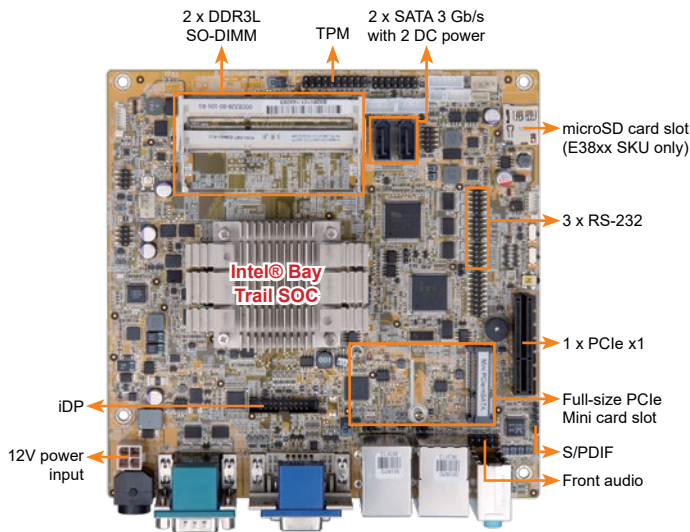


# KINO-DBT

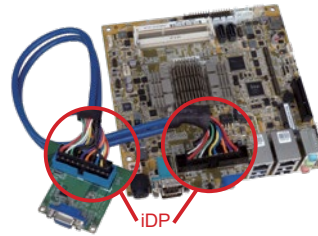
Mini-ITX SBC supports 22nm Intel® Atom™ or Celeron® on-board SoC, VGA/DVI/iDP, dual Realtek PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA, HD Audio, RoHS



## Specifications

- ◆ SoC
  - 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=4.5W)
- ◆ BIOS
  - UEFI BIOS
- ◆ Memory
  - Two 204-pin 1066/1333 MHz dual-channel unbuffered DDR3L SDRAM SO-DIMM support up to 8 GB (J1900, N2930, E3845, E3827, E3826)
  - One 204-pin 1066/1333 MHz dual-channel unbuffered DDR3L SDRAM SO-DIMM supports up to 8 GB (E3825, E3815) or 4 GB (N2807)
- ◆ Graphics Engine
  - Intel® HD Graphics Gen 7 engine with 4 execution units, supporting DX11.1, OpenGL 4.2 and OpenCL 1.2
- ◆ Display Output
  - Dual independent display
  - 1 x VGA (up to 2560x1600@60 Hz)
  - 1 x DVI-D (up to 1920x1080@60 Hz)
  - 1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 2560x1600@60 Hz)
- ◆ Ethernet
  - LAN1: Realtek RTL8111E PCIe GbE controller
  - LAN2: Realtek RTL8111E PCIe GbE controller
- ◆ External I/O Interface
  - 2 x RS-232
  - 2 x USB 2.0
  - 2 x USB 3.2 Gen 1 (5Gb/s)
- ◆ Internal I/O Interface
  - 1 x KB/MS (1x6 pin)
  - 1 x mSATA (colay SATA2)
  - 2 x SATA 3Gb/s
  - 4 x USB 2.0 (2x4 pin, P=2.0)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ TPM: 1 x TPM (2x10 pin)
- ◆ Audio
  - Realtek ALC662 HD Audio codec supports 5.1-channel
  - 3 x Audio jacks (line-out, line-in, mic-in) on rear IO
  - 1 x Front audio (2x5 pin)
  - 1 x S/PDIF (1x5 pin)
- ◆ Front Panel
  - 1 x Front panel (2x7 pin, power LED, HDD LED, speaker, power button, reset button)
- ◆ LAN LED: 2 x LAN LED (1x2 pin)
- ◆ Expansion
  - 1 x PCIe x4 slot (with PCIe x1 signal)
  - 1 x Full-size PCIe Mini card slot
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Chassis Intrusion Detection: 1 x Chassis intrusion connector (1x2 pin)
- ◆ Fan Connector
  - 1 x CPU smart fan (1x4 pin)
  - 1 x System smart fan (1x4 pin)
- ◆ Power Supply
  - 12V DC input
  - 1 x External DC jack (4-pin DIN)
  - 1 x Internal power connector (2x2 pin)
- ◆ Power Consumption
  - 12V@1.64A (Intel® Celeron® J1900 CPU with 4 GB 1333 MHz DDR3L memory)
- ◆ Watchdog Timer: Software programmable supports 1~255 sec. system reset
- ◆ Operating Temperature: -20°C ~ 60°C
- ◆ Storage Temperature: -30°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 170mm x 170mm
- ◆ Weight: GW: 900g / NW: 400g
- ◆ CE/FCC compliant

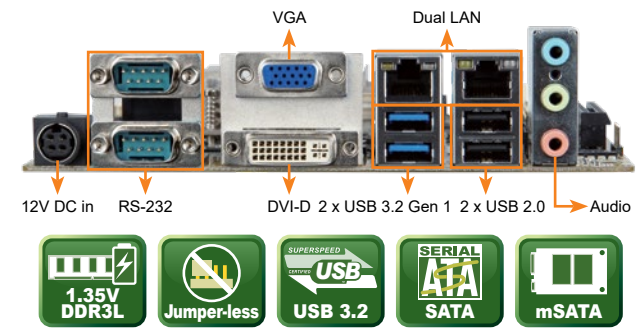
## iDP (IEI Internal DisplayPort)



Model	Output	External Power
DP-VGA-R10	VGA	No
DP-HDMI-R10	HDMI	No
DP-DVI-R10	DVI	No
DP-LVDS-R10	LVDS	Yes
DP-DP-R10	DP	No

## Easy Installation on the Chassis

iDP converter cards with brackets



## Features

- Mini-ITX SBC with 22nm Intel® Atom™ on-board SoC
- 1.35V DDR3L 1066/1333 MHz SDRAM supporting up to 8 GB of memory
- Dual independent display support
- COM, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, PCIe Mini, mSATA and HD Audio support
- Support Intel® VT-x technology

## Packing List

1 x KINO-DBT single board computer	1 x SATA cable with power output cable
1 x IO shielding	1 x QIG

## Ordering Information

Part No.	Description
KINO-DBT-J19001-R10	Mini-ITX SBC supports Intel® Celeron® quad-core processor J1900 (10W), VGA/DVI/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA, HD Audio and RoHS
KINO-DBT-N29301-R10	Mini-ITX SBC supports Intel® Celeron® quad-core processor N2930 (7.5W), VGA/DVI/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA, HD Audio and RoHS
KINO-DBT-N28071-R10	Mini-ITX SBC supports Intel® Celeron® dual-core processor N2807 (4.5W), VGA/DVI/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA, HD Audio and RoHS
KINO-DBT-E38XX1-R10**	Mini-ITX SBC supports Intel® Atom™ processor E38XX, VGA/DVI/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA, HD Audio and RoHS
19800-000075-RS	PS/2 KB/MS cable with bracket, 220mm, P=2.0
32205-002700-200-RS	RS-232 cable, 200mm, P=2.0
32205-003800-300-RS	RS-422/485 cable, 200mm, P=2.0
DP-DP-R10	DisplayPort to DisplayPort converter board (for IEI iDP connector)
DP-DVI-R10	DisplayPort to DVI-D converter board (for IEI iDP connector)
DP-HDMI-R10	DisplayPort to HDMI converter board (for IEI iDP connector)
DP-LVDS-R10	DisplayPort to 24-bit dual-channel LVDS converter board (for IEI iDP connector)
DP-VGA-R10	DisplayPort to VGA converter board (for IEI iDP connector)
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17

\*\*By order production, MOQ: 100