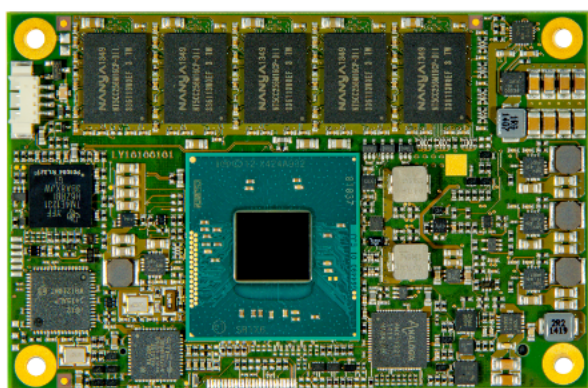


COM Express Type 10

TRIA C10M-BT

Intel® Atom™ / Celeron® SOC



84 x 55

8/ 14W

-40-+85

COM 
Express



Highlights

- Intel Atom E3845 quad-core 1.91GHz, 10W
- Intel Atom E3827 dual-core 1.75GHz, 8W
- Intel Atom E3826 dual-core 1.46GHz, 7W
- Intel Atom E3825 dual-core 1.33GHz, 6W
- Intel Atom E3815 single-core 1.46GHz, 5W
- Intel Atom E3805 dual-core 1.33GHz, 3W (no graphics)
- Intel Celeron N2807 dual-core 1.58/2.16GHz, 4.3W
- Intel Celeron N2930 quad-core 1.83/2.16GHz, 7.5W
- Intel Celeron J1900 quad-core 2.00/2.42GHz, 10W
- Integrated Intel Gen. 7 HD graphics
- Up to 8GB DDR3L SDRAM, ECC opt.
- Two SATA 3Gb/s mass storage interfaces
- eMMC SSD (optional)
- DisplayPort/HDMI/DVI interface
- LVDS/Embedded DisplayPort interface
- Two independent displays supported
- DirectX 11.1, OpenGL 3.2, OpenCL 1.1
- One USB 3.0 and up to seven USB 2.0 interfaces
- Two UARTs
- Trusted Platform Module (option)

COM Express Type 10



- Extended temperature variants (on request)

COM Express Type 10



Technical Data

Technology	x86
Formfactor	COM Express Mini
CPU	Intel Atom E3845 quad-core 1.91GHz, 10W TDP Intel Atom E3827 dual-core 1.75GHz, 8W TDP Intel Atom E3826 dual-core 1.46GHz, 7W TDP Intel Atom E3825 dual-core 1.33GHz, 6W TDP Intel Atom E3815 single-core 1.46GHz, 5W TDP Intel Atom E3805 dual-core 1.33GHz, 3W TDP (no graphics) Intel Celeron N2807 dual-core 1.58/2.16GHz, 4.3W TDP Intel Celeron N2930 quad-core 1.83/2.16GHz, 7.5W TDP Intel Celeron J1900 quad-core 2.00/2.42GHz, 10W TDP
Chipset	SOC
RAM	up to 8GB DDR3L@1.35V SDRAM (DDR1333) soldered on board, ECC optional
Flash	eMMC optional
Storage Interfaces	2x SATA 3Gb/s
USB	1x USB 3.0 , 4x USB 2.0, 3x USB 2.0 (optional hub)
Serial Interfaces	1x PCU UART 1x HS UART
Bus Interfaces	3x PCI Express x1 Gen 2, fourth channel is available if no GbE is used; LPC bus (Low Pin Count bus)
Display Controller	Integrated Intel HD graphics Gen. 7
Display Memory	UMA
Display Interfaces	1x Digital Display Interface (DP 1.1a (2560 x 1600), DVI/HDMI 1.4a (1920 x 1080)), 1x Embedded DisplayPort 1.3, 2560 x 1600 @ 60Hz (shared with LVDS), LVDS 24 bit, single-channel, 1366 x 768 @ 60Hz (shared with Embedded DisplayPort)
Network Interface	10/100/1000Base-TX (Intel i210)
Audio Interface	High Definition Audio
Security Device	TPM 1.2 (option)
Miscellaneous	Watchdog Timer: Initiates system reset, programmable RTC battery: external System Monitoring: voltage, temperature, CPU fan, system fan
Feature Highlights	Type 10 pin-out
Firmware	AMI Aptio UEFI
OS Support	Windows 7 Windows 10 Windows 10 IOT Core BSP for Linux on request EAPI (HW Programming Interface)
Power Requirement	Wide range input +5 ... +20V, 5V Stby optional, 8 W (typ.) up to 14 W (typ.)

COM Express Type 10



Environment	Ambient Temperature; 0° ... 60°C (operating, commercial), -40° ... 85°C (operating, industrial), -40° ... 85°C (storage) Humidity: 5 ... 95% (operating, non-condensing), 5 ... 95% (storage, non-condensing)
Dimensions	84mm x 55mm

Technical Data for TRIA C10M-BT

COM Express Type 10



Order Reference

Order No.	Description	Reference	Status*
49221	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel E3815 single-core 1.46GHz, 0.5MB L2, 5W TDP; Graphics: integrated Intel HD Gen 7; DP/HDMI and LVDS interfaces; Ethernet: Intel i210 Gbit; 2GB DDR3 SDRAM; HD audio; 2x SATA, 1x USB3, 7x USB2, 1x PCU UART, 1x HS UART; 3x PCIe x1; -40...+85°C	MSC C10M-BT-2111 PCBFTX	PV
49219	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel E3827 dual-core 1.75GHz, 1MB L2, 8W TDP; Graphics: integrated Intel HD Gen 7; DP/HDMI and LVDS interfaces; Ethernet: Intel i210 Gbit; 4GB DDR3 SDRAM; 4GB eMMC; TPM; HD audio; 2x SATA, 1x USB3, 7x USB2, 1x PCU UART, 1x HS UART; 3x PCIe x1; - 40...+85°C	MSC C10M-BT-3164 PCBFTX	PV
49215	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel E3845 quad-core 1.91GHz, 2MB L2, 10W TDP; Graphics: integrated Intel HD Gen 7; DP/HDMI and LVDS interfaces; Ethernet: Intel i210 Gbit; 4GB DDR3 ECC SDRAM; 16GB eMMC; TPM; HD audio; 2x SATA, 1x USB3, 7x USB2, 1x PCU UART, 1x HS UART; 3x PCIe x1; -40...+85°C	MSC C10M-BT-33E5 PCBFTX	PV
68403	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel E3845 quad-core 1.91GHz, 2MB L2, 10W TDP; Graphics: integrated Intel HD Gen 7; DP/HDMI and eDP interfaces; Ethernet: Intel i210 Gbit; 4GB DDR3 ECC SDRAM; 16GB eMMC; TPM; HD audio; 2x SATA, 1x USB3, 7x USB2, 1x PCU UART, 1x HS UART; 3x PCIe x1; -40...+85°C	MSC C10M-BT-37E5 PCBFTX	PV
49213	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel E3815 single-core 1.46GHz, 0.5MB L2, 5W TDP; Graphics: integrated Intel HD Gen 7; DP/HDMI and LVDS interfaces; Ethernet: Intel i210 Gbit; 2GB DDR3 SDRAM; HD audio; 2x SATA, 1x USB3, 7x USB2, 1x PCU UART, 1x HS UART; 3x PCIe x1;	MSC C10M-BT-2011 PCBFTX	OR
49223	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel E3825 dual-core 1.33GHz, 1MB L2, 6W TDP; Graphics: integrated Intel HD Gen 7; DP/HDMI and LVDS interfaces; Ethernet: Intel i210 Gbit; 4GB DDR3 SDRAM; HD audio; 2x SATA, 1x USB3, 7x USB2, 1x PCU UART, 1x HS UART; 3x PCIe x1;	MSC C10M-BT-2022 PCBFTX	OR

COM Express Type 10



Order No.	Description	Reference	Status*
49217	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel Celeron J1900 quad-core 2.0/2.42GHz, 2MB L2, 10W TDP; Graphics: integrated Intel HD Gen 7; DP/HDMI and LVDS interfaces; Ethernet: Intel i210 Gbit; 4GB DDR3 SDRAM; 16GB eMMC; HD audio; 2x SATA, 1x USB3, 7x USB2, 1x PCU UART, 1x HS UART; 3x PCIe x1;	MSC C10M-BT-20E7 PCBFTX	OR
68335	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel E3805 dual-core 1.33GHz, 1MB L2, 3W TDP; Graphics: no; Ethernet: Intel i210 Gbit; 8GB DDR3 ECC SDRAM; 32GB eMMC (SD); TPM; HD audio; 2x SATA, 1x USB3, 7x USB2, 3x PCIe x1; -40...+85°C	MSC C10M-BT-37J9 PCBFTX	OR
68389	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel E3827 dual-core 1.75GHz, 1MB L2, 8W TDP; Graphics: integrated Intel HD Gen 7; DP/HDMI and eDP interfaces; Ethernet: Intel i210 Gbit; 4GB DDR3 ECC SDRAM; 16GB eMMC; TPM; HD audio; 2x SATA, 1x USB3, 7x USB2, 1x PCU UART, 1x HS UART; 3x PCIe x1; -40...+85°C	MSC C10M-BT-37E4 PCBFTX	OR
67761	COM Express Type 10 Mini module (84mm x 55mm); CPU: Intel E3815 single-core 1.46GHz, 0.5MB L2, 5W TDP; Graphics: integrated Intel HD Gen 7; DP/HDMI and LVDS interfaces; Ethernet: Intel i210 Gbit; 1GB DDR3 SDRAM; HD audio; 2x SATA, 1x USB3, 7x USB2, 1x PCU UART, 1x HS UART; 3x PCIe x1;	MSC C10M-BT-2001 PCBFTX	OR

Ordering Information for TRIA C10M-BT

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

COM Express Type 10



Accessories

Carrier Options

Order No.	Description	Reference
67293	COM Express Type 10 Evaluation Carrier Board with PCI Express x4 slot, USB 3.0/2.0, GbE, SATA, DisplayPort, eDP/LVDS 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 C10-MB-EV-001 PCBFTX

Carrier Options for Tria COM Express Type 10 modules

Cooling Solutions

Order No.	Description	Reference
1124458	Heatspreader for C10M-BT. Single-piece aluminum profile, standoffs with M2.5 thread and thermopad for the thermal contact to SOC.	MSC C10M-BT-02 HSP-001
1124457	Heatspreader for C10M-BT. Single-piece aluminum profile, standoffs without thread (2.7mm inner diameter) and thermopad for the thermal contact to SOC.	MSC C10M-BT-01 HSP-001
1126980	Passive Heatsink for C10M-BT and C10M-BTC consisting of a single-piece aluminum pin cooler, standoffs without thread (2.7mm inner diameter) and thermopad for the thermal contact to SOC. With threaded mounting holes for an optional fan.	MSC C10M-BT-01 HSI-001

Cooling Devices for TRIA C10M-BT

Starter Kits

Order No.	Description	Reference
65357	COM Express Type 10 Starterkit for all C10M-BT modules; uses the new C10-MB-EV platform for Type 10 modules (Mini-ITX format); includes suitable Heatspreader for C10M-BT modules	MSC C10-SK-BT-EV

Starter Kits for TRIA C10M-BT

COM Express Type 10



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