Single Board Computer

#### **Computer on Modules**



COM Express Rev 2.1 Basic Type 6 Module, Intel® 4th Generation Atom™ Processor, VGA, DDI, GbE, SATA 3Gb/s, USB and Audio, RoHS



# One piece heat sink for COM **Express Basic Size provides** better thermal solution lne Key Recovéry symai 🔄 symai ... USB 3.1

#### **Features**

- Intel® 22nm Atom™ or Celeron® on-board SoC supported
- Intel® HD Graphics Gen7 integrates high-performance graphics and media processing
- Supports 1333/1066 MHz DDR3L (1.35V) memory, up to 8 GB
- Supports one analog CRT, one 24-bit dual-channel LVDS, and one DDI
- Optional soldered down 4 GB SSD
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

#### **Dimensions** (Unit: mm)



#### Packing List

- 1 x ICE-BT-T6 single board computer
- 1 x QIG 1 x Heatsink

### **Ordering Information**

Part No.	Description
ICE-BT-T6-J19001-R10	COM Express Basic Type 6 module with Intel® Celeron® quad- core processor J1900 (10W), VGA, DDI, LVDS, GbE, SATA, USB 3.1 Gen 1 (5Gb/s) and HD Audio, RoHS
ICE-BT-T6-N29301-R10	COM Express Basic Type 6 module with Intel® Celeron® quad- core processor N2930 (7.5W), VGA, DDI, LVDS, GbE, SATA, USB 3.1 Gen 1 (5Gb/s) and HD Audio, RoHS
ICE-BT-T6-N28071-R10	COM Express Basic Type 6 module with Intel® Celeron® dual- core processor N2807 (4.3W), VGA, DDI, LVDS, GbE, SATA, USB 3.1 Gen 1 (5Gb/s) and HD Audio, RoHS
ICE-BT-T6-E38XX1-R10	COM Express Basic Type 6 module with Intel® Atom™ processor E38XX, VGA, DDI, LVDS, USB 3.1 Gen 1 (5Gb/s), GbE, SATA and HD Audio, RoHS (by request MOQ: 100pcs/lot)
ICE-DB-T6R-R11	Baseboard for COM Express Type 6 Module COM.0 Rev. 2.1, supports PICMG EAPI R1.0
19100-000186-00-RS	Heat spreader for ICE-BT-T6

## **Specifications**

#### ♦ CPU

Intel® Atom™ E3845 on-board SoC (1.91GHz, quad-core, 2MB cache, TDP=10W) Intel® Atom™ E3827 on-board SoC (1.75GHz, dual-core, 1MB cache, TDP=8W) Intel® Atom™ E3826 on-board SoC (1.46GHz, dual-core, 1MB cache, TDP=7W) Intel® Atom™ E3825 on-board SoC (1.33GHz, dual-core, 1MB cache, TDP=6W) Intel® Atom™ E3815 on-board SoC (1.46GHz, single-core, 512KB cache, TDP=5W) Intel® Celeron® J1900 on-board SoC (2GHz, quad-core, 2MB cache, TDP=10W) Intel® Celeron® N2930 on-board SoC (1.83GHz, quad-core, 2MB cache, TDP=7.5W) Intel® Celeron® N2807 on-board SoC (1.58GHz, dual-core, 2MB cache, TDP=4.3W) Memory

- Two 204-pin 1066/1333 MHz dual-channel DDR3L SDRAM unbuffered DIMMs support up to 8 GB ♦ BIOS
- **UEFI BIOS**
- Graphics Engine
- Intel® HD Graphics Gen 7 Engine with 4 execution units, supporting DX11.1, OpenGL 4.2 and OpenCL1.2
- Display Output
- 1 x VGA (up to 2560x1600@60Hz)
- 1 x DDI 1 (DP up to 2560x1600@60Hz / HDMI up to 1920x1080@60Hz) 1 x LVDS: 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz)
- Ethernet Intel® I210 GbE Ethernet
- Storage
- 2 x SATA 3Gb/s signal to baseboard
- Optional soldered down SSD up to 64 GB (SATA port 1) Embedded Controller
- ITE IT8528E/FX
- ♦ USB 7 x USB 2.0 signal to baseboard
- 4 x USB 3.1 Gen 1 (5Gb/s) signal to baseboard (via 1 to 4 USB 3.1 Gen 1 (5Gb/s) hub) Audio
- High Definition Audio interface to baseboard
- ♦ GPIO
- Yes, to baseboard ♦ SMBus
- Yes, to baseboard
- ♦ l²C
- Yes, to baseboard ♦ LPC
- Yes, to baseboard
- ♦ SPI
- Yes, to baseboard Internal Storage
- 2-Kb serial I<sup>2</sup>C bus EEPROM supports EAPI Rev. 1.0
- Serial Port
- 2 x Serial ports to baseboard (TX & RX from EC) Expansion
- 5 x PCIe x1 signal to baseboard (2 from SoC, 3 from PLX PEX8605 switch IC) Watchdog Timer
- Software programmable, supports 1~255 sec. system reset (by EC) Power Consumption
- +12V@0.54A, Vcore\_12V@0.95A (Intel® Celeron® J1900 CPU with two 8 GB 1333 MHz DDR3 memory)
- Operating Temperature -20°C ~ 60°C
- Storage Temperature -30°C ~ 70°C
- Operating Humidity 5% ~ 95%, non-condensing
- ◆ Dimensions: 125 mm x 95 mm
- Weight: GW: 600g / NW: 200g