MP-6421

User's Manual

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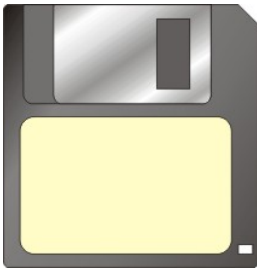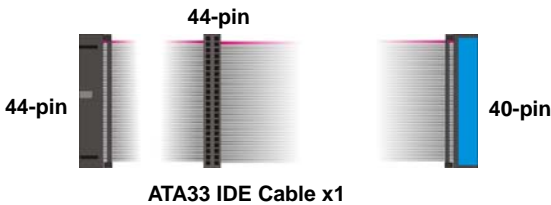# Packing List:

Please check the package content before you starting using the board.

## Hardware:

MP-6421 Mini ITX Motherborad x 1

Cable Kit:

44-pin

44-pin   **40-pin**

ATA33 IDE Cable x1

SATA Cable x 2

RAID drivers Disc for Windows 2000,

Windows XP and Windows Server 2003

Product Specification

General Specification	
Form Factor	Mini-PCI Type IIIB with 124-pin interface
Controller	VIA VT6421A
Serial ATA	2 Serial ATA interfaces **(Option RAID Function)**Up to 150MB/s of transfer rate
Enhanced IDE	One 44-pin IDE port onboard One CompactFlash Type II socket on solder side

Component Placement

<Mechanical Drawing>
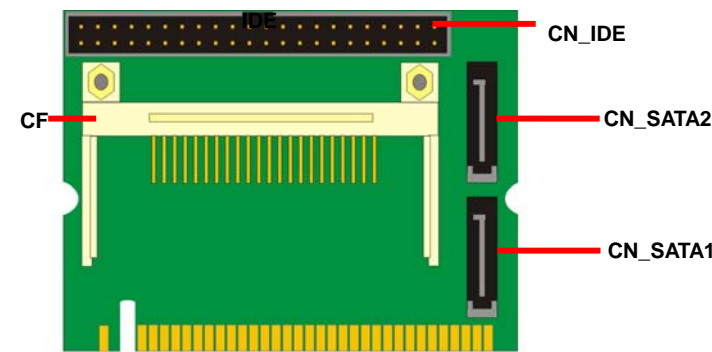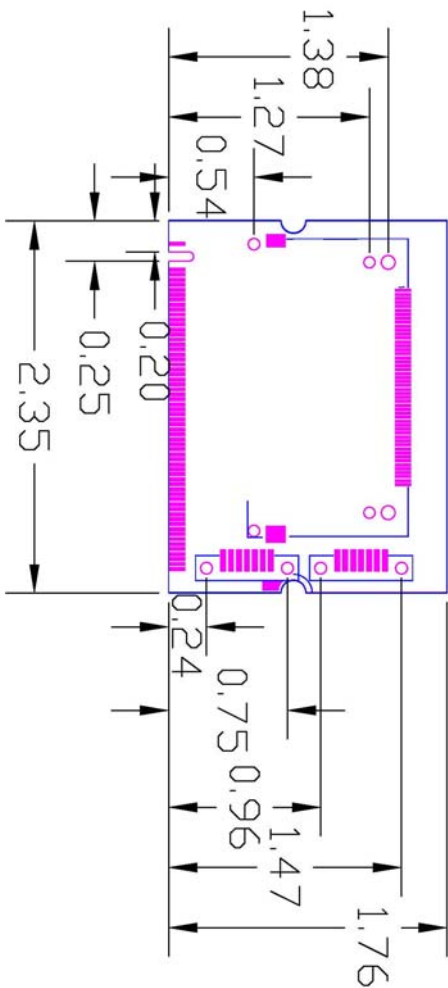
Appendix A <I/O Port Pin Assignment>

A.1 <IDE Port>
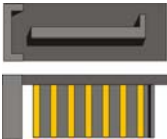
Connector: **IDE**

Type: 44-pin (22 x 2) box header

Pin	Description	Pin	Description
1	Reset	2	Ground
3	D7	4	D8
5	D6	6	D9
7	D5	8	D10
9	D4	10	D11
11	D3	12	D12
13	D2	14	D13
15	D1	16	D14
17	D0	18	D15
19	Ground	20	N/C
21	REQ	22	Ground
23	-IOW	24	Ground
25	-IOR	26	Ground
27	IORDY	28	Ground
29	DACK	30	Ground
31	IDEIRQ	32	N/C
33	A1	34	66DET
35	A0	36	A2
37	-CS1	38	-CS3
39	-HD LED1	40	Ground
41	+5V	42	+5V
43	Ground	44	Ground

A.2 <Serial ATA Port>

Connector: **SATA1/2**

Type: 7-pin wafer connector

1	2	3	4	5	6	7	8	9
GND	RSATA_TXP1	RSATA_TXN1	GND	RSATA_RXN1	RSATA_RXP1	GND	GND	GND

A.3 <CF>

Connector: **CF**

Type: 50-pin

Pin	Description	Pin	Description
1	Ground	2	D3
3	D4	4	D5
5	D6	6	D7
7	CS0	8	Ground
9	Ground	10	Ground
11	Ground	12	Ground
13	+5V	14	Ground
15	Ground	16	Ground
17	Ground	18	A2
19	A1	20	A0
21	D0	22	D1
23	D2	24	N/C
25	Ground	26	Ground
27	D11	28	D12
29	D13	30	D14
31	D15	32	CS1
33	N/C	34	IOR
35	IOW	36	+5V
37	IDEIRQ	38	+5V
39	CFSEL	40	N/C
41	REST	42	RDY
43	REQ	44	DACK
45	LED	46	66DET
47	D8	48	D9
49	D10	50	Ground

B. <SATA RAID Configuration>

The board supports two Serial ATA ports onboard, and supports RAID 0, 1 and JBOD disk array, the RAID 0, 1 and JBOD are specified below:

RAID 0 (Stripping): Two hard drives operating as one drive for optimized data R/W performance. It needs two unused drives to build this operation.

RAID 1 (Mirroring): Copies the data from first drive to second drive for data security, and if one drive fails, the system would access the applications to the workable drive. It needs two unused drives or one used and one unused drive to build this operation. The second drive must be the same or lager size than first one.

JBOD (Span): As different as RAID 0, the JBOD combines two disks as one without any fault tolerance and I/O performance enhancement.

To build Serial ATA disk array, please press <TAB> while booting up the system before entering OS, and follow the instructions to edit the RAID function.

You also can edit disk array under OS, please install the VIA RAID Utility in the driver CD.
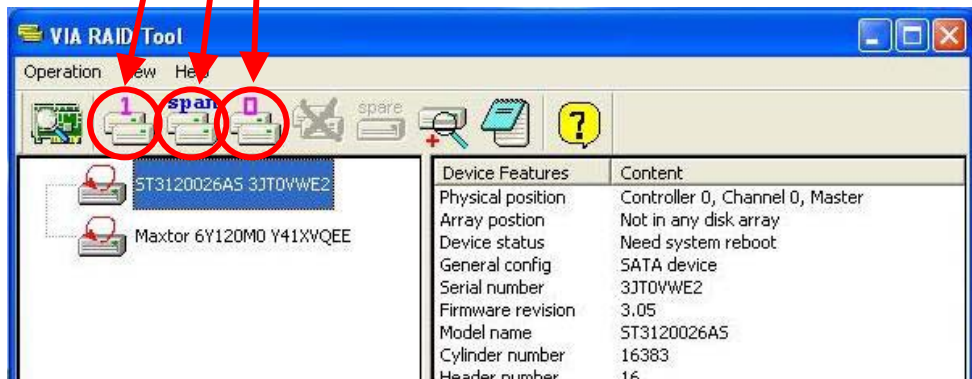
(To getting start, please click here to learn more information)
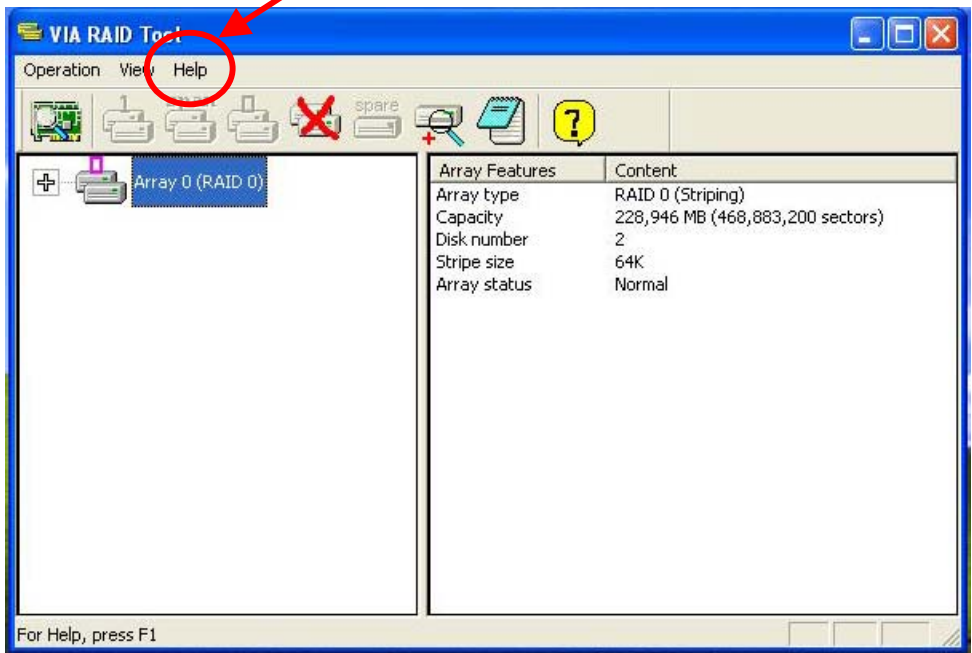
(Click here to build RAID 0)

(Click here to build RAID JBOD)

(Click here to build RAID 0)

Contact Information

Any advice or comment about our products and service, or anything we can help you please don't hesitate to contact with us. We will do our best to support you for your products, projects and business.

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