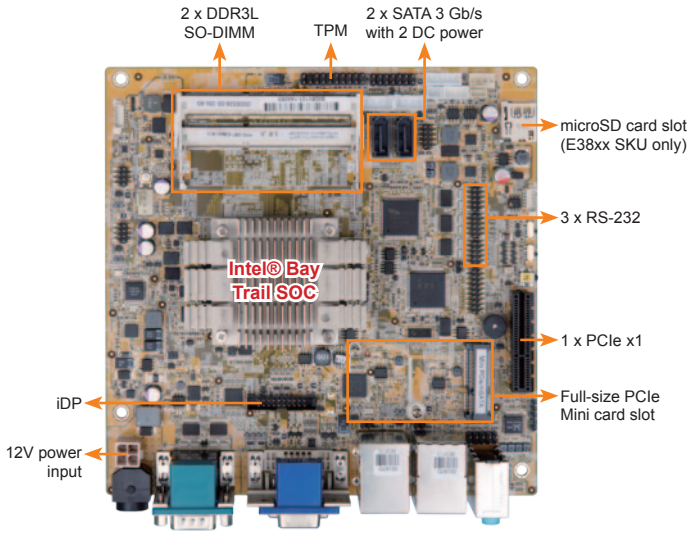
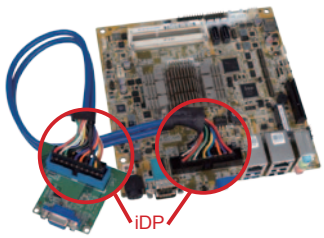
KINO-DBT

Mini-ITX SBC supports 22nm Intel® Atom™ or Celeron® on-board SoC, VGA/DVI/iDP, dual Realtek PCIe GbE, USB 3.0, SATA, HD Audio, RoHS



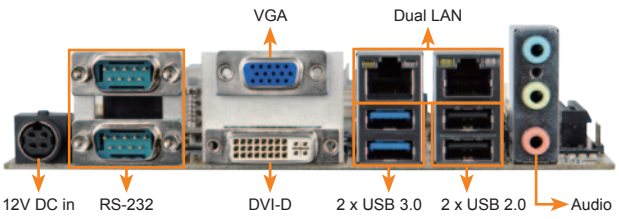
iDP (IEI Internal DisplayPort)



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



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
  AMI 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 4 GB (N2807, E3825, E3815)
- Graphics Engine
  Intel® HD Graphics Gen 7 engine with 4 execution units, supporting DX11.1, OpenGL 4.2 and OpenCL1.2
- Display Output
  Dual independent display
  VGA (up to 2560x1600@60 Hz)
  DVI-D (up to 1920x1080@60 Hz)
  iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 2560x1600@60 Hz)
- Ethernet
  Dual Realtek RTL8111E PCIe GbE controller
- External I/O Interface
  2 x RS-232
  2 x USB 2.0
  2 x USB 3.0
- Internal I/O Interface
  1 x KB/MS (1x6 pin)
  4 x USB 2.0 (2x4 pin, P=2.0)
  2 x SATA 3Gb/s with 5V, 12V SATA power connector
  1 x RS-422/485 (1x4 pin, P=2.0)
  3 x RS-232 (2x5 pin, P=2.54)
- SMBus
  1 x SMBus (1x4 pin)
- TPM
  1 x TPM connector (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)
- 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 Full-size PCIe Mini card slot
  1 x PCIe x4 slot (with PCIe x1 signal)
  1 x microSD slot (E38XX SKU only)
  1 x mSATA share with SATA port 2
- Digital I/O: 8-bit digital I/O (2x5 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 4-pin DIN DC jack
  1 x Internal 4-pin (2x2) power connector
- 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

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 3.0, SATA 6Gb/s, PCIe Mini, mSATA and HD Audio support
- Support Intel® VT-x techology

Packing List

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

Ordering Information

Part No.	Description
KINO-DBT-J19001-R10	Mini-ITX SBC supports Intel® Celeron® quad-core processor J1900 (10W), VGA/DVI/iDP, Dual Intel® PCIe GbE, USB 3.0, 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 Intel® PCIe GbE, USB 3.0, 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 Intel® PCIe GbE, USB 3.0, SATA, HD Audio and RoHS
KINO-DBT-E38XX1-R10**	Mini-ITX SBC supports Intel® Atom™ processor E38XX, VGA/DVI/iDP, Dual Intel® PCIe GbE, USB 3.0, SATA, HD Audio and RoHS
32006-000300-100-RS	PS/2 KB/MS Y-cable without bracket, 140mm/120mm
32205-002700-100-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-R11	20-pin Infineon TPM module, software management tool, firmware v3.17

**By order production, MOQ: 100