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Operating Guide of VT6020B

Date: Sep. 9, 2002

1. Introduction:

The VT6020 mainboard is a highly integrated IBM PC/AT compatible system board designed to accommodate VIA C3/Eden EPGA processors. The VT6020 mainboard consists of VIA chipset which is included the VIA VT82C694X/T system controller and the VT8231 south bridge.

2. Specification:

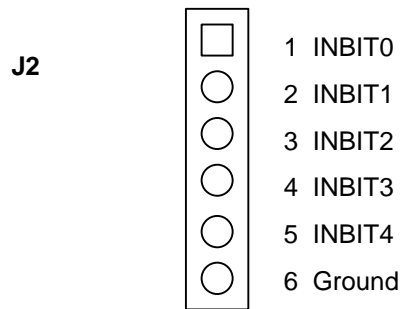
PCB size	180 mm * 200 mm with 6 layers.
CPU Type	VIA C3/Eden EPGA CPU. Internal L1 128KB and L2 64KB cache memory.
Chipset	VT82C694X/T north bridge. VT8231 south bridge.
DRAM	PC133/PC100 32M SDR SDRAM On-board.
PCI Bus / IDE	The VT6020 includes two PCI Slots(SCSI Connector), one Mini-PCI Slot. One IDE Connector supports two Enhanced IDE devices with Ultra DMA 33 / 66 / 100.
LAN	VIA VT6105 Ethernet Controller, supports ethernet 10/100Mbps. ADMtek ADM8513 USB to 10/100 Mbps Ethernet Lan Controller Four ports 10/100 Mbps Ethernet Lan switch.
USB	One USB v1.1 type A port. One USB v1.1 type B port.
Keyboard controller	Internal keyboard controller in VT8231 which supports PS/2 keyboard and mouse.
Memory Stick	Winbond W81386D memory stick controller supports one memory stick socket.
DOC	One M-SYSTEM DOC support.
Other I/O Ports	One 16C550 compliant serial port jumper pin connector.
Clock generator	Clock generator ICS 94211.
Real time clock	Internal RTC in VT8231 and with external battery.
POWER	Sony AC Adapter 12V.

3. Jumper Setting: (Default Setting is marked *)

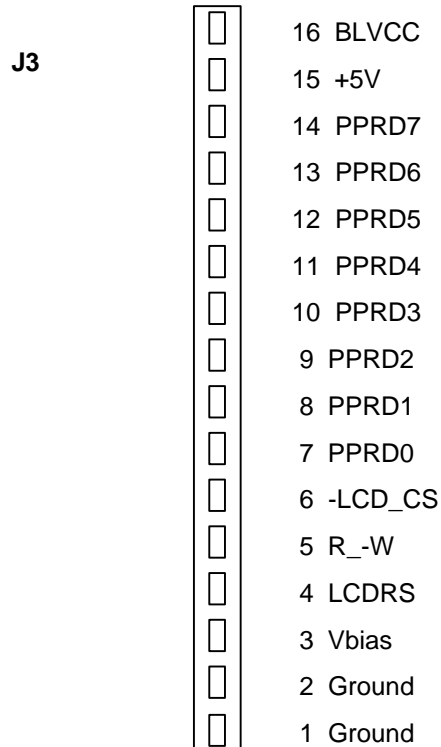
3.1 Clear CMOS:

J1	
1-2	Normal *
2-3	Clear CMOS

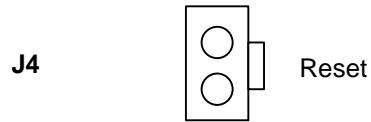
3.2 Front Panel Input Connector:



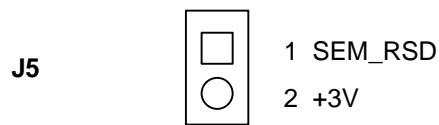
3.3 LCM Connector:



3.4 System Reset Connector:



3.5 Memory Stick Remote Wakeup Connector:



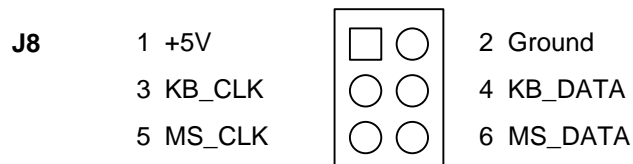
3.6 OEM BIOS Selection:

J6			
1-2	3-4	5-6	Definition
Close	Close	Close	On Board Memory 16MB*
Close	Close	Open	On Board Memory 32MB
Close	Open	Close	On Board Memory 64MB

3.7 OEM BIOS System Selection:

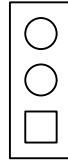
J7			
1-2	3-4	5-6	Definition
Open	X	X	COM Port Disable
Close	Close	Close	To be defined
Close	Open	Close	To be defined

3.8 PS/2 Connector:



3.9 Wake up on Modem Connector:

J9

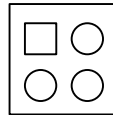


- 3 Wake up on Modem
- 2 Ground
- 1 +5V

3.10 Kendin EEPROM Remote Programming Connector:

J10

- 1 ESDA
- 3 ESCL



- 2 SMBDT
- 4 SMBCK



4. LED, Connector and Switch:

4.1 LED List:

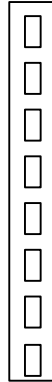
LED	Indication
LED1	Mini PCI WLAN Internet Link + Activity
LED2	System Fail Message
LED3	Amber: Power On Green: System Initial OK
LED8	ADMtek USB-B Link + Activity
LED9	VIA LAN Internet Link + Activity

4.2 Connector and Switch List:

ITEM	FUNCTION
CN1	Memory Stick Connector
CN2	RS-232 Connector
CN3	Mini-PCI Connector
CN4	USB-A Connector
CN5	RJ45 Connector
CN6	USB-B Connector
CN7	RJ45 x4 Connector
CN8	DC Input Connector
IDE1	On-board IDE Connector
S1	Power Button

4.3 Memory Stick Connector:

CN1

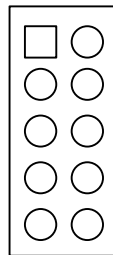


- 1 Ground
- 2 MS_BS
- 3 MS_V
- 4 MS_DIO
- 5..-MS_DETECT
- 6 MS_SCLK
- 7 MS_V
- 8 Ground

4.4 RS-232 Connector:

CN2

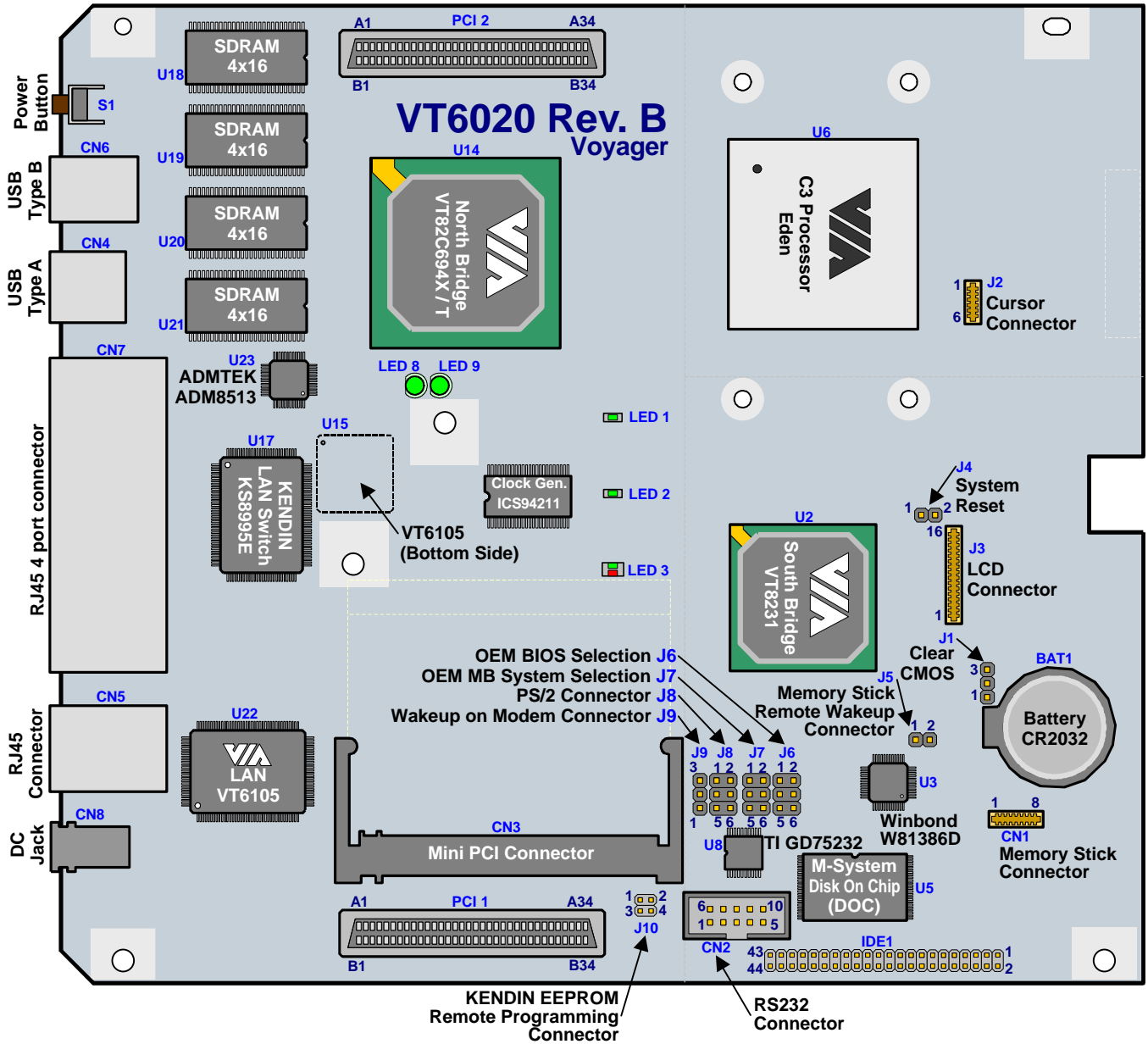
- 1 -DCDA
- 2 RXDA
- 3 TXDA
- 4 -DTRA
- 5 Ground



- 6 -DSRA
- 7 -RTSA
- 8 -CTSA
- 9 -RIA
- 10 Ground

5. Diagrams:

5.1 Layout Placement and Connector Location:



5.2 PCB Dimension and Mounting Hole Location:

