

MX1900J

Intel® Quad Core Bay Trail-D Celeron J1900 SoC

Mini ITX Motherboard

User's Quick Start Card

Version 1.01

<http://www.bcmcom.com>

• Inspect the Package:

One **MX1900J Motherboard**

One **SATA Power Cable**

One **I/O Shield**



MX1900J



SATA Power Cable



I/O Shield

• **Note:** In order for MX1900J board to function properly, it is recommended to maintain air flow around MX1900J with ambient temperature not to exceed 33.4°C.

• Responsibility:

This manual is provided "As-Is" with no warranties of any kind, it will neither expressed or implied, including, but not limited to the implied warranties or conditions of this product's fitness for any particular purpose. In no event shall we be liable for any loss of profits, loss of business, loss of data, interruption of business, or indirect, special, incidental, or consequential damages of any kind, even the possibility of such damages arising from any defect or error in this manual or product. We reserve the right to modify and update the user manual without prior notice.



WARNING: CMOS Battery Damage

Replace your system's CMOS RAM battery only with the identical CR-2032 3V Lithium-Ion coin cell (or equivalent) battery type to avoid risk of personal injury or physical damage to your equipment. Always dispose of used batteries according to the manufacturer's instructions, or as required by the local ordinance (where applicable). The damage due to not following this warning will void your motherboard's manufacturer warranty.

Perchlorate Material- Special Handling May Apply.

See <http://www.dtsc.ca.gov/hazardouswaste/perchlorate/>



ATTENTION: Incorrect BIOS Setup

If you do not know how to handle BIOS setup or how to set it up properly, it is strongly advisable that you do not modify any of the settings than otherwise instructed in the User's Quick Start Card. Even a seemingly small incorrect adjustment or modification in the BIOS setup can render your system unstable or unusable. The incorrect BIOS setup is not covered by your motherboard's manufacturer warranty.

• Additional Information:

Additional information on setting this board up can be found in the User's Manual in the provided CD-ROM. The Online User's Manual and FAQ/Knowledge Base can be found on our website by visiting our website: <http://www.bcmcom.com>. If your question is not answered in our FAQ/Knowledge Base, visit our forums and post your messages or submit a new FAQ through FAQ Submittal form for us to add your question in our FAQ with our answer.



WARNING: Electrostatic Sensitive Device (ESD)

Static electricity can easily damage your motherboard and will void your motherboard warranty. Keep the motherboard and other system components in their anti-static packaging until you are ready to install them. Touch a grounded surface before you remove any system component from its protective anti-static packaging. Unpacking and installation should be done on a grounded, anti-static mat. The operator should be wearing an anti-static wristband, grounded at the same points as the anti-static mat. During configuration and installation touch a grounded surface frequently to discharge any static electrical charge that may have built up in your body. Avoid touching the components when handling the motherboard or a peripheral card. Handle the motherboard and peripheral cards either by the edges or by the peripheral card case-mounting bracket.



WARNING: Misplaced Jumper Damage

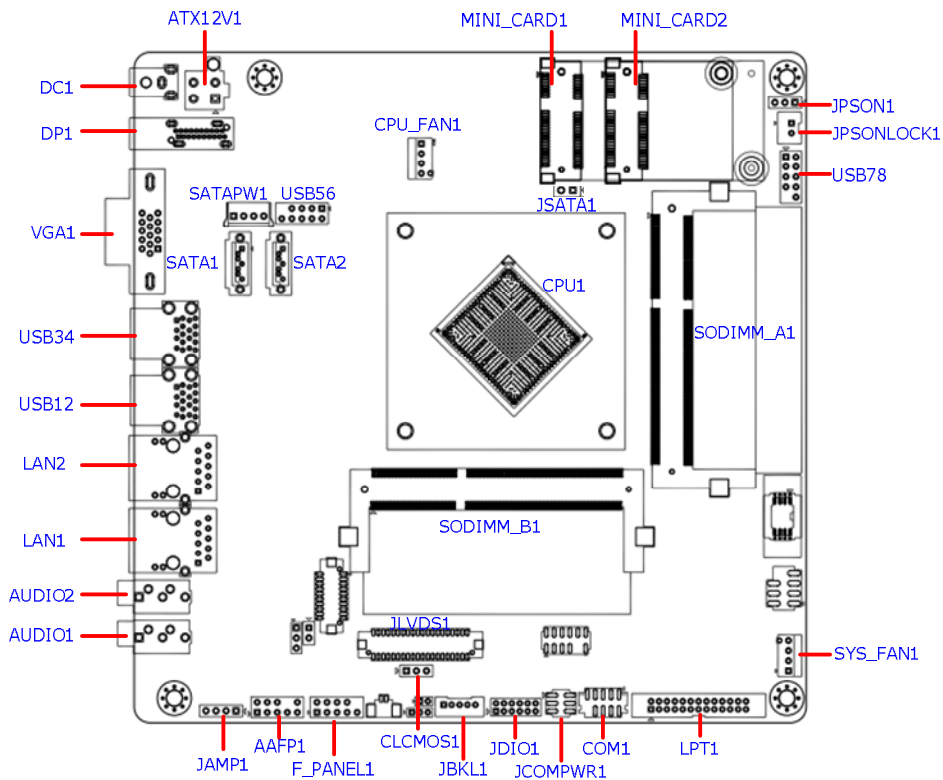
Incorrect setting jumpers and connectors may lead to damage to your motherboard and will void your motherboard warranty. Please pay special attention not to connect these headers in wrong directions. DO NOT change ANY jumpers while the motherboard has the power!

Note (Please read this before proceed with OS installation)

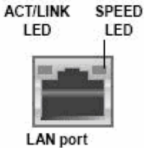
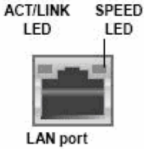
1. Due to “SATA2” and “MINI_CARD1” are sharing the same SATA channel, only **either one of them** can be used. Please **DO NOT** install devices to these two headers at the same time.
2. If there is only one memory module being installed, install it at memory slot “SODIMM_A1” only.
3. If “Win7+SP1” is going to be installed, it is recommended to set the BIOS option “Miscellaneous Configuration” to “Windows 7”.
4. If “Win8.x” is going to be installed, it is recommended to set the BIOS option “Miscellaneous Configuration” to “Win8.X”.
5. If “Linux” is going to be installed, it is recommended to download the latest kernel, the native driver in the kernel should be able to support the LANs, graphic features.
6. Please install the provided drivers for the following OS:
 - a. Windows 7+SP1
 - i. Intel inf
 - ii. Intel Graphic
 - iii. Intel LAN
 - iv. Realtek Audio
 - v. Intel TXE base driver
 - vi. Intel TXE update driver
 - vii. Intel USB3.0 driver (Intel recommended to copy the file to system hard drive first, then install driver from there).
 - b. Win8.x
 - i. Intel inf
 - ii. Intel Graphic
 - iii. Intel LAN
 - iv. Realtek Audio
 - v. Intel TXE base driver
 - vi. Intel MEI driver (Shown as “unknown device” under Device Manager)

Motherboard Layout:

• Board Layout:



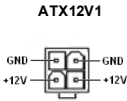
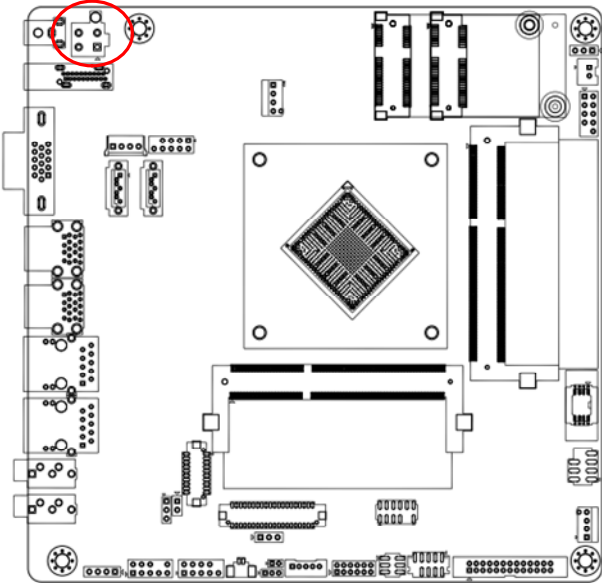
• Back Panel:

Item	Name	Function	Description																				
1	DC1	DC adapter Connector	The port is for a DC adapter.																				
2	DP1	Display Port	The display port Connector																				
3	VGA1	VGA Video Port	The VGA15-pin Connector.																				
4	USB34	USB 3.0 Connectors	These two 4-pin Universal Serial Bus (USB) ports are available for connecting USB 3.0 devices.																				
5	USB12	USB 3.0 Connectors	These two 4-pin Universal Serial Bus (USB) ports are available for connecting USB 3.0 devices.																				
6.	LAN2.	Gigabit LAN (RJ-45) Connectors  LAN port	This port allows Gigabit connection to a Local Area Network (LAN) through a network hub. Refer to the table below for the LAN port LED indications. <table><tr><th colspan="2">ACT/Link LED</th><th colspan="2">Speed LED</th></tr><tr><th>Status</th><th>Description</th><th>Status</th><th>Description</th></tr><tr><td>OFF</td><td>No link</td><td>OFF</td><td>10Mbps connection</td></tr><tr><td>Orange</td><td>Linked</td><td>Green</td><td>100Mbps connection</td></tr><tr><td>Blinking</td><td>Data activity</td><td>Orange</td><td>1Gbps connection</td></tr></table>	ACT/Link LED		Speed LED		Status	Description	Status	Description	OFF	No link	OFF	10Mbps connection	Orange	Linked	Green	100Mbps connection	Blinking	Data activity	Orange	1Gbps connection
ACT/Link LED		Speed LED																					
Status	Description	Status	Description																				
OFF	No link	OFF	10Mbps connection																				
Orange	Linked	Green	100Mbps connection																				
Blinking	Data activity	Orange	1Gbps connection																				
7	LAN1	Gigabit LAN (RJ-45) Connectors  LAN port	This port allows Gigabit connection to a Local Area Network (LAN) through a network hub. Refer to the table below for the LAN port LED indications. <table><tr><th colspan="2">ACT/Link LED</th><th colspan="2">Speed LED</th></tr><tr><th>Status</th><th>Description</th><th>Status</th><th>Description</th></tr><tr><td>OFF</td><td>No link</td><td>OFF</td><td>10Mbps connection</td></tr><tr><td>Orange</td><td>Linked</td><td>Green</td><td>100Mbps connection</td></tr><tr><td>Blinking</td><td>Data activity</td><td>Orange</td><td>1Gbps connection</td></tr></table>	ACT/Link LED		Speed LED		Status	Description	Status	Description	OFF	No link	OFF	10Mbps connection	Orange	Linked	Green	100Mbps connection	Blinking	Data activity	Orange	1Gbps connection
ACT/Link LED		Speed LED																					
Status	Description	Status	Description																				
OFF	No link	OFF	10Mbps connection																				
Orange	Linked	Green	100Mbps connection																				
Blinking	Data activity	Orange	1Gbps connection																				
8	AUDIO2	Microphone port (Pink)	This port connects a microphone.																				
9	AUDIO1	Line-out port (Lime)	This port connects a headphone or a speaker.																				

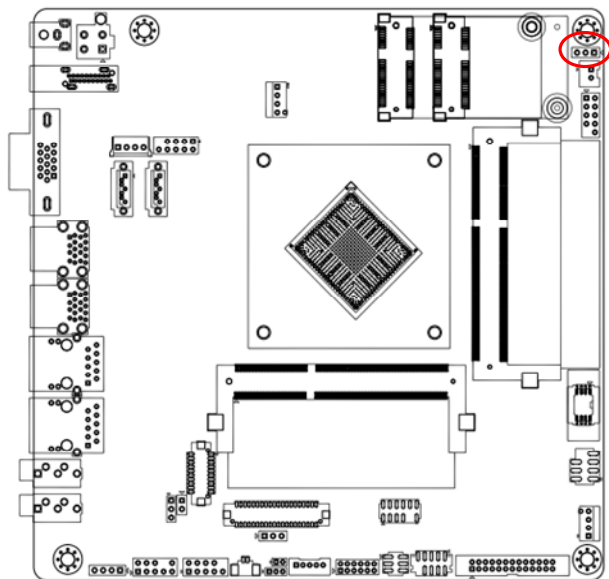
Jumpers, Connectors, & Headers:

- **ATX Power Connector: ATX12V1 (4-pin)**

(Note: This header doesn't need to be connected to an ATX power supply if a 12V DC adapter is connected to “DC1” connector.)



- **ATX/AT Mode Selection: JPSON1**



AT mode



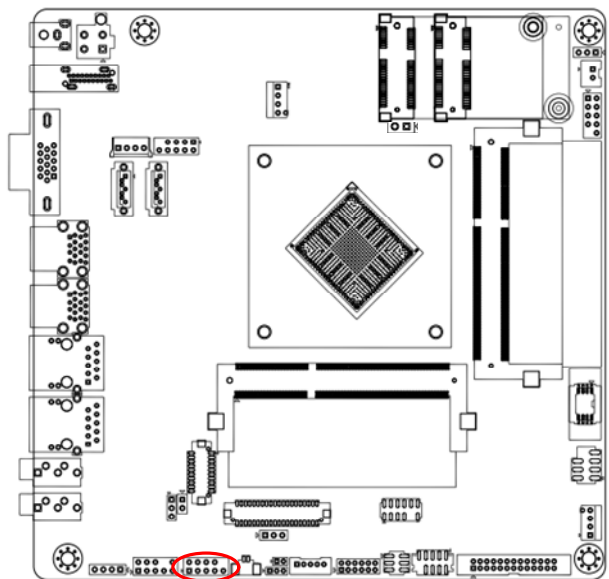
1

ATX mode
(Default)



1

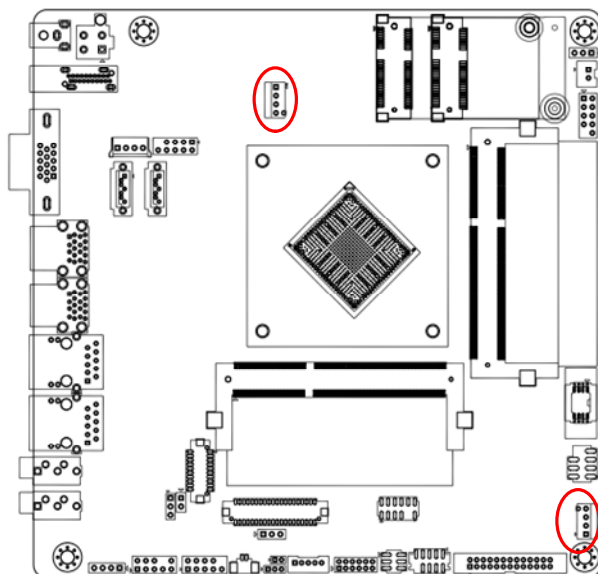
• Front Panel Connector: F_PANEL1



1

- | | |
|-------------|-------------|
| 1. HDD LED+ | 2. +5V |
| 3. HDD LED# | 4. PWR LED# |
| 5. GND | 6. PANSWIN# |
| 7. RST | 8. GND |
| 9. N/A | |

• Fan Connectors: CPU_FAN1, SYS_FAN1



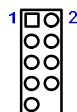
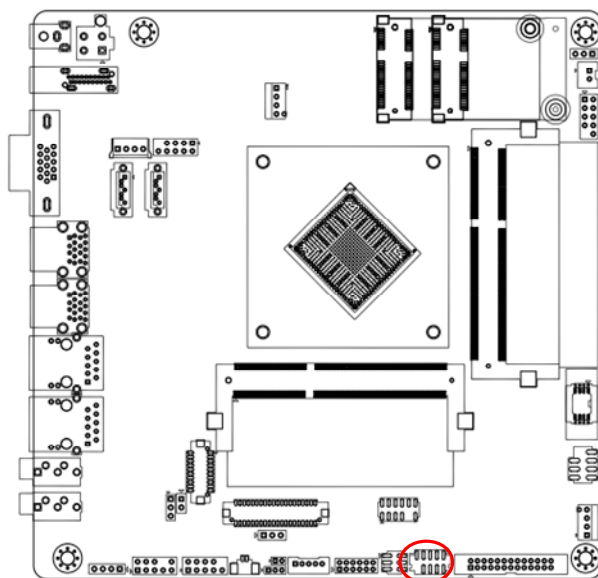
CPU_FAN1

- 1  1. GND
2. +V12
3. FAN_SPEED1
4. FAN_PWM1

SYS_FAN1

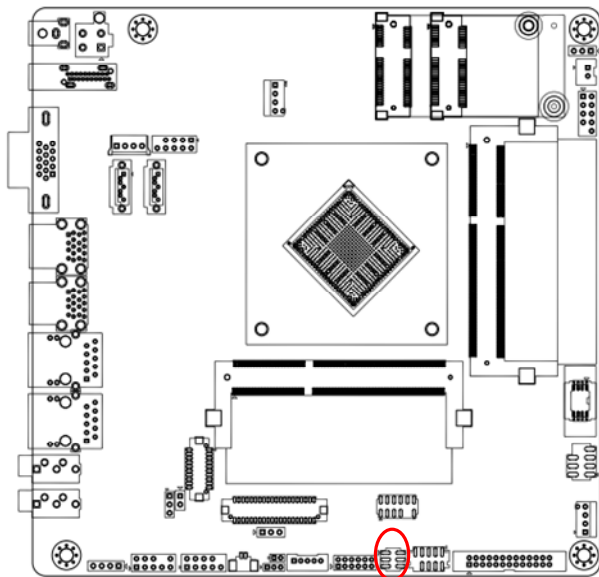
- 1  4. FAN_PWM3
3. FAN_SPEED3
2. +V12
1. GND

• Serial Port Connector: COM1



- | | |
|------------------|---------|
| 1. DCD# | 2. RX |
| 3. TX | 4. DTR# |
| 5. GND | 6. DSR# |
| 7. RTS# | 8. CTS# |
| 9. RI3xPOWERxJMP | |

• COM1 Ring-In/ +12V/ +5V Select: JCOMPWR1



Ring (Default)



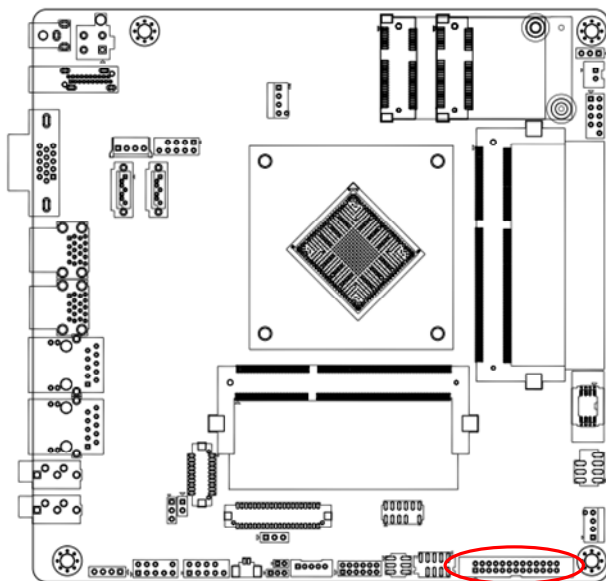
+12V



+5V



• LPT Port Connector: LPT1



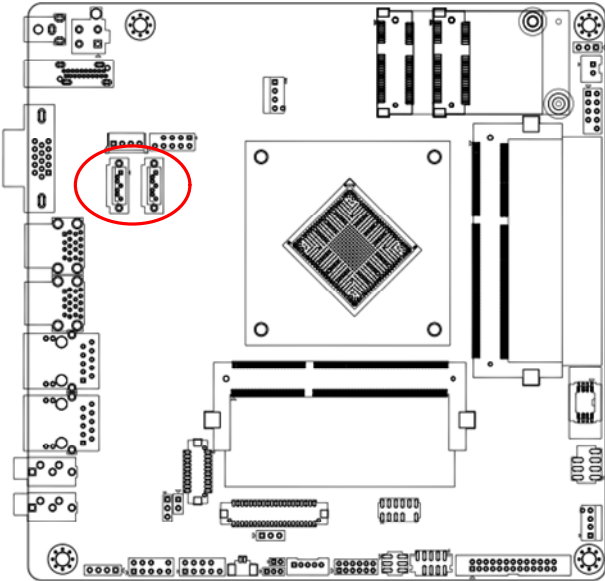
LPT1



- | | |
|--------------|--------------|
| 1. LPT_STB# | 2. LPT_AFD# |
| 3. LPT_PD0 | 4. LPT_ERR# |
| 5. LPT_PD1 | 6. LPT_NIT# |
| 7. LPT_PD2 | 8. LPT_SLIN# |
| 9. LPT_PD3 | 10. GND |
| 11. LPT_PD4 | 12. GND |
| 13. LPT_PD5 | 14. GND |
| 15. LPT_PD6 | 16. GND |
| 17. LPT_PD7 | 18. GND |
| 19. LPT_ACK# | 20. GND |
| 21. LPT_BUSY | 22. GND |
| 23. LPT_PE | 24. GND |
| 25. LPT_SLCT | 26. NC |

• SATA 3.0 Ports: SATA1, SATA2

(Note: Due to “SATA2” and “MINI_CARD1 (mSATA)” are sharing the same SATA channel, only either one of them can be used. Please **DO NOT** install devices to these two headers at the same time.)



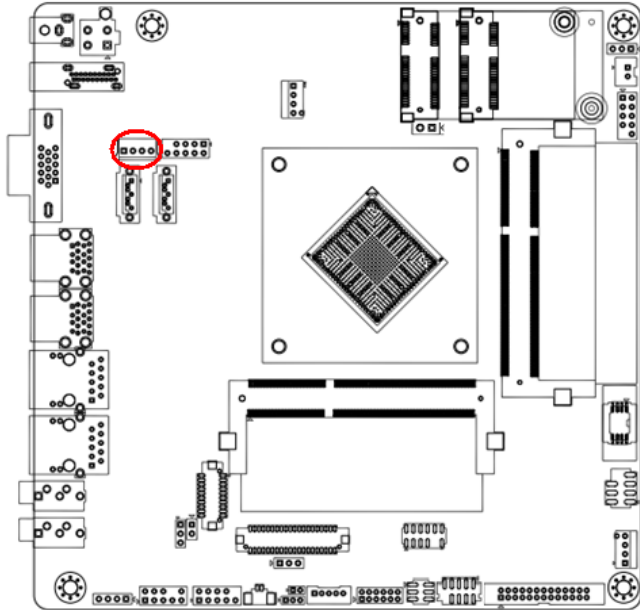
SATA

1



- 1. GND
- 2. TX+
- 3. TX-
- 4. GND
- 5. RX-
- 6. RX+
- 7. GND

• SATA Power Header: SATAPW1



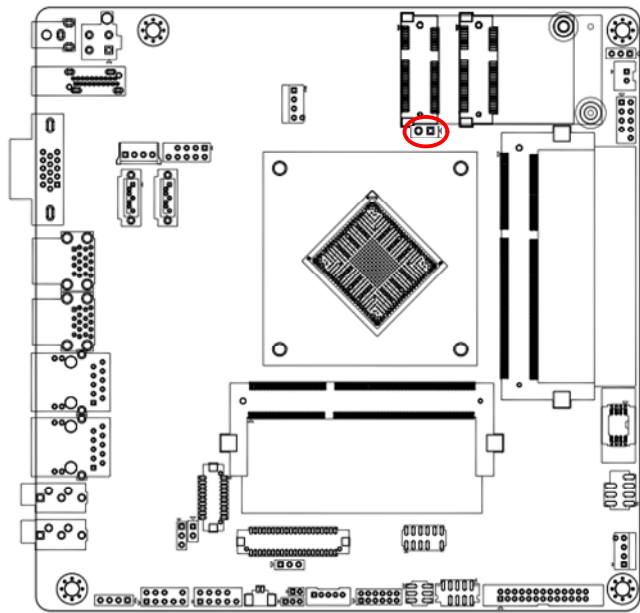
1



- 1. +12V
- 2. GND
- 3. GND
- 4. +5V

• mSATA Mode Select: JSATA1

(Note: Remove this jumper only when there is trouble for BIOS to detect the installed mSATA device on connector “MINI_CARD1”.)



Auto mode
(Default)



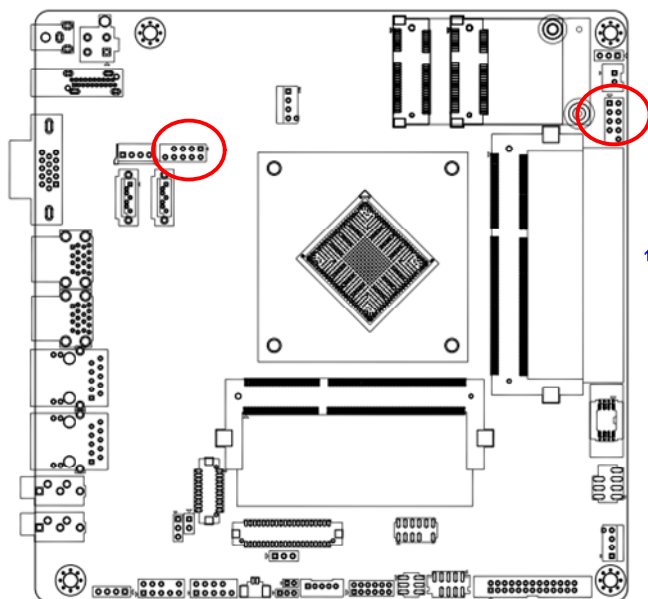
1

Force mSATA



1

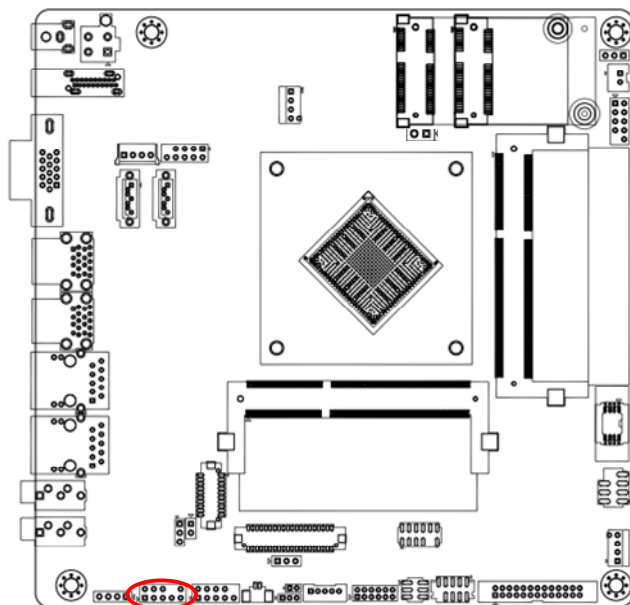
• **Front USB2.0 Headers: USB56, USB78**



USB

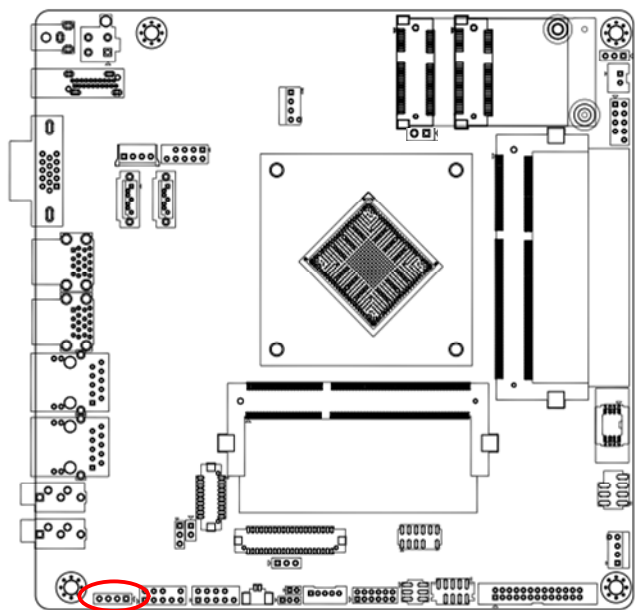
1	2	1. USB+5V	2. USB+5V
		3. USB -	4. USB -
		5. USB +	6. USB +
		7. GND	8. GND
			9. NC

Front Panel Audio Connector: AAFP1



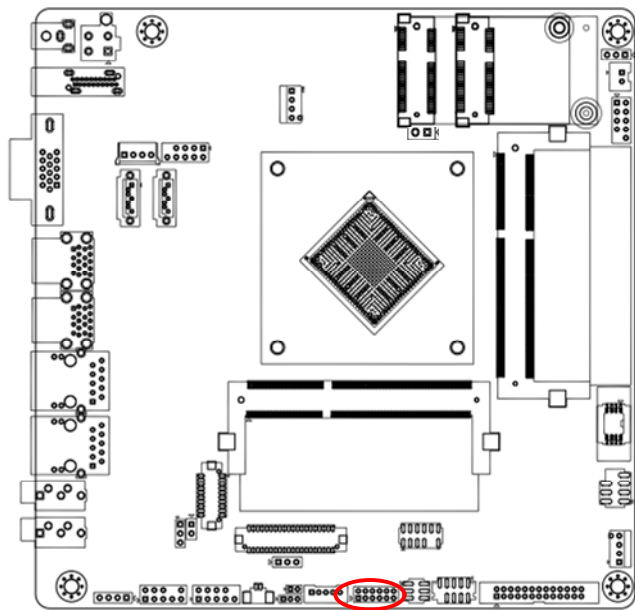
10. LINE2-JD	9. LINE2L
8. NC	7. SENSEB
6. MIC2-JD	5. LINE2R
4. +3.3	3. MIC2R
2. GND	1. MIC2L

• Amplifier Connector: JAMP1



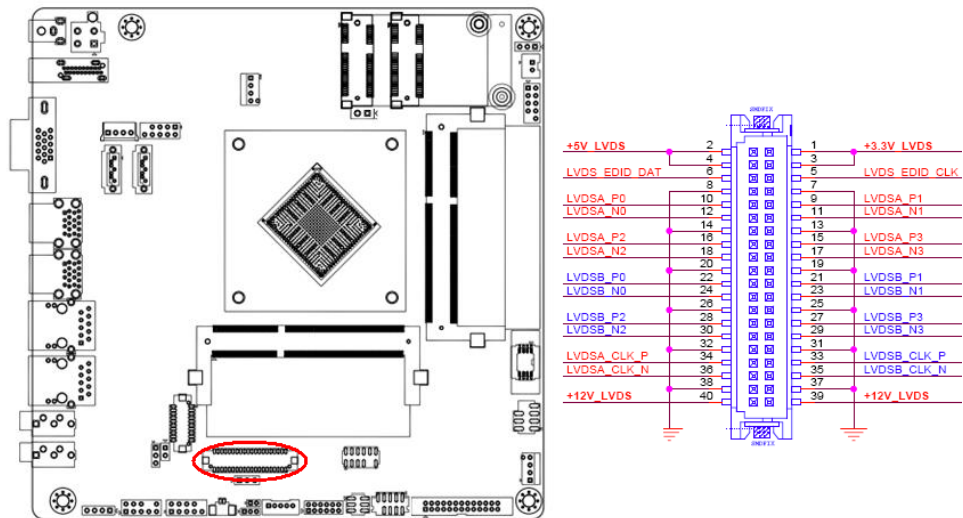
- 1
- | | |
|----|--------|
| 1. | AMP_L- |
| 2. | AMP_L+ |
| 3. | AMP_R- |
| 4. | AMP_R+ |

• Digital I/O Connector: JDIO1

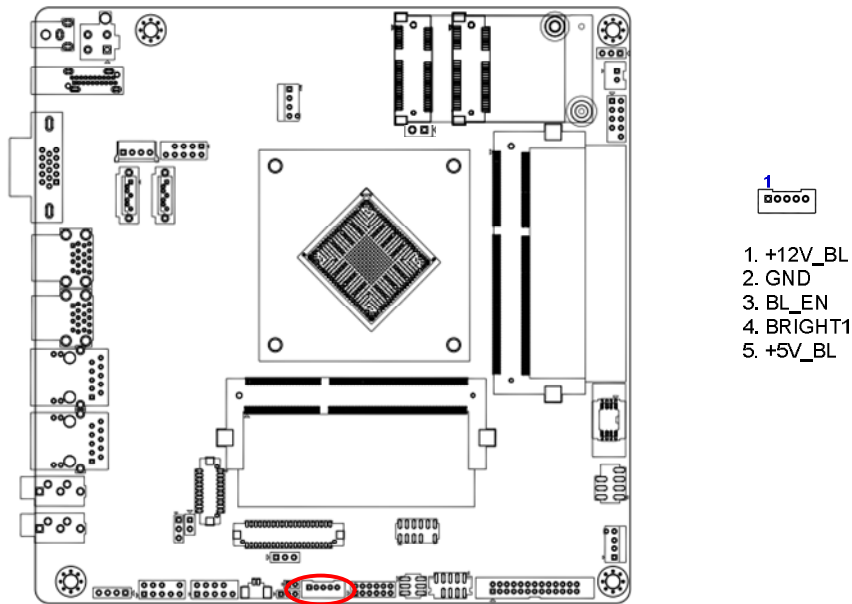


- 2
- | | |
|-----|-----------|
| 1. | SIO_GPIO0 |
| 2. | SIO_GPIO4 |
| 3. | SIO_GPIO1 |
| 4. | SIO_GPIO5 |
| 5. | SIO_GPIO2 |
| 6. | SIO_GPIO6 |
| 7. | SIO_GPIO3 |
| 8. | SIO_GPIO7 |
| 9. | SMB_CLK_ |
| 10. | SMB_DATA_ |
| 11. | GND |
| 12. | +5Vsb |
- 1

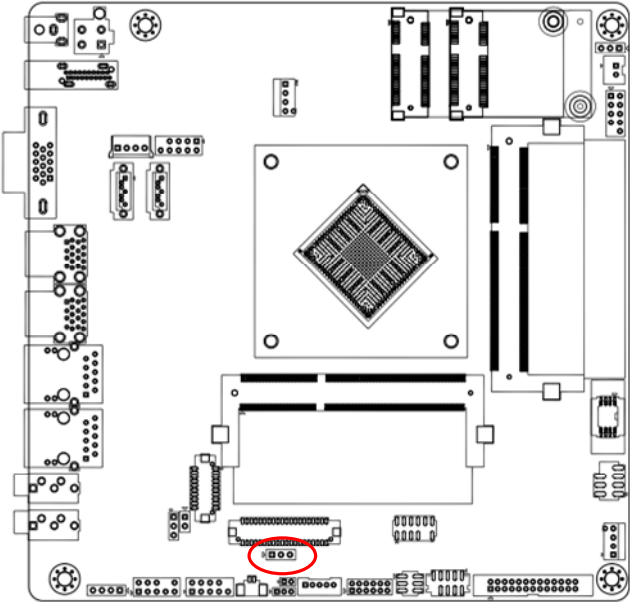
• LVDS Panel Connector: JLVDS1



• LVDS Panel Backlight Connector: JBLK1



• Clear CMOS Jumper: CLCMOS1



Normal (Default)



Clear CMOS



• Mini PCI Express Slot: MINI_CARD1, MINI_CARD2

