

MX255D

Intel® Atom Mobile Processor

User's Quick Start Card

Version 1.2

<http://www.bcmcom.com>

Inspect the Package:

- One **MX255D Motherboard**
- One **Standard I/O Shield**
- One **Dual COM Port Cables**
- Two **SATA data cables**
- One **SATA power Y cable**
- One **Driver CD**
- One **User's Quick Start Card**



MX255D



Responsibility:

This manual is provided "As-Is" with no warranties of any kind, 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. Improper installation might cause battery to explode. 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/>

Additional Information:

Additional information on setting this board up can be found in the User's Manual in the provided CD or DVD 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.



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. Incorrect BIOS setup is not covered by your motherboard's manufacturer warranty. Try Clear CMOS information when system does not boot after BIOS settings change.

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

 **WARNING: Fan/ Fanless Operation Temperature Range.**

- For Fanless solution, operating temperature is 0°C ~ 45°C.
- For 45°C ~ 60°C operation, a system fan is required.

Jumpers

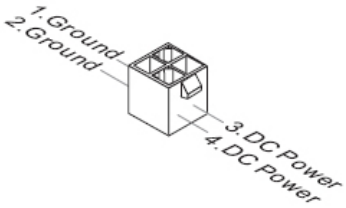
Label	Function
JBAT1	Clear CMOS Jumper
J1	AT/ATX Select Jumper
JCOMP1 ~ JCOMP6	COM port Power Jumper
JVDD1	LVDS power jumper

Connectors & Headers

Label	Function
JPWR1	DC Power Connector
JPWR2	SATA Power Connector
JCI1	Chassis Intrusion Pin header:
SATA1	Serial ATA Connector
SATA2	Serial ATA Connector
JAMP1	Audio Amplifier Pin header:
CPUFAN1	Fan Power Connector:
SYSFAN1	Fan Power Connector:
JGPIO1	GPIO Pin header:
JFP1	Front Panel Pin header:
JUSB1	Front USB Pin header:
JUSB2	Front USB Pin header:
JLPT1	Parallel port connector
COM3	Serial Port Connector
COM4	Serial Port Connector
COM5	Serial Port Connector
COM6	Serial Port Connector
JINV1	LVDS Inverter Connector:
JLVDS1	LVDS Connector:
JSPDI1	S/PDIF Pin header:
JAUD1	Front Audio Pin header:
JDP1	Port 80 Pin header:
JKB_MS1	Keyboard and Mouse Connector

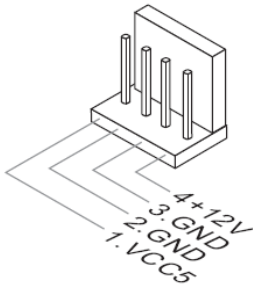
Internal Connector Pin Assignment

JPWR1



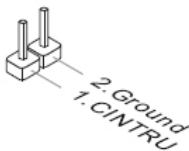
Pin	Signal
1	GND
2	GND
3	DC Power
4	DC Power

JPWR2



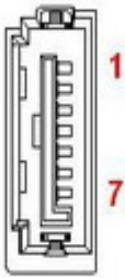
Pin	Signal
1	VCC5
2	GND
3	GND
4	12V

JCI1



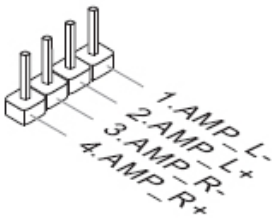
Pin	Signal
1	CINTRU
2	GND

SATA1, SATA2,



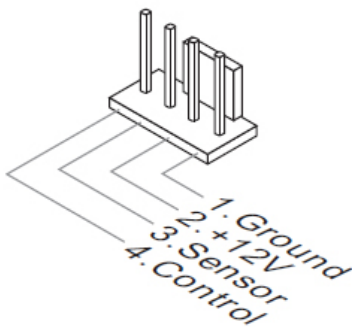
Pin	Signal Name
1	GND
2	TX+
3	TX-
4	GND
5	RX-
6	RX+
7	GND

JAMP1



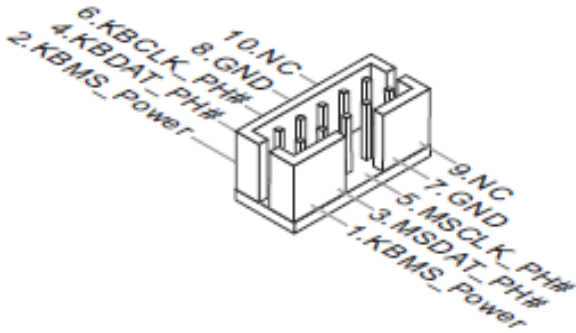
Pin	Signal
1	AMP_L-
2	AMP_L+
3	AMP_R-
4	AMP_R+

CPUFAN1, SYSFAN1



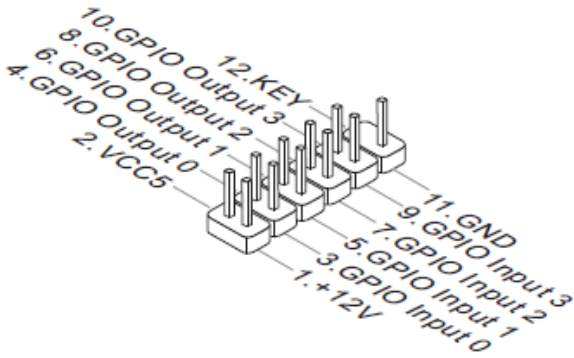
Pin	Signal
1	Ground
2	+12V
3	Sensor
4	Control

JKB_MS1



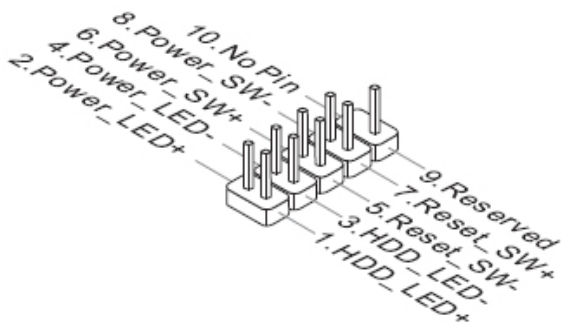
Pin	Signal Name	Pin	Signal Name
10	NC	9	NC
8	GND	7	GND
6	KBCLK_PH#	5	MSCLK_{H#
4	KBDAT_PH#	3	MSDAT_PH#
2	KBMS_Power	1	KBMS_Power

JGPIO1



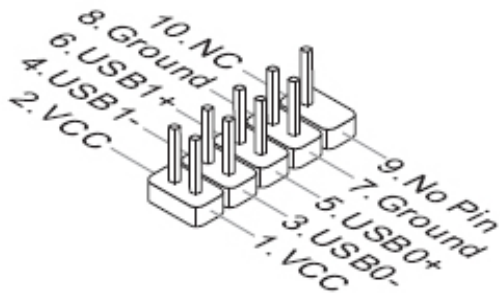
Pin	Signal Name	Signal Name	Pin
12	KEY	GND	11
10	GPIO OUPUT 3	GPIO INPUT 3	9
8	GPIO OUPUT 2	GPIO INPUT 2	7
6	GPIO OUPUT 1	GPIO INPUT 1	5
4	GPIO OUPUT 0	GPIO INPUT 0	3
2	VCC5	+12V	1

JFP1



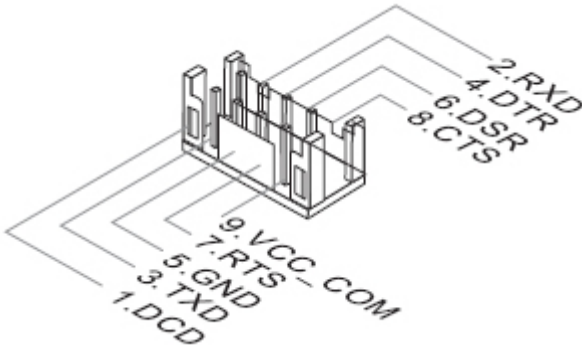
Pin	Signal Name	Signal Name	Pin
1	HDD_LED+	Power_LED+	2
3	HDD_LED-	Power_LED-	4
5	RESET_SW-	Power_SW+	6
7	RESET_SW+	Power_SW-	8
9	Reserved	No Pin	10

JUSB1, JUSB2



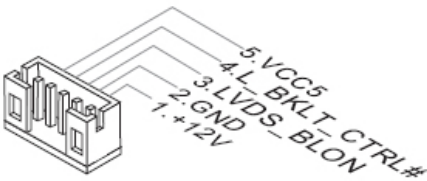
Pin	Signal Name	Pin	Signal Name
1	VCC	2	VCC
3	USB0-	4	USB1-
5	USB0+	6	USB1+
7	GND	8	GND
9	No Pin	10	NC

COM3, COM4, COM5, COM6



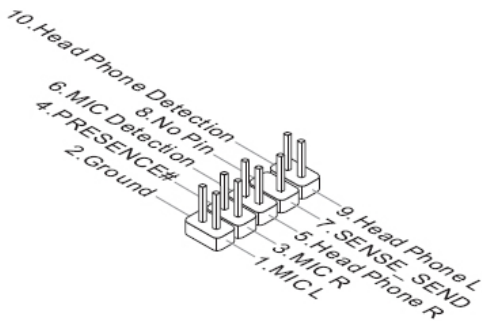
Pin	Signal Name	Pin	Signal Name
1	DCD	2	RXD
3	TXT	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	VCC_COM		

JINV1



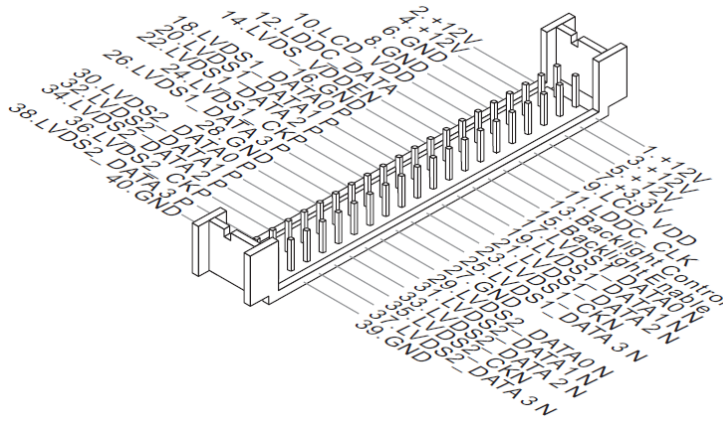
Pin	Signal
1	+12V
2	GND
3	LVDS_BLON
4	L_BKLT+CTRL#
5	VCC5

JAUD1



Pin	Signal Name	Pin	Signal Name
1	MIC L	2	GND
3	MIC R	4	PRESENCE #
5	HEAD PHONE R	6	MIC DETECTION
7	SENSE_SEND	8	NO PIN
9	HEAD PHONE L	10	HEAD PHONE DETECTION

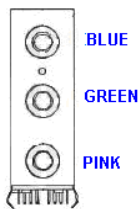
JLVDS1



Pin	Signal Name	Pin	Signal Name
1	12V	2	12V
3	12V	4	12V
5	12V	6	GND
7	VCC3	8	GND
9	LCD_VDD	10	LCD_VDD
11	DDC_CLK	12	DDC_DATA
13	L_BKLT_CTRL#	14	LVDS_VDDEN
15	LBKTL_EN_C	16	GND
17	LVDSA_DATA#0	18	LVDSA_DATA0
19	LVDSA_DATA#1	20	LVDSA_DATA1
21	LVDSA_DATA#2	22	LVDSA_DATA2
23	LVDSA_CLK#	24	LVDSA_CLK
25	LVDSA_DATA#3	26	LVDSA_DATA3
27	GND	28	GND
29	LVDSB_DATA#0	30	LVDSB_DATA0
31	LVDSB_DATA#1	32	LVDSB_DATA1
33	LVDSB_DATA#2	34	LVDSB_DATA2
35	LVDSB_CLK#	36	LVDSB_CLK
37	LVDSB_DATA#3	38	LVDSB_DATA3
39	GND	40	GND

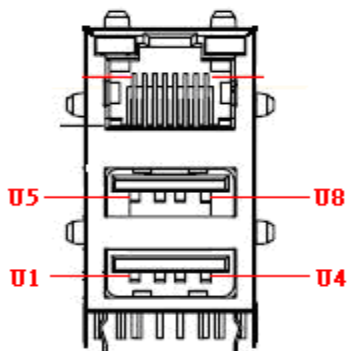
Rear Panel Connector List

AUDIO1 Audio Phone Jack



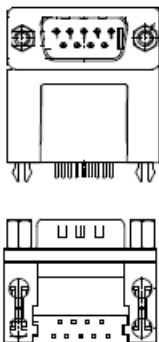
	Signal Name
BLUE	LINE IN
GREEN	LINE OUT
PINK	MIC IN

LAN1, LAN2 RJ-45 + USB Port-0&1 Connector



Pin	Signal	Pin	Signal
1	VCC	12	Yellow LED
2	D0+	13	Green LED#
3	D0-	14	Orange LED#
4	D1+	U1	USB_PWR
5	D1-	U2	USB_N0
6	D2+	U3	USB_P0
7	D2-	U4	GND
8	D3+	U5	USB_PWR
9	D3-	U6	USB_N1
10	GND	U7	USB_P1
11	Yellow LED#	U8	GND

COM1 RS-232 DB-9 Connector



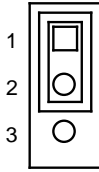
Pin	Signal
1	DCD, Data carrier detect
2	RXD, Receive data
3	TXD, Transmit data
4	DTR, Data terminal ready
5	GND, ground
6	DSR, Data set ready
7	RTS, Request to send
8	CTS, Clear to send
9	RI, Ring indicator

PS-KBMS1 Internal PS/2 Keyboard & Mouse

	Pin	Signal Name	Pin	Signal Name
	1	KB_DATA	2	NC
	3	GND	4	KB_PWR
	5	KB_CLK	6	NC
	7	MS_DATA	8	NC
	9	GND	10	KB_PWR
	11	MS_CLK	12	NC
	13	GND	14	GND
	15	GND	16	GND

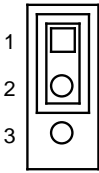
Jumper Settings

JCMOS1



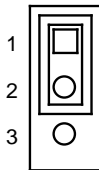
Jumper	Status
1-2 (Default)	Keep CMOS
2-3	Clear CMOS

JAT1 : AT/ATX SELECT JUMPER



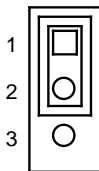
Jumper	Status
1-2 (Default)	AT POWER
2-3	ATX POWER

JCOMP1 – JCOMP2 POWER JUMPER



Jumper	Status
1-2 (Default)	5V
2-3	12V

J2 : LVDS POWER



Jumper	Status
1-2 (Default)	3.3V
2-3	5V

Motherboard Layout:

