

GES-BINIT01

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, Supports Single-channel 1600/1333MHz DDR3L Memory, Up to 8GB
- VGA and HDMI Dual Outputs, or Dual HDMI Outputs
- 2x Realtek RTL8111H Gigabit Network Ports
- 1x Mini-PCIe (WIFI/4G) and 1x mSATA
- 1x USB 3.0 Port and 5x USB 2.0 Ports
- 2x RS232 (Optional 2x RS485)
- Fanless Design, Optional Made as a Sealed Unit for Dust and Moisture Resistance
- Operating Temperature: -20°C to 60°C

Appearance





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Revision Table

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

GES-BINIT01

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Intel® Celeron J1900, Baytrail-I/M/D

Specification

Motherboard	
CPU	Intel® Celeron J1900/2.0GHz Quad-Core Processor, Compatible With Baytrail-I/M/D Series CPUs
Memory	1x SO-DIMM Slot, Supports Single-channel 1600/1333MHz DDR3L/1.35V Memory, Maximum Support up to 8GB
Graphics	Integrated Intel® UHD Graphics 600
Display	1x VGA and 1x HDMI; (Optional 2x HDMI) Supports VGA and HDMI Synchronous/ Asynchronous Display
Ethernet	2x Realtek RTL8111H Gigabit Network Prots, Supports Wake-on-LAN/PXE
Storage	1x SATA 3.0 1x mSATA 3.0 Slot (Long Card).
Audio	ALC897 7.1 Channel High-Fidelity Audio Controller, Supports MIC In/Line-Out
Expansion slot	1x Mini-PCIe slot (Supports both half-length and full-length cards), Supports WIFI/4G modules
Back I/O	1x HDMI 1x VGA (Optional Second HDMI Port, Default) 1x USB 3.0 1x USB 2.0 2x RJ-45 Gigabit Network 1x 12V DC Power Input
Front I/O	4x USB 2.0 Ports 1x Line-Out and MIC Combo Port 2x RS232 Serial Ports (Optional COM1 and COM2 RS485 via jumper) 1x HDD Indicator LED 1x Power Switch Button with LED

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Specification

Internal I /O	1x 4 Pin 12V DC Power Connector 1x HDD Power Connector 1x Front Panel Switch Button and Indicator 2*5 pin
Fan connector	Back-mounted CPU Fanless Cooling
GPIO	Supports 4 Channels 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 Input	Supports 12~19V DC Input
Dimension	120* 120mm

Environmental Compliance

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

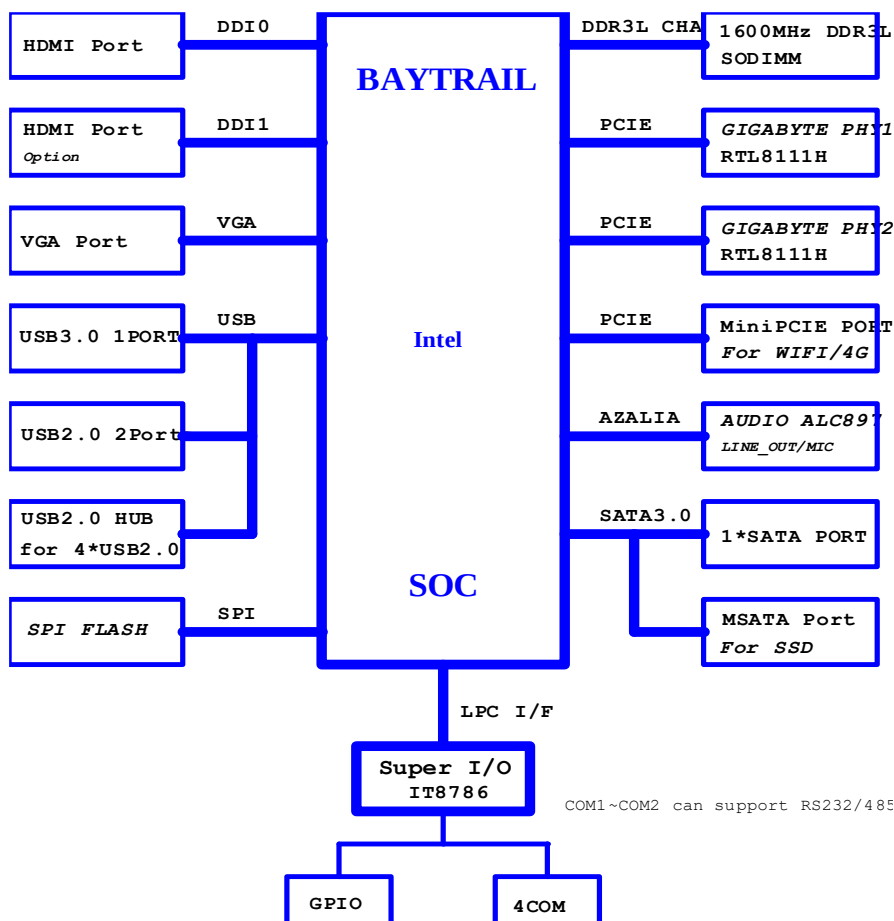
Environmental performance may vary according to the integration method or final integration scenario.

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Block Diagram



Interface Options

No.	Interface Options	CPU	Cores	Frequency	TDP	DDR	HDMI	VGA	LAN	USB	COM/485	POWER
1	-	J1900	4	2.0-2.42GHz	10W	DDR3L	1	1	2	6	2/2	12V
2	-	N2840	2	2.16-2.58GHz	7.5W	DDR3L	1	1	2	6	2/2	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-BINIT01 - P P P P P S M T C

Processor:

(J190): J1900
(N2840): N2840

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-BINIT01-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.

Disclaimer

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