

SII-ITX-18P-L2AP v:1.1

Mini ITX_ form factor, Based on Intel® Embedded IoT Solution_ Bay Trail

Processor-**J1900** / 10W TDP

ideal for embedded systems, edge computing, IoT devices.



Features

- CPU: Intel Celeron J1900 Processor
- Memory: 1x SO-DIMM 1333/1600MHz DDR3L, up to 8GB
- Graphics card: Intel HD Graphics
- Display: 1x VGA + 1x HDMI + 1x LVDS/EDP(option) displays
- Ethernet: 2x Realtek RTL8111H GbE
- Storage: 1x MSATA SSD + 1x SATA2.0
- Expansion: 1x MINI-PCIE (WIFI/4G) + 1x PCI slot (option)
- Power: DC_12V



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Introduction

SII-ITX-18P-L2AP Ver1.1 is a 170×170 mm Thin-ITX industrial motherboard powered by Intel Celeron J1900 quad-core processor with 10W TDP. It features one SO-DIMM DDR3L slot supporting up to 8GB memory, with integrated Intel HD Graphics.

It delivers multi-display outputs via VGA, HDMI and optional LVDS/eDP interfaces. Equipped with 2×RTL8111H Gigabit LAN ports supporting Wake-on-LAN and PXE boot, it provides rich onboard I/O including configurable multi-COM ports, LPT, multiple USB2.0, GPIO and power-amplified audio. Storage includes SATA2.0 and mSATA slots. A Mini-PCIe slot supports WiFi/4G modules, and an optional PCI slot is available. It adopts DC 12V power input and supports hardware watchdog reset.

Compatible with Windows 7/10 and Linux systems, this mainboard operates stably from -10°C to 60°C. It is well-suited for cost-effective embedded control, IoT gateway and industrial terminal equipment.



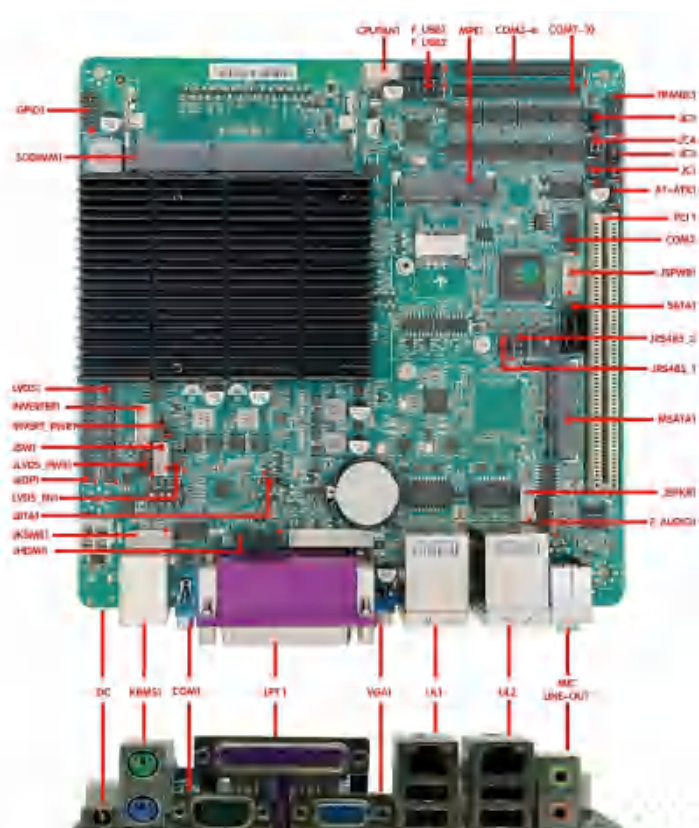
GPIO



Watchdog



I/O Interfaces



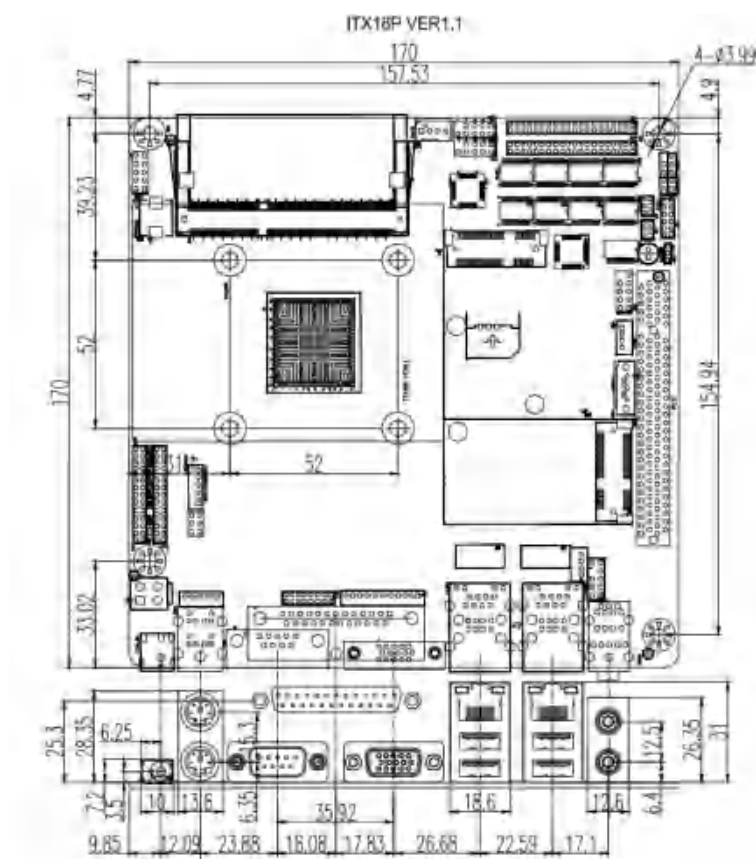
Specifications:

Model No.	SII-ITX-18P-L2AP VER:1.1
Processor	Integrated Intel® Celeron J1900/2.0GHz quad-core quad-thread processor, TDP:10W ; compatible with Intel® Baytrail-I/M/D series CPUs.
RAM	1x SO-DIMM slot, supports 1333/1600MHz DDR3L / 1.35V memory, up to 8GB
Display	1x VGA, 1x HDMI, 1x LVDS / eDP (Option) Supports synchronous/asynchronous display via VGA, HDMI, LVDS, or eDP Integrated Intel® HD Graphics
Ethernet	2x Realtek RTL8111H GbE ports (1 network option), support wake-up / PXE function
Storage	1x SATA 2.0 slot 1x MSATA SSD slot
Audio	Integrated ALC662 6-channel high-fidelity audio controller, supporting MIC/Line-out and a power amplifier (supporting dual-channel 2Ω/5W operation).
Expansion Slot	1x Mini PCIe slot (Both half-credit and full-credit cards are supported.), supports Wi-Fi/4G module 1x PCI slot (Option)
Rear I/O interface	1x 12V DC power input interface 2x RJ-45 Gigabit network interface 1x COM 4x USB 2.0 1x LPT interface 1x VGA display interface 1x Line out (Green) , 1x MIC (Red) 1x Standard keyboard and mouse interface
Built-in I/O interface	1x JHDMI interface 2x8-pin 1× LVDS interface, 2×15 pins, supports dual-channel 24-bit (either LVDS or eDP, with the former being the default). 1x JVGA; 1x12-pin (same signal as DB15) 1x eDP interface, 2 x 15-pin (choose either eDP or LVDS, optional) 4× USB 2.0 ports, 2× 5-pin 1× Front audio interface, 2× 5-pin 1× Screen backlight power interface, 6-pin 1x Power amplifier interface: 1×4-pin

	9x COM interfaces (optionally configurable as 5 or 9 serial ports, with COM2–COM5 supporting RS485, and COM1/2 supporting 9-pin interface)
	1 x Keyboard/Mouse interface, 6-pin
	1× 4-pin ATX power connector
	1x Hard drive power interface
	1x Front panel switch buttons and indicator light interfaces; 2x 5-pin
Fan interface	Fanless cooling design, with a reserved 1×4-pin CPU fan interface
GPIO	Support 4-way input/output GPIO function
BIOS	AMI 64Mb Flash ROM
Watchdog	Support hardware reset function (256 levels, 0~255 seconds)
OS	Windows 7/10/ Linux
Power type	DC 12V
Operating temperature	-10°C~60°C
Storage temperature	-20°C ~ 70°C
Working humidity	5%—95% relative humidity, non-condensing
Size	170 mm x 170 mm

xAll specifications and photos are subject to change without notice

Diagram(mm)



Ordering Info

No.	Model	Processor	Memory	VGA	HDMI	LVDS	eDP	LAN	USB	COM	Power
1	SII-ITX-18P-L2AP v1.1	J1900	1xDDR3L	1	1	1(option)	1(option)	2xRTL8111F	8	14	DC_12V

!! xFor customized options, please consult regional sales. And please confirm the model name and description before purchasing.

xThe model name and description might vary due to inventory changes.