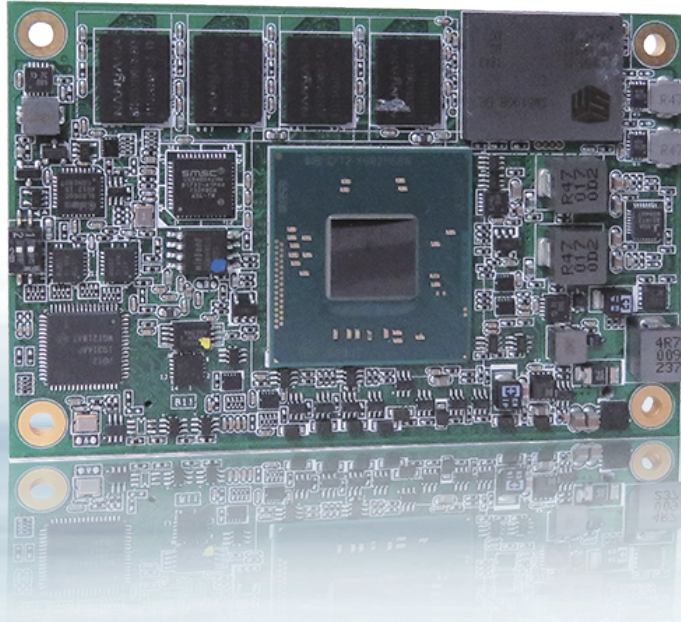


COMe-mBTi10S

ROBUST EMBEDDED STORAGE SUPPORT



COM EXPRESS® MINI TYPE 10 MODULE WITH INTEL® ATOM® E3800 SERIES PROCESSORS

- ▶ 1x DDI, 1x LVDS for video output
- ▶ 1x GbE LAN for Ethernet
- ▶ 1x USB 3.0, 7x USB 2.0, 2x UART, 8-bit GPIO / SDIO 3.0, I2C for peripherals
- ▶ 32 GB / 64 GB onboard SSD, 1x SATA 2.0, 3x PCIe x1 for storage & expansion
- ▶ Extreme operating temperature range: -40 °C ~ 85 °C

COMe-mBTi10S

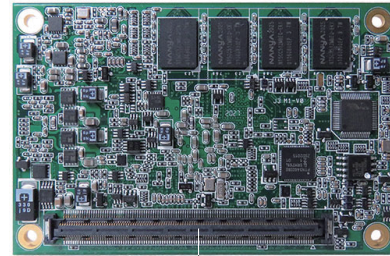
COM EXPRESS® MINI TYPE 10 MODULE WITH ATOM® E3800 SERIES PROCESSORS

COMe-mBTi10S is a COM Express® Mini Module powered by Intel® Atom® E3800 Series processors. It supports extreme operating temperature and thus it can help developers efficiently and flexibly realize a robust, small and power-saving embedded device for harsh industrial applications.

Besides supporting a variety of I/O and expansion interfaces, the module integrates an embedded SSD to provide faster access speed, more robust data protection and higher data reliability. Furthermore, the embedded SSD has a footprint of around a thumbnail, allowing developers to get rid of a conventional 2.5" or 3.5" hard drive to build a smaller and lighter device.

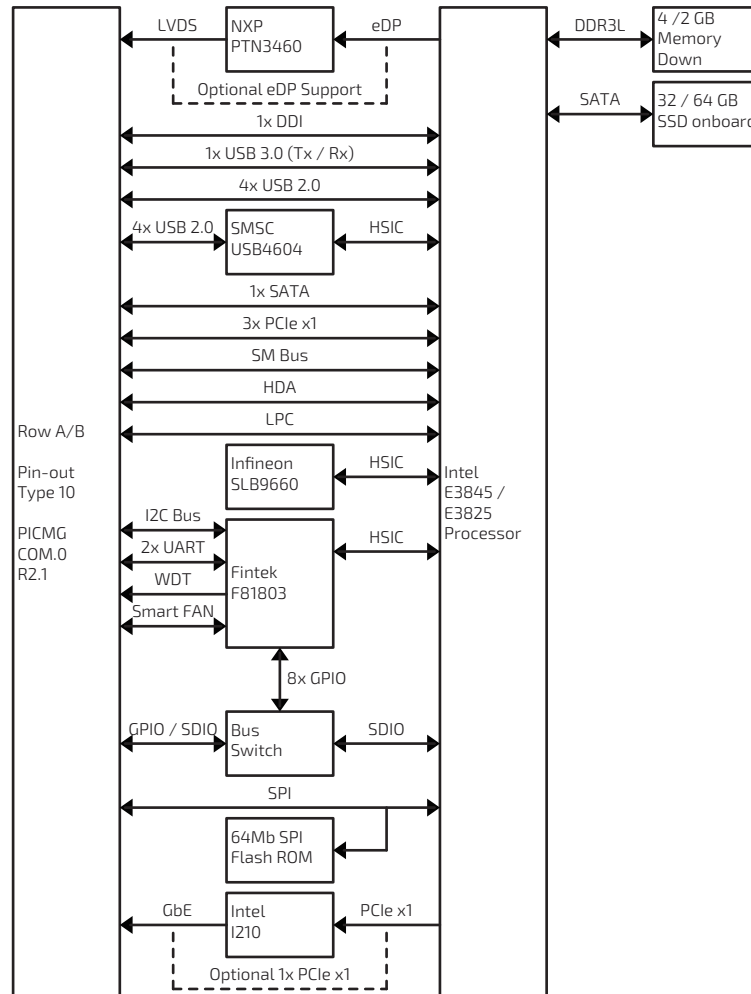
▶ PRODUCT HIGHLIGHTS

- ▶ Intel® Atom® E3800 Series processors, Atom® E3845 / E3825
- ▶ 4 GB / 2 GB onboard DDR3L memory
- ▶ 1x LVDS, 1x DDI for video output
- ▶ 1x GbE LAN for Ethernet
- ▶ 1x USB 3.0, 7x USB 2.0 for USB device connection
- ▶ 2x UART for serial device connection
- ▶ 8-bit GPIO / SDIO 3.0 for device / signal control
- ▶ 32 GB / 64 GB onboard SSD, 1x SATA 2.0 for storage
- ▶ 3x PCIe x1 for expansion
- ▶ Extreme operating temperature range: -40 °C ~ 85 °C



Type 10 Pin-out

▶ BLOCK DIAGRAM



► TECHNICAL INFORMATION

SYSTEM	PROCESSOR	Intel® Atom® E3845 (Quad Core, 2M Cache, 1.91 GHz, FCBGA1170, 10 W TDP) Intel® Atom® E3825 (Dual Core, 1M Cache, 1.33 GHz, FCBGA1170, 6 W TDP)
	MEMORY	4 GB / 2 GB DDR3L 1333 ECC memory onboard (Atom® E3845) 4 GB / 2 GB DDR3L 1067 ECC memory onboard (Atom® E3825)
VIDEO	GRAPHICS DISPLAY INTERFACE	Intel® HD Graphics 1x LVDS (18/24-bit, 1/2-ch, 1920 x 1200 @ 60 Hz, via Pin-out) 1x eDP (2560 x 1600 @ 60 Hz, via Pin-out, optional to replace LVDS)
	MULTIPLE DISPLAY	1x DDI (via Pin-out, 2560 x 1600 @ 60 Hz) Dual
AUDIO	AUDIO CODEC	Intel® HD Audio (via Pin-out)
NETWORK CONNECTION	ETHERNET	1x GbE LAN (via Pin-out, Intel® I210, replaceable by PCIe x1 for option)
PERIPHERAL CONNECTION	USB	1x USB 3.0 (via Pin-out) 7x USB 2.0 (via Pin-out, 3x from CPU, 4x from HSIC Hub)
	SERIAL PORT	2x UART (via Pin-out)
	OTHER I/Os	1x 8-bit GPIO / SDIO 3.0 (via Pin-out) 1x LPC (via Pin-out) 1x I2C Bus (via Pin-out)
STORAGE & EXPANSION	EMBEDDED SSD	32 GB / 64 GB embedded SSD onboard
	SATA	1x SATA 2.0 (via Pin-out)
	PCIe	3x PCIe x1 (via Pin-out, +1 when LAN is replaced by an optional PCIe x1)
POWER	INPUT VOLTAGE	DC 5 V ~ 20 V (Single Supply Power) DC 5 V5B / 12 V (ATX)
FIRMWARE	BIOS	AMI uEFI BIOS w/ 64 Mb SPI Flash (Boot from external SPI / FWH flash)
	WATCHDOG	Programmable WDT to generate system reset event
	H/W MONITOR	Voltages, Temperatures
	REAL TIME CLOCK	Processor integrated RTC
	SECURITY	TPM 1.2 (Infineon SLB9660)
COOLING	FAN	1x Smart Fan (via Pin-out)
SOFTWARE	OS SUPPORT	Windows 7, Windows 8, Windows 10, Linux
MECHANICAL	DIMENSION (L x W)	COM Express® Mini (84 mm x 55 mm / 3.31" x 2.17")
	PIN-OUT TYPE	COM Express® R2.1 Type 10
ENVIRONMENTAL	OPERATION TEMPERATURE	-40 °C ~ 85 °C / -40 °F ~ 185 °F (Extreme)
	STORAGE TEMPERATURE	-55 °C ~ 85 °C / -67 °F ~ 185 °F (Extreme)
	HUMIDITY	0 % ~ 95 %

▶ ORDERING INFORMATION

ARTICLE	DESCRIPTION
COMe-mBTi10S-E3845-4GB/32GB	Intel® Atom® E3845, 4 GB DDR3L, 32 GB embedded SSD
COMe-mBTi10S-E3825-4GB/32GB	Intel® Atom® E3825, 4 GB DDR3L, 32 GB embedded SSD