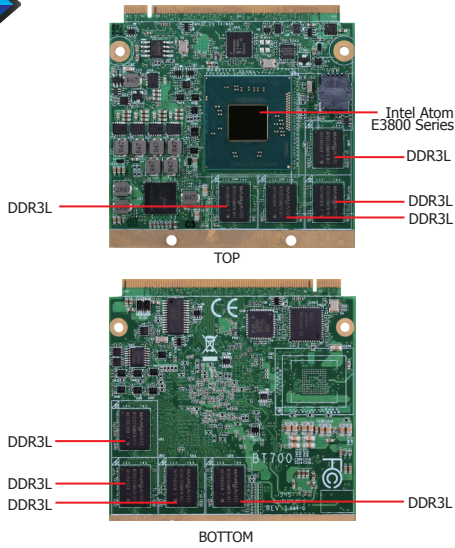




BT700

Atom



Features

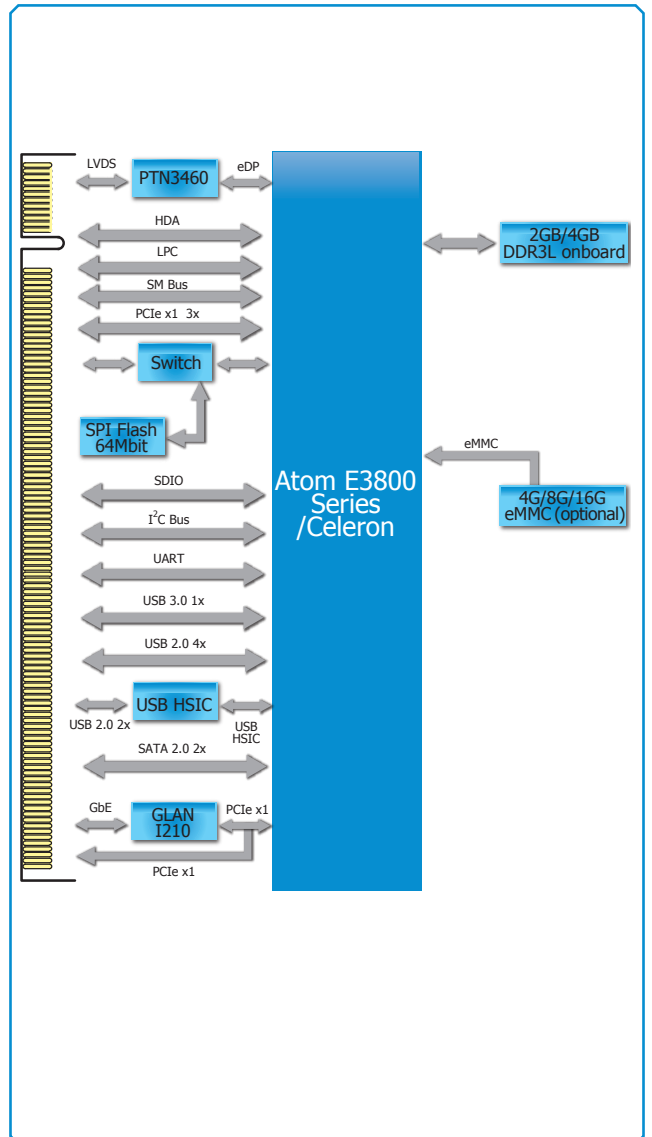
MEMORY	2GB/4GB DDR3L onboard
STORAGE	4GB/8GB/16GB eMMC onboard (optional)
EXPANSION	3 PCIe x1 1 LPC, 1 SMBus, 1 I ² C, 1 UART 1 LVDS, 1 DDI (HDMI/DVI/DP) 1 HDA 7 USB: 1 USB 3.0, 6 USB 2.0 2 SATA 2.0 1 SDIO 8-bit DIO
LAN	1 LAN
DIMENSIONS	Qseven R2.0 70mm x 70mm (2.76" x 2.76")



Mechanical Drawing



Block Diagram



BT700

► Specifications

PROCESSOR

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

SYSTEM MEMORY

- 2GB/4GB DDR3L onboard
- Supports DDR3L 1333MHz (-E45/-E27/-J00/-N30/-N07)
- Supports DDR3L 1066MHz (-E26/-E25/-E15)

STORAGE

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

ONBOARD GRAPHICS FEATURES

- Intel® HD Graphics
- Supports LVDS and DDI interfaces
- 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® WGI210 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

SDIO INTERFACE

- Supports 1 SDIO
- Supports SDA Standard Ver 1.0, SD memory card specification Ver 2.0, SDIO card specification Ver 1.0
- Conforms to Secure Digital Host Controller (SDHC) speed class 6

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 4 USB 2.0 ports
- Supports 1 USB HSIC for 2 USB 2.0 (default); or 4 USB 2.0 ports
- Supports 3 PCIe x1 (GPP, GPP3 is connected to onboard LAN by default)
- Supports LPC interface
- Supports I²C interface
- Supports SMBus interface
- Supports 1 UART interface (TX/RX/CTS/RTS)
- Supports 8-bit Digital I/O

DAMAGE FREE INTELLIGENCE

- Monitors CPU temperature
- Monitors CPU fan speed
- Monitors Vcore/VGFX/VSM voltages
- Watchdog timer function

BIOS

- 64Mbit SPI Flash BIOS

POWER

- Input: VCC_RTC, 5V standby, 5V

POWER CONSUMPTION

- TBD

OS SUPPORT

- Windows 8 Enterprise x64 (64-bit)

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 95%

PCB

- Dimensions
 - Qseven form factor
 - 70mm (2.76") x 70mm (2.76")
- Compliance
 - Qseven specification revision 2.0

► Ordering Information

Model Name	Temperature	Memory	eMMC	Processors
BT700	B	2	0	E45
	B: 0°C to 60°C E: -20°C to 70°C T: -40°C to 85°C	2: 2GB 4: 4GB	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 BT700 board
- 1 QR (Quick Reference)
- 1 DVD

► Optional Items

- Q7X-151 carrier board kit
- Heat sink: A71-012004-000G
- 1 Bracket