

GES-BIOTH01

Motherboard

Intel® Celeron J1900, Baytrail-I/M/D

Features

- Intel® Celeron J1900/2.0GHz Quad-Core Processor, Compatible With Baytrail-I/M/D Series CPUs
- 1x SO-DIMM Slot, Support Single-Channel 1600/1333MHz DDR3L, Up to 8GB
- Display Supports VGA, HDMI, LVDS(Optional eDP)
- 2x Intel i211 2.5 Gigabit Ethernet Ports
- 1x Mini-PCIe (WIFI/4G) and 1x MSATA
- Support 6x USB Ports
- Built-In 6x RS232 Serial Ports, With Support For 2x RS485
- Fanless Cooling
- Supports Wide Temperature Operation From -20°C to 60°C
- AT and ATX Mode Switching, Support 12V DC Power Input

Appearance





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Revision Table

Date	Revision	Content	By
2024/10/11	0.1	Mother Board Datasheet	Leon

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Specification

Mother Board	
CPU	Intel® Celeron J1900/2.0GHz Quad-Core Processor, Compatible With Baytrail-I/M/D Series CPUs
Memory	1x SO-DIMM Slot, Supports Dual-Channel 1600/1333MHz DDR3L/1.35V Memory, Maximum Support to 8GB
Graphics	Integrated Intel® HD Graphics 4000
	1x VGA 1x HDMI 1x LVDS or eDP (Default To LVDS) Supports VGA, HDMI and LVDS for Synchronous/Asynchronous Display
Ethernet	2x Intel I211/I210 Gigabit Network Ports, Supports Wake-On-LAN/PXE
Storage	1x SATA 2.0 1x mSATA 3.0 Slot
Audio	ALC662/ALC897/ALC262 6 Channel High-Definition Audio Controller, Supports MIC In/Line-Out, with 3W Amplifier
Expansion Slot	1x Mini-PCIe Slot, Supports WIFI/4G module
Back Panel I/O	1x HDMI 1x VGA 1x USB 3.0 1x USB 2.0 2x RJ-45 Gigabit Network 1x Line-Out 1x HDD and Power Indicator LED 1x 12V DC Power Input

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Specification

Internal I /O	1x LVDS Interface 2*15Pin (Alternative to eDP, Optional) 1x Backlight Power Supply Interface 1*6Pin 4x USB 2.0 header, 2*5Pin 1x Front audio header 2*5Pin 1x Amplifier Interface, 1*4Pin 1x SIM Port 2*3Pin 6x COM Header Interface(COM2/COM3 Optionally Supporting RS485) 1x Power Input 1*4Pin 1x PS/2 header 1*6Pin 1x HDD Power Connector (Red Connector) 1x Front Panel Switch and LED Connector 2*5Pin 1x ATX Power Connector 2*2Pin 1x 12V DC Power-in Interface 1*2Pin
Fan Connector	Back-Mounted CPU with Fanless Design, Reserved 1x 4 Pin CPU Fan Connector
GPIO	Supports 4 GPIO Inputs/Outputs
BIOS	64Mb Flash ROM
Watchdog	Supports Hardware Reset Function (256 Levels, 0~255 Seconds)
Support OS	Windows 7/Windows 10/Linux
Power Supply	Supports 12V DC Power Input
Dimension	146* 102mm

Environment Compliance

Operating Temp.	-20°C ~ 60°C
Storage Temp.	-20°C ~ 70°C
Humidity	5% to 95%RH, Non-Condensing

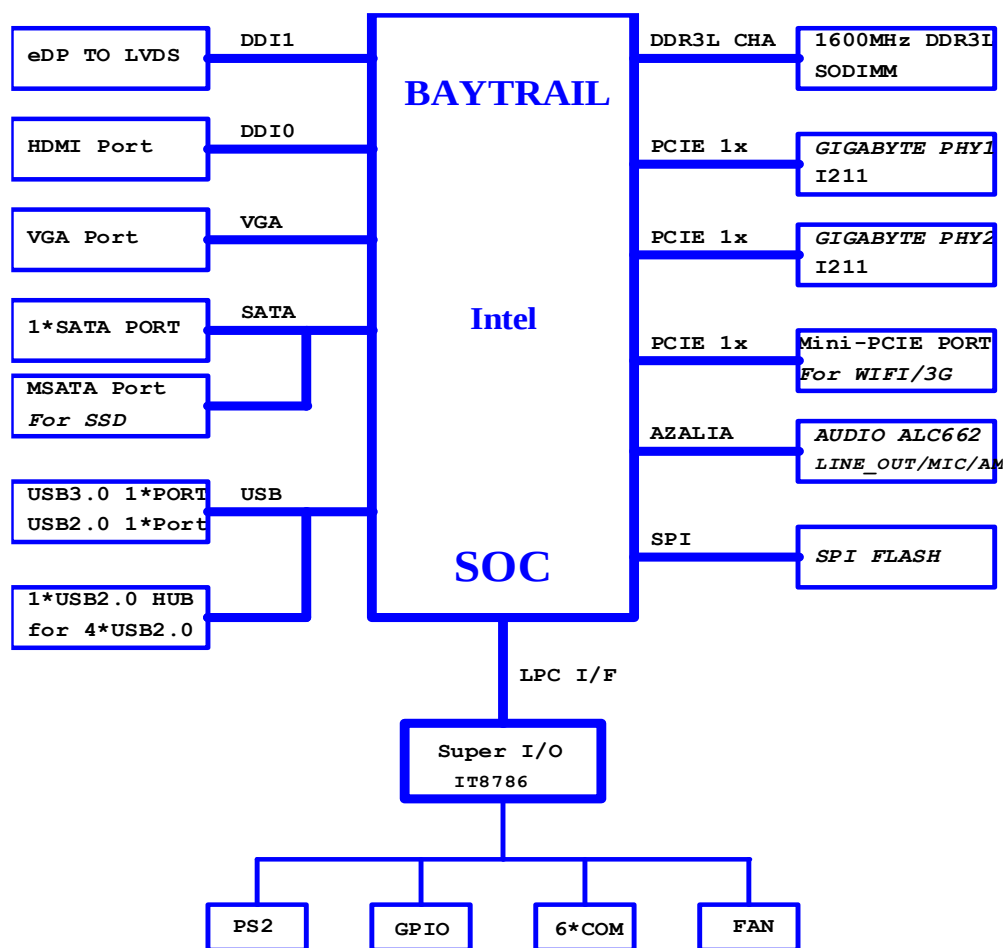
Environmental performance may vary according to the integration method or final integration scenario.

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Block Diagram



Note: support 1*RS422 or 2*RS485

Interface Options

No.	Interface Options	CPU	Cores	Frequency	DDR	HDMI	VGA	LVDS	LAN	USB	PS2	COM/485	POWER
1	-	J1900	4	2.0Ghz	DDR3L	1	1	1	2	6	1	6/2	12v

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Deliverables

1	Motherboard Intel® Celeron J1900, Baytrail-I/M/D
Others	Optional Assemblies as per Ordering Details

Ordering Details

GES-BIOTH01 - P P P P P S M T C

Processor:
(J1900): J1900

Storage
(N): None
(1): 8GB
(2): 16GB
(3): 32GB
(4): 64GB
(5): 120~128GB
(6): 240~256GB
(7): 480~512GB
(8): 960~1TB
(9): 2TB
(A): 4TB

Memory
(N): None
(1): 2GB
(2): 4GB
(3): 8GB

Telecommunication
(N): None
(F): 5G
(L): 4G/LTE
(S): 3G
(G): 2G

Connectivity (Wireless)
WIFI/GPS/BT
(N): None
(A): WIFI, BT, GPS
(B): BT
(C): WIFI, GPS
(D): BT, GPS
(E): WIFI, BT
(G): GPS
(W): WIFI

Example: GES-BIOTH01-J190043NN

Motherboard - Intel® Celeron J1900, Baytrail-I/M/D CPU, with J1900 CPU, 64GB Storage, 8GB RAM
Optional Interfaces listed in the datasheet could be set upon request.

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