MicroSD card socket
- Two DisplayPort/HDMI/DVI interfaces
- Embedded DisplayPort / LVDS (24 Bit, dual channel) interface
- Three independent displays supported
- DirectX 12, OpenGL 4.4, OpenCL 2.x
- Resolution up to 4096 x 2304
- Four USB 3.0/2.0 and four USB 2.0 interfaces
- Eight PCI Express™ x1 lanes
- Trusted Platform Module
- UEFI Firmware

COM Express Type 6



Technical Data

Technology	x86
Formfactor	COM Express Compact
CPU	Intel Core i7-7600U dual-core 2.8/3.9GHz, 4MB L2, 15W TDP Intel Core i5-7300U dual-core 2.6/3.5GHz, 3MB L2, 15W TDP Intel Core i3-7100U dual-core 2.4GHz, 3MB L2, 15W TDP Intel Celeron 3965U dual-core 2.2GHz, 2MB L2, 15W TDP
Chipset	Integrated in Multi-Chip-Package
RAM	2x 260-pin SO-DIMM socket for up to 2x 16 GB DDR4 SDRAM (DDR4-2133); dual channel operation
Flash	MicroSD card socket
Storage Interfaces	Up to 3x SATA 6Gb/s
USB	4x USB 3.0/2.0 4x USB 2.0
Serial Interfaces	2x high-speed serial ports from PCH
Bus Interfaces	8x PCI Express x1 Gen 3 LPC bus (Low Pin Count bus; no DMA support)
Display Controller	Integrated Intel HD graphics Gen. 9 3D Acceleration: DirectX® 11/12, OpenGL 4.3/4.4, OpenGL ES 2.0, OpenCL 2.x; Video Decode: H.264 @ Level 5.2, H.265/HEVC 10-bit, MPEG2, VC1/WMV, JPEG, VP8, VP9 10-bit; Video Encode: H.263, H.264, VP8, AVC JPEG, VP9 GPU-accelerated. Triple independent display support
Display Interfaces	Display Port and HDMI/DVI: 2x Digital Display Interface, usable as DisplayPort 1.2 (up to 4096 x 2304 @ 60Hz), also usable as HDMI 1.4 or DVI (up to 4096 x 2160 @ 30Hz) 1x Embedded DisplayPort 1.4 (on variants without LVDS only); 4096 x 2304 @ 60Hz LCD: LVDS 24bit, dual-channel (not on all variants); 1920 x 1200 @ 60Hz
Network Interface	10/100/1000Base-TX (Intel i219)
Audio Interface	High Definition Audio
Security Device	TPM 2.0
Miscellaneous	Watchdog Timer: Initiates system reset, programmable Fan Supply: 4-pin header for CPU fan, PWM speed controlled and PWM speed control for system fan supported RTC battery: external System Monitoring: voltage, temperature, CPU fan, system fan
Feature Highlights	Type 6 pin-out

COM Express Type 6



Firmware	UEFI Firmware: AMI Aptio® V Security: TPM 1.2 support, TCG compliant Power Management: ACPI Active fan control USB: USB legacy support (keyboard, mouse, storage) Monitoring: System Monitoring Health Monitoring Tria Adv. Boot Device Selection: Boot device priority setting based on physical interfaces
OS Support	Windows 10 (embedded) BSP for Linux (Yocto) EAPI (HW Programming Interface)
Power Requirement	12V +-5%, 5V Stby optional, 17 W to 19 W (typ.)
Environment	Ambient Temperature; 0° ... 60°C (operating), -25° ... 85°C (storage) Humidity: 5 ... 95% (operating, non-condensing), 5 ... 95% (storage, non-condensing)
Dimensions	95mm x 95mm
Certificates	UL / CE

Technical Data for TRIA C6C-KLU

Order Reference

Order No.	Description	Reference	Status *
70278	COM Express Type 6 Compact module (95mm x 95mm); CPU: Intel Celeron 3965U, dual-core, 2.2GHz, 15W TDP; Graphics: integrated Intel HD Gen 9 (GT1); LVDS; 2x DP/HDMI/DVI; Ethernet: Intel i219 Gbit; HD audio; 3x SATA, 4x USB3, 4x USB2, 8x PCIe x1 Gen 3; 2x socket for DDR4 SO-DIMM.	MSC C6C-KLU-3965U-NN201C PCBFTX	OR
82915	COM Express Type 6 Compact module (95mm x 95mm); CPU: Intel Celeron 3965U, dual-core, 2.2GHz, 15W TDP; Graphics: integrated Intel HD Gen 9 (GT1); LVDS; 2x DP/HDMI/DVI; Ethernet: Intel i219 Gbit; HD audio; 2x SATA, 4x USB3, 4x USB2, 2x PCIe Gen 3 x4; 2x socket for DDR4 SO-DIMM.	MSC C6C-KLU-3965U-NN211C PCBFTX	OR
70268	COM Express Type 6 Compact module (95mm x 95mm); CPU: Intel i3-7100U, dual-core, 2.4GHz, 15W TDP; Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 2x DP/HDMI/DVI; Ethernet: Intel i219 Gbit; HD audio; 3x SATA, 4x USB3, 4x USB2, 8x PCIe x1 Gen 3; 2x socket for DDR4 SO-DIMM.	MSC C6C-KLU-7100U-NN201C PCBFTX	OR
70276	COM Express Type 6 Compact module (95mm x 95mm); CPU: Intel i5-7300U, dual-core, 2.6/3.5GHz, 15W TDP; Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 2x DP/HDMI/DVI; Ethernet: Intel i219 Gbit; HD audio; 3x SATA, 4x USB3, 4x USB2, 8x PCIe x1 Gen 3; 2x socket for DDR4 SO-DIMM.	MSC C6C-KLU-7300U-NN201C PCBFTX	OR
70270	COM Express Type 6 Compact module (95mm x 95mm); CPU: Intel i7-7600U, dual-core, 2.8/3.9GHz, 15W TDP; Graphics: integrated Intel HD Gen 9 (GT2); LVDS; 2x DP/HDMI/DVI; Ethernet: Intel i219 Gbit; HD audio; 3x SATA, 4x USB3, 4x USB2, 8x PCIe x1 Gen 3; 2x socket for DDR4 SO-DIMM.	MSC C6C-KLU-7600U-NN201C PCBFTX	OR
70274	COM Express Type 6 Compact module (95mm x 95mm); CPU: Intel Celeron 3965U, dual-core, 2.2GHz, 15W TDP; Graphics: integrated Intel HD Gen 9 (GT1); eDP; 2x DP/HDMI/DVI; Ethernet: Intel i219 Gbit; HD audio; 3x SATA, 4x USB3, 4x USB2, 8x PCIe x1 Gen 3; 2x socket for DDR4 SO-DIMM.	MSC C6C-KLU-3965U-NN101C PCBFTX	OR
70280	COM Express Type 6 Compact module (95mm x 95mm); CPU: Intel i3-7100U, dual-core, 2.4GHz, 15W TDP; Graphics: integrated Intel HD Gen 9 (GT2); eDP; 2x DP/HDMI/DVI; Ethernet: Intel i219 Gbit; HD audio; 3x SATA, 4x USB3, 4x USB2, 8x PCIe x1 Gen 3; 2x socket for DDR4 SO-DIMM.	MSC C6C-KLU-7100U-NN101C PCBFTX	OR

COM Express Type 6



Order No.	Description	Reference	Status *
70266	COM Express Type 6 Compact module (95mm x 95mm); CPU: Intel i5-7300U, dual-core, 2.6/3.5GHz, 15W TDP; Graphics: integrated Intel HD Gen 9 (GT2); eDP; 2x DP/HDMI/DVI; Ethernet: Intel i219 Gbit; HD audio; 3x SATA, 4x USB3, 4x USB2, 8x PCIe x1 Gen 3; 2x socket for DDR4 SO-DIMM.	MSC C6C-KLU-7300U- NN101C PCBFTX	OR
70272	COM Express Type 6 Compact module (95mm x 95mm); CPU: Intel i7-7600U, dual-core, 2.8/3.9GHz, 15W TDP; Graphics: integrated Intel HD Gen 9 (GT2); eDP; 2x DP/HDMI/DVI; Ethernet: Intel i219 Gbit; HD audio; 3x SATA, 4x USB3, 4x USB2, 8x PCIe x1 Gen 3; 2x socket for DDR4 SO-DIMM.	MSC C6C-KLU-7600U- NN101C PCBFTX	OR

Ordering Information for TRIA C6C-KLU

*PV = Preferred variant; OR = on Request (in OEM quantities only)

COM Express Type 6



Accessories

Carrier Boards

Order No.	Description	Reference
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

Carrier Board TRIA C6B-KLH/CFLR/CFLH/TRIA C6C-TLU/WLU/KLU/EL/AL/BT

Cooling Solutions

Order No.	Description	Reference
1129634	Active Heatsink for C6C-SLU and C6C-KLU, consisting of a single-piece aluminum profile with fins, milled standoffs without thread (2.7mm inner diameter), screws and thermopads for the thermal contact to SOC. PWM fan 80x80x15mm.	MSC C6C-SLU-01 HSF-001
1129633	Passive Heatsink for C6C-SLU and C6C-KLU, consisting of a single-piece aluminum profile with fins, milled standoffs without thread (2.7mm inner diameter), screws and thermopad for the thermal contact to SOC.	MSC C6C-SLU-01 HSI-001
1129631	Heatspreader for C6C-SLU and C6C-KLU. Single-piece aluminum profile, milled standoffs without thread (2.7mm inner diameter), screws and thermopad for the thermal contact to SOC.	MSC C6C-SLU-01 HSP-001
1129632	Heatspreader for C6C-SLU and C6C-KLU. Single-piece aluminum profile with milled standoffs with M2.5 thread, screws and thermopad for the thermal contact to SOC.	MSC C6C-SLU-02 HSP-001

Cooling Devices for TRIA C6C-KLU/SLU

Memory Options

Please contact your Tria Technologies representative for information on supported memory options.

COM Express Type 6



Starter Kits

Order No.	Description	Reference
68454	Starter kit for COM Express Type 6 modules TRIA C6C-SLU/KLU with Intel 6th/7th generation Core processors (Skylake U, Kaby Lake U). Consists of the TRIA C6-MB-EV Mini-ITX platform board, suitable Heatsink with fan, two memory modules and a suitable power supply with cable kit. Please order separately the COM Express C6C-SLU/KLU module of your choice.	MSC C6-SK-SLU-EV-KIT001 BRDFTX

Starter Kits for TRIA C6C-KLU/SLU

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