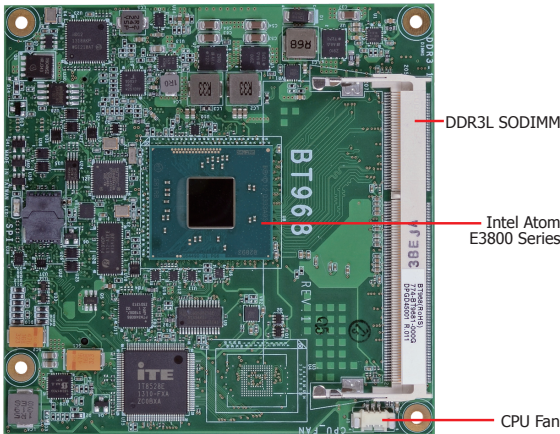




BT968 Series

Atom

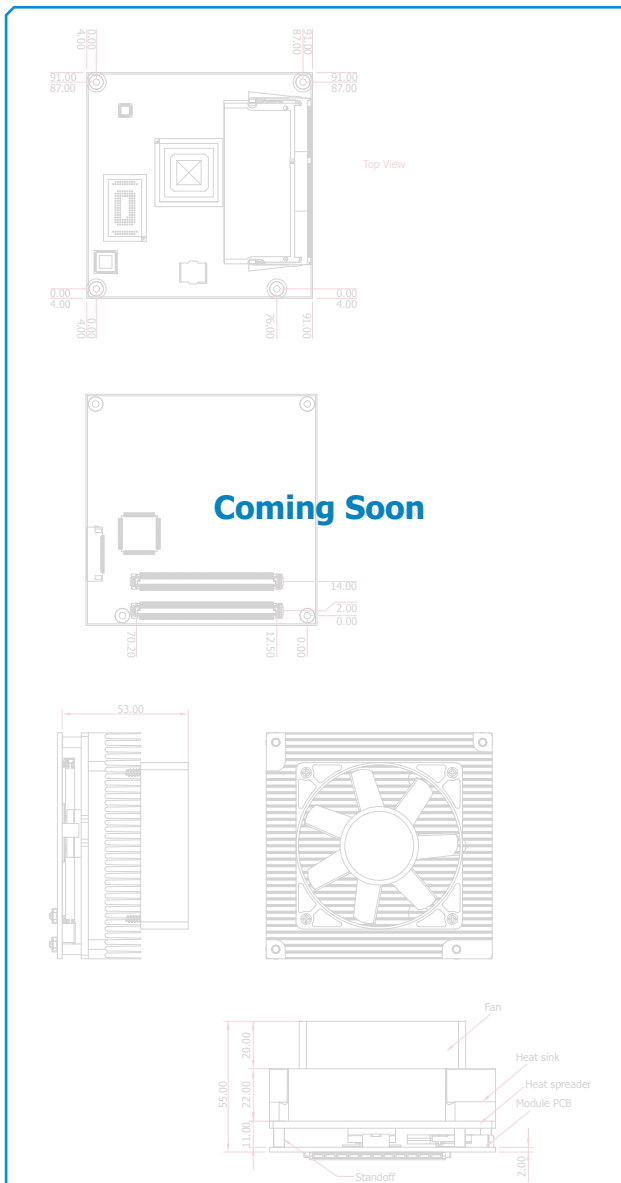


Features

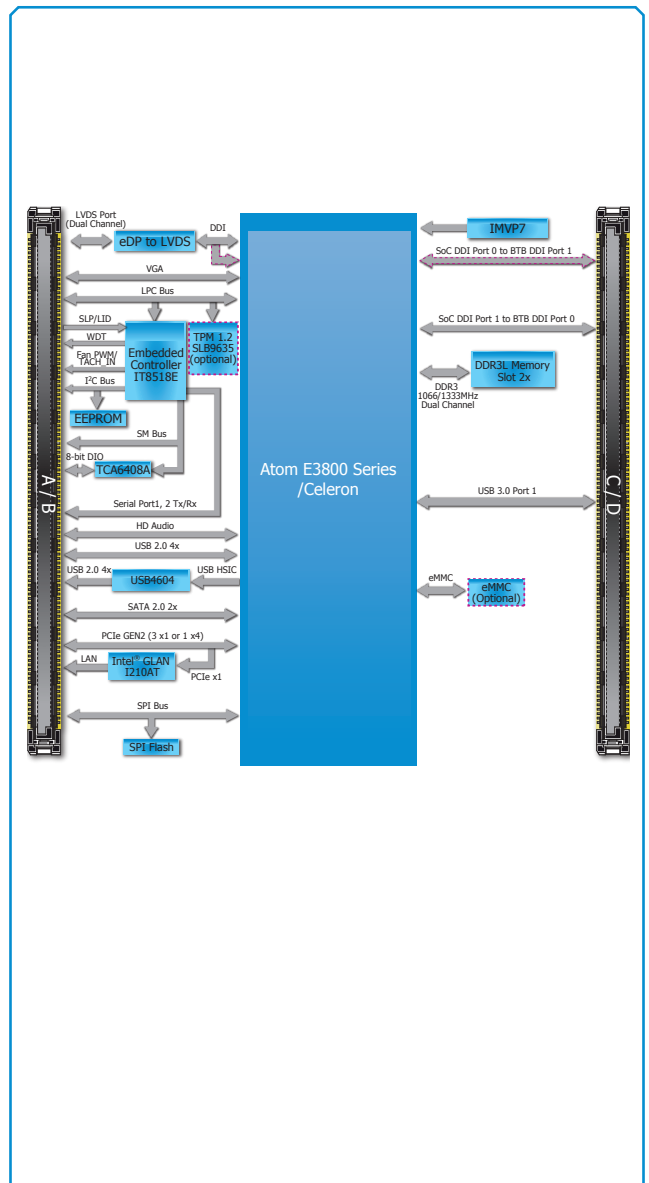
MEMORY	2 DDR3L SODIMM up to 8GB (-E45/-E27/-E26/-J00/-N30) 1 DDR3L SODIMM up to 4GB (-E25/-E15/-N07)
STORAGE	4GB/8GB/16GB eMMC onboard (optional)
EXPANSION	3 PCIe x1 1 LPC, 1 SMBus, 1 I ² C, 2 serial 1 VGA, 1 LVDS, 1 DDI (HDMI/DVI/DP) 1 HDA 9 USB: 1 USB 3.0, 8 USB 2.0 2 SATA 2.0 8-bit DIO
LAN	1 LAN
DIMENSIONS	COM Express® R2.1 Compact, Type 6 95mm x 95mm (3.74" x 3.74")



Mechanical Drawing



Block Diagram



BT968 Series

► Specifications

PROCESSOR

- Intel® Atom™/Intel® Celeron® processors
 - BGA 1170 packaging technology
 - 22nm process technology
- Please refer to the Ordering Information below*

SYSTEM MEMORY

- Two 204-pin DDR3L SODIMM sockets (-E45/-E27/-E26/-J00/-N30)
 - up to 8GB system memory
 - dual channel memory interface
- One 204-pin DDR3L SODIMM socket (-E25/-E15/-N07)
 - up to 4GB system memory
 - single channel memory interface
- Supports DDR3L 1333MHz (-E45/-E27/-J00/-N30/-N07)
- Supports DDR3L 1066MHz (-E26/-E25/-E15)
- DRAM device technologies: 1Gb, 2Gb and 4Gb DDR3L DRAM technologies are supported for x8 and x16 devices, unbuffered, non-ECC

STORAGE

- Supports 4GB, 8GB and 16GB eMMC onboard (optional)

ONBOARD GRAPHICS FEATURES

- Intel® HD Graphics
- Supports VGA, LVDS (default)/DDI and DDI interfaces
- Supports 2 display interfaces at the same time
- VGA: 24-bit, resolution up to 2560x1600 @ 60Hz
- LVDS: NXP PTN3460, 24-bit, dual channel, resolution up to 1920x1200 @ 60Hz
- Digital Display Interface: HDMI, DVI and DP
- HDMI, DVI: resolution up to 2560x1600 @ 24Hz
- DP: resolution up to 2560x1600 @ 60Hz
- Supports hardware acceleration for DirectX 11, OCL 1.2, OGL 3.2, H.264, MPEG2, MVC, VC-1, WMV9 and VP8

ONBOARD AUDIO FEATURES

- Supports High Definition Audio interface

ONBOARD LAN FEATURES

- Intel® I210AT Gigabit Ethernet Controller
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

SERIAL ATA (SATA) INTERFACE

- Supports 2 Serial ATA interfaces
- SATA 2.0 with data transfer rate up to 3Gb/s
- Integrated Advanced Host Controller Interface (AHCI) controller

TRUSTED PLATFORM MODULE (TPM) - optional

- Provides a Trusted PC for secure transactions
- Provides software license protection, enforcement and password protection

WATCHDOG TIMER

- Watchdog timeout programmable via software from 1 to 255 seconds

EXPANSION INTERFACES

- Supports 1 USB 3.0 port
- Supports 8 USB 2.0 ports
 - 4 integrated USB 2.0 ports
 - 1 USB HSIC for 4 USB 2.0 Ports
- Supports 3 PCIe x1 (default); or 1 PCIe x4 (PCIe port 3 share with on board LAN by default)
- Supports LPC interface
- Supports I²C interface
- Supports SMBus interface
- Supports 2 serial interfaces (TX/RX)
- Supports 8-bit Digital I/O

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors Vcore/Vgfx/VDDR/3V3 voltages and failure alarm
- Monitors CPU/system fan speed and failure alarm
- Watchdog timer function

BIOS

- TBD

POWER CONSUMPTION

- TBD

OS SUPPORT

- TBD

TEMPERATURE

- Operating
 - Atom: 0°C to 60°C, -20°C to 70°C, -40°C to 85°C
 - Celeron: 0°C to 60°C
- Storage: -40°C to 85°C

HUMIDITY

- 5% to 90%

POWER INPUT

- 12V, 5VSB, VCC_RTC (ATX mode)
- 12V, VCC_RTC (AT mode)

PCB

- Dimensions
 - COM Express® Compact
 - 95mm (3.74") x 95mm (3.74")
- Compliance
 - PICMG COM Express® R2.1, Type 6

► Ordering Information

Model Name	Temperature	Memory	eMMC	Processors
BT968	B	S	0	E45
	B: 0°C to 60°C E: -20°C to 70°C T: -40°C to 85°C	S: Socket	0: None 4: 4GB 8: 8GB 1: 16GB	E45: Intel® Atom™ E3845, Quad Core, 2M Cache, 1.91GHz, 10W E27: Intel® Atom™ E3827, Dual Core, 1M Cache, 1.75GHz, 8W E26: Intel® Atom™ E3826, Dual Core, 1M Cache, 1.46GHz, 7W E25: Intel® Atom™ E3825, Dual Core, 1M Cache, 1.33GHz, 6W E15: Intel® Atom™ E3815, Single Core, 0.5M Cache, 1.46GHz, 5W J00: Intel® Celeron® J1900, Quad Core, 2M Cache, up to 2.42GHz, 10W N30: Intel® Celeron® N2930, Quad Core, 2M Cache, up to 2.16GHz, 7.5W N07: Intel® Celeron® N2807, Dual Core, 1M Cache, up to 2.16GHz, 4.3W

► Packing List

- 1 BT968 board
- 1 QR (Quick Reference)
- 1 DVD

► Optional Items

- COM331-B carrier board kit
- COM101-BAT carrier board kit
- Heat spreader with heat sink: TBD