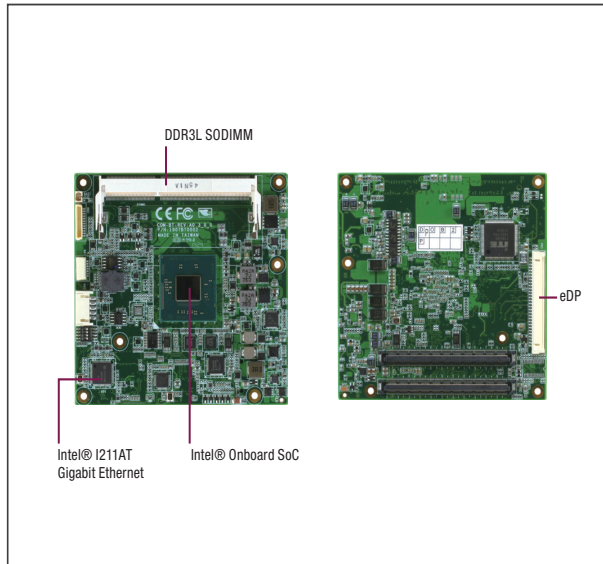


# 04 COM-BT

COM Express Type 6 with Intel® Atom™/ Celeron® Processor SoC

COM Express CPU Modules



## Features

- Intel® Atom™/ Celeron® Processor SoC
- DDR3L 1066/1333 MHz SODIMM x 1, Up to 8 GB
- Gigabit Ethernet with Intel(R) i210
- VGA, Up to 24-bit Dual-channel LVDS, eDP (Optional), up to DDI x 2 (Share w/ eDP LVDS)
- High Definition Audio Interface
- SATA2 x 2
- USB 2.0 x 7, USB 3.2 Gen 1 x 1
- PCI-Express [x1] x 3
- COM Express Compact Module, Pin-out Type 6, COM.0 Rev. 2.1
- Supports Industrial Temperature



## Specifications

| System                      |                                                                                                             |
|-----------------------------|-------------------------------------------------------------------------------------------------------------|
| Form Factor                 | COM Express Compact Size, Type 6                                                                            |
| CPU                         | Intel® Atom™/ Celeron® Processor                                                                            |
| CPU Frequency               | Up to J1900 (2.0 GHz)                                                                                       |
| Chipset                     | Intel® Atom™/ Celeron® SoC                                                                                  |
| Memory Type                 | DDR3L, SO-DIMM x 1                                                                                          |
| Max. Memory Capacity        | 8 GB                                                                                                        |
| BIOS                        | AMI BIOS                                                                                                    |
| Wake on LAN                 | Yes                                                                                                         |
| Watchdog Timer              | 255 Levels                                                                                                  |
| Power Requirement           | +12 V and +5 VSB for ATX, +12V for AT                                                                       |
| Power Supply Type           | AT/ATX                                                                                                      |
| Power Consumption (Typical) | 0.92A@12V, full load, J1900                                                                                 |
| Dimension (L x W)           | 3.74" x 3.74" (95mm x 95mm)                                                                                 |
| Operating Temperature       | 32°F ~ 140°F (0°C ~ 60°C)<br>-40°F ~ 185°F (-40°C ~ 85°C) Option                                            |
| Storage Temperature         | -40°F ~ 185°F (-40°C ~ 85°C)                                                                                |
| Operating Humidity          | 0% ~ 90% relative humidity, non-condensing                                                                  |
| Certification               | CE/FCC Class A                                                                                              |
| Display                     |                                                                                                             |
| Graphic Controller          | Intel® HD Graphic                                                                                           |
| Video Output                | 3 Simultaneous Display:<br>Single/Dual Channel LVDS (18/24bit),<br>VGA, DDI (Up to 2x DDI shared with LVDS) |
| I/O                         |                                                                                                             |
| Ethernet                    | Intel® i210AT GbE x 1                                                                                       |
| Audio                       | High Definition Audio Interface                                                                             |
| USB Port                    | USB 2.0 x 7, USB 3.2 Gen 1 x 1                                                                              |
| Serial Port                 | 2-Wire UART (Tx/Rx) x 2                                                                                     |
| HDD Interface               | SATA x 2                                                                                                    |
| Expansion Slot              | PCIe[x1] x 3<br>LPC<br>SMBus<br>I2C                                                                         |
| GPIO                        | 8-bit                                                                                                       |
| Onboard Storage             | —                                                                                                           |
| TPM                         | —                                                                                                           |

## Packing List

- COM-BT-A30 x1

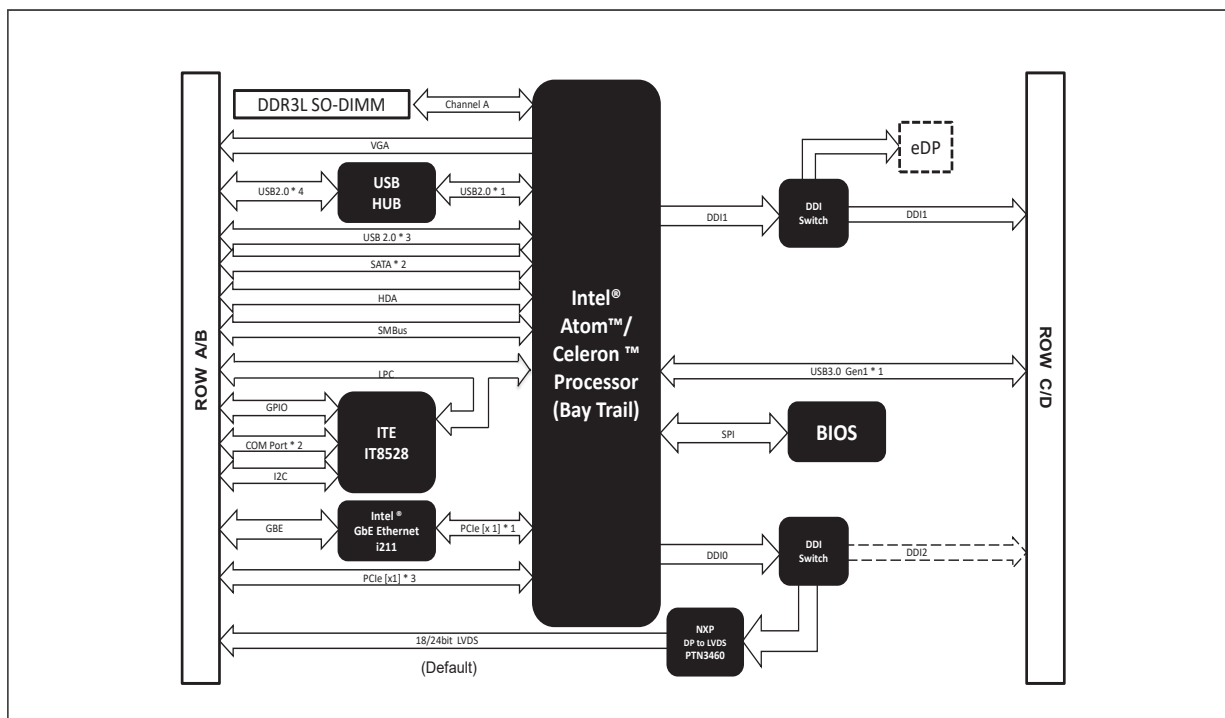
## Optional Accessories

- **ECB-920A-A11-0001**  
COMe Type 6/10, Carrier Board, ATX, 2.5GbE, 8USB, 2COM, 4SATA, PCIe, AT/ATX, Rev. A1.1
- **PER-A126**  
Heat Spreader, For COM-BT, Onboard CPU
- **COM-BT-HSK01**  
Heat Sink, 95 x 95 x 22mm, Silver, COM-BT
- **COM-FAN02**  
CPU Cooler, 95 x 95 x 26.5mm, Silver, use with HSP

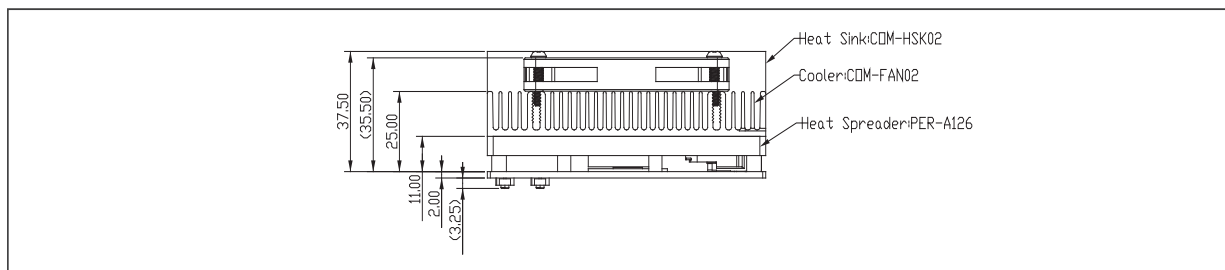
## CPU Support Chart

| CPU   | Core/Thread | Base Frequency/Turbo | TDP  | Graphic            |
|-------|-------------|----------------------|------|--------------------|
| N2930 | 4C/4T       | 1.83GHz / 2.16GHz    | 7.5W | Intel® HD Graphics |
| N2807 | 2C/2T       | 1.58GHz / 2.16GHz    | 4.3W | Intel® HD Graphics |
| E3845 | 4C/4T       | 1.91GHz              | 10W  | Intel® HD Graphics |
| E3825 | 2C/2T       | 1.33GHz              | 6W   | Intel® HD Graphics |
| E3815 | 1C/1T       | 1.46GHz              | 5W   | Intel® HD Graphics |
| J1900 | 4C/4T       | 2.00GHz / 2.42GHz    | 10W  | Intel® HD Graphics |

## Block Diagram Unit: mm



## Dimension Unit: mm



## Ordering Information

| PART NUMBER     | COM EXPRESS TYPE        | CPU              | MEMORY                    | DISPLAY                                           | LVDS            | STORAGE   | LAN     | USB                              | UART      | EXPANSION            | POWER | TEMPERATURE | OTHERS          |
|-----------------|-------------------------|------------------|---------------------------|---------------------------------------------------|-----------------|-----------|---------|----------------------------------|-----------|----------------------|-------|-------------|-----------------|
| COM-BT-A30-0001 | Type 6 (COM.0 Rev. 2.1) | N2930 (1.83 GHz) | DDR3L1066/1333, Max. 8 GB | LVDS/eDP, VGA, DDI (2nd DDI shared with LVDS/eDP) | 18/24b 2CH LVDS | SATA2 x 2 | GbE x 1 | USB 3.2 Gen 1 x 1<br>USB 2.0 x 7 | 2 (Tx/Rx) | PCI-Express [x1] x 3 | 12V   | 0°C - 60°C  | LPC, SMBus, I2C |
| COM-BT-A30-0003 | Type 6 (COM.0 Rev. 2.1) | E3845 (1.91 GHz) | DDR3L1066/1333, Max. 8 GB | LVDS/eDP, VGA, DDI (2nd DDI shared with LVDS/eDP) | 18/24b 2CH LVDS | SATA2 x 2 | GbE x 1 | USB 3.2 Gen 1 x 1<br>USB 2.0 x 7 | 2 (Tx/Rx) | PCI-Express [x1] x 3 | 12V   | 0°C - 60°C  | LPC, SMBus, I2C |

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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