

### **FCC Compliance Statement:**

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations This equipment generates, uses. and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However. there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment

reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna

-Move the equipment away from the receiver

-Plug the equipment into an outlet on a circuit different from that to which the receiver is connected

-Consult the dealer or an experienced radio/television technician for additional suggestions

You are cautioned that any change or modifications to the equipment not expressly approve by the party responsible for compliance could void Your authority to operate such equipment.

This device complies with Part 15 of the FCC Rules. Operation is subjected to the following two conditions 1) this device may not cause harmful interference and 2) this device must accept any interference received, including interference that may cause undesired operation.

Declaration of Conformity We, Manufacturer/Importer (full address)

#### G.B.T. Technology Träding GMbH Ausschlager Weg 41, 1F, 20537 Hamburg, Germany

declare that the product ( description of the apparatus, system, installation to which it refers)

#### Mother Board GA-6WXM7

#### is in conformity with (reference to the specification under which conformity is declared) in accordance with 89/336 EEC-EMC Directive

🔲 EN 55011	Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM high frequency equipment	[	EN 61000-3-2* EN60555-2	Disturbances in supply systems caused by household appliances and similar electrical equipment "Harmonics"
EN55013	Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment		EN61000-3-3* EN60555-3	Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations"
EN 55014	Limits and methods of measurement of radio disturbance characteristics of	0	X EN 50081-1	Generic emission standard Part 1: Residual, commercial and light industry
	portable tools and similar electrical apparatus	0	X EN 50082-1	Generic immunity standard Part 1: Residual, commercial and light industry
EN 55015	Limits and methods of measurement of radio disturbance characteristics of fluorescent lamps and luminaries	[	EN 55081-2	Generic emission standard Part 2: Industrial environment
EN 55020	Immunity from radio interference of broadcast receivers and associated equipment	[	EN 55082-2	Generic immunity standard Part 2: Industrial environment
🛛 EN 55022	Limits and methods of measurement of radio disturbance characteristics of information technology equipment	[	ENV 55104	Immunity requirements for household appliances tools and similar apparatus
DIN VDE 0855 part 10 part 12	Cabled distribution systems; Equipment for receiving and/or <b>distribution</b> from sound and television signals	[	EN 50091- 2	EMC requirements for uninterruptible power systems (UPS)
🛛 CE marking			(EC conformity n	narking)
	The manufacturer also declare with the actual required safety	es the / stand	conformity of above me dards in accordance wit	entioned product h LVD 73/23 EEC
EN 60065	Safety requirements for mains operated electronic and related apparatus for household and similar general use	[	EN 60950	Safety for information technology equipment including electrical business equipment
EN 60335	Safety of household and similar electrical appliances	[	EN 50091-1	General and Safety requirements for uninterruptible power systems (UPS)
	Mai	nufact	turer/Importer	
				Signature : Rex Lin
	(Stamp) De	ate : .	June. 28, 1999	Name : Rex Lin

# 6WXM7 Celeron<sup>™</sup>AGP Motherboard

# **USER'S MANUAL**

INTEL<sup>®</sup> Celeron <sup>™</sup> Socket 370 Processor MAINBOARD REV. 1.4 First Edition

R-14-01-090729

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Revisior	n History	
Revision	Revision Note	Date
1.41	Initial release of the 6WXM7 motherboard user's manual.	Jul.1999

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July 29, 1999 Taipei, Taiwan, R.O.C

### Item Checklist

☑ The 6WXM7 Motherboard

☑ Cable for IDE / Floppy device

☑ Diskettes or CD (IUCD) for motherboard utilities

☑Internal COM2 Cable (Optional for VGA/AGP on-board Motherboard)

□Internal USB Cable (Optional for Baby AT Motherboard)

□Cable for SCSI device

☑ Display Driver(Optional)

☑ Sound Driver (Optional)

☑6WXM7 User's Manual

□Lan Driver (Optional)

□SCSI Driver (Optional)

☑Internal DFP and TV-Out Cable (Optional)

Summary of Feature

Summary of Fea	atures
Form factor	• 30.5 cm x 19.1 cm ATX SIZE form factor, 4 layers PCB.
CPU	Celeron <sup>™</sup> Socket 370 Processor
Chipset	Intel <sup>®</sup> 810 ,consisting of: • 82810 PCI/AGP Controller(PAC) • 82801AA PCI IDE Xcelerator(PIIX4E)
Clock Generator	Supports 66.6 / 100MHz
Memory	<ul> <li>2 168-pin DIMM Sockets</li> <li>Supports PC-100 SDRAM 16MB~512MB</li> <li>Supports only 3.3V SDRAM DIMM</li> </ul>
I/O Control	• ITE IT8712F-A
Slots	<ul> <li>1 AMR</li> <li>5 32-bit Master PCI Bus slots</li> <li>1 16-bit ISA Bus slots (Optional)</li> </ul>
On-Board IDE	<ul> <li>An IDE controller on the Intel<sup>®</sup> 82810AA PCI chipset provides IDE HDD/ CD-ROM with PIO, Bus Master and Ultra DMA66/33 operation modes</li> <li>Can connect up to four IDE devices</li> </ul>
On-Board Peripherals	<ul> <li>1 Floppy port supports 2 FDD with 360K, 720K,1.2M, 1.44M and 2.88M bytes</li> <li>1 Parallel ports supports SPP/EPP/ECP mode</li> <li>2 Serial Ports (COMA &amp; COMB)</li> <li>2 USB ports</li> <li>1 IrDA connector for Fast IrDA (Optional)</li> </ul>
On-Board Sound (Optional)	<ul> <li>YAMAHA YMF-744B</li> <li>Line In / Line Out / Mic In / AUX In / CD In / TEL SPDIF</li> <li>/ Game Port</li> </ul>
Hardware Monitor (Optional)	<ul> <li>CPU/Power Supply/Chassis Fan Revolution detect</li> <li>CPU Fan Control</li> <li>System Voltage Detect</li> <li>CPU Overheat Warning</li> <li>Chassis Intrusion Detect</li> <li>Display Actual Current Voltage</li> </ul>

To be continued...

PS/2 Connector	• inte	PS/2 <sup>®</sup> Keyboard interface and PS/2 <sup>®</sup> Mouse rface
BIOS	•	Licensed AWARD BIOS, 4M bit FLASH RAM
Additional Features	•	Internal/External Modem Wake up
	•	Keyboard Password Wake up
	•	LAN Wake up
	•	System after AC back
	•	Support Dual BIOS Function (Optional)
	•	Support STR Function

Summary Of features

# 6WXM7 Motherboard Layout



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### **CPU Speed Setup**

The system bus speed can be set Auto ; **B**6MHz and 100MHz by JP11. The CPU Frequency Auto control by BIOS.

● The CPU speed must match with the frequency RATIO. It will cause system hanging up if the frequency RATIO is higher than that of CPU. Set system Bus speed (See Figure-1)

● JP11 (Select the system speed between Auto ; B6MHz and 100MHz)

1-2 Close $3 2 1$	Set system speed to Auto - auto detect system speed.
<b>2-3 Close</b> $3 \ 2 \ 1$	<b>Set system speed to 66MHz</b> - system always run at 66MHz FSB (Front Side Bus).
<b>1-2-3 Open</b> $\bigcirc 3 \ 2 \ 1$	<b>Set system speed to 100MHz</b> - system always run at 100MHz FSB (Front Side Bus).

### JP11 & JP13~JP16 (Optional)

CPU	JP11	JP16	JP15	JP14	JP13
AUTO	1-2	NC	NC	2-3	2-3
66MHz	2-3	1-2	1-2	2-3	2-3
100MHz	NC	2-3	2-3	2-3	2-3

- ★ Note: 1. If you want to set CPU frequency to "AUTO", JP11 must be "1-2 short".
  - 2. If you want to set force 66MHz, JP11 must be "2-3 short". If you want to set force 100MHz, JP11 must be "1-2-3 open".
  - 3. Please set the CPU host frequency in accordance with your processor's specifications. We don't recommend you to set the system bus frequency over the CPU's specification because these specific bus frequencies are not the standard specifications for CPU, chipset and most of the peripherals. Whether your system can run under these specific bus frequencies properly will depend on your hardware configurations, including CPU, Chipsets, SDRAM, Cards..etc.

JP11 & JP13~JP16:(Optional)



<Figure-1>

# Connectors

COM A / VGA / LPT Port





COM B Port





# GAME & Audio Port





**USB** Connector





Pin No.	Definition
1	USB V0
2	USB D0-
3	USB D0+
4	GND
5	USB V1
6	USB D1-
7	USB D1+
8	GND

TV/DFP :TV-Out / Digital Flat Panel Daughter card connector.



PS/2 Keyboard & PS/2 Mouse Connector



PS/2 Mouse	PS/2 Mouse/		
	Keyboard		
	Pin No.	Definition	
6 5	1	Data	
4	2	NC	
	3	GND	
2 1	4	VCC(+5V)	
PS/2 Keyboard	5	Clock	
	6	NC	

### CPU FAN / PWR FAN





Pin No.	Definition
1	Control
2	+12V
3	SENSE

### SYSTEM FAN





Pin No.	Definition
1	Control
2	+12V
3	SENSE

### ATX PWR



Pin No.	Definition
3,5,7,13,15-17	GND
1,2,11	3.3V
4,6,19,20	VCC
10	+12V
12	-12V
18	-5V
8	Power Good
9	5V SB stand by+5V
14	PS-ON(Soft On/Off)

JP4 : Front Panel USB Port





1\_11

Pin No.	Definition
1,4,5,10	NC
2	+5V
3,7,9	GND
6	USBP0+
8	USBP0-

### J12 : CIR/IR





Pin No.	Definition
1	VCC
2,6,9	NC
3	IRRX
4	GND
5	IRTX
7	CIRRX
8	KBVcc
10	CIRTX

FLOPPY



IDE1(Primary) , IDE2 (Secondary)



# Panel and Jumper Definition

J9 : For 2X11 PINs Jumper



GN (Green Switch)	Open: Normal Operation	
	Close: Entering Green Mode	
GD (Green LED)	Pin 1: LED anode(+)	
	Pin 2: LED cathode(-)	
HD (IDE Hard Disk Active	Pin 1: LED anode(+)	
LED)	Pin 2: LED cathode(-)	
SPK (Speaker Connector)	Pin 1: VCC(+)	
	Pin 2- Pin 3: short	
	Pin 4: Data(–)	
RE (Reset Switch)	Open: Normal Operation	
	Close: Reset Hardware System	
P+P–P–(Power LED)	Pin 1: LED anode(+)	
	Pin 2: LED cathode(-)	
	Pin 3: LED cathode(-)	
PW (Soft Power Connector)	Open: Normal Operation	
	Close: Power On/Off	

### JP2 : Keyboard Power On



$\sim$	Pin No.	Definition
1	1-2 close	Keyboard Power on
2		Enabled
3	2-3 close	Keyboard Power on
		Disabled (Default)

J11 : RING PWR ON (Internal Modem Card Wake Up)



Pin No.	Definition
1	Signal
2	GND
	Pin No. 1 2

JP9 : Clear CMOS Function



$ \bigcirc$	Pin No.	Definition
	1-2 close	Clear CMOS
	2-3 close	Normal (Default)

J10 : Wake on LAN





Pin No.	Definition
1	+5V
2	GND
3	Signal

# J6 : CD Audio Line In (Optional)





### JP18 : CASE OPEN



$\frown$		
$\square$	Pin No.	Definition
	1	Signal
1	2	GND



JP1 Close : STR Enable



Pin No.	Definition
Close	STR Enable
Open	STR Disable

JP21 : Top Block Lock





J19 : Timeout Reboot Function



### JP25 : USB Keyboard Wake up Selection



JP6 : SPDIF (The SPDIF output is capable of providing digital audio to external speakers or compressed AC3 data to an external Dobly Digital decoder.)



JP7 : TEL: The connector is for Modem with internal voice connector.



~		
1)	Pin No.	Definition
$\leq$	1	Signal-In
$\langle$	2	GND
)	3	GND
$\leq$	4	Signal-Out
Σ	-	

JP8 : AUX IN



JP26/JP27 : USB Port Selection





	Front Panel USB Enable	Back Panel USB Enable
	FPUSB	BPUSB
JP26	1-2close	2-3close
JP27	1-2close	2-3close

JP12 : Onboard Sound Function Selection (Optional)



)	Pin No.	Definition
	1-2 close	Disable Onboard sound
	2-3 close	Enable Onboard sound
J		(Default)

JP17 : AMR Function Selection (Optional)



JP24 : Buzzer Enable (Optional)



### JP23 : Safe mode/Recovery/Normal





Pin No.	Definition
1-2close	Normal(Default)
2-3close	Safe mode
1-2-3open	Recovery

BAT1 : Battery



- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to the manufacturers instructions.

### Performance List

The following performance data list is the testing results of some popular benchmark testing programs.

These data are just referred by users, and there is no responsibility for different testing data values gotten by users. (The different Hardware & Software configuration will result in different benchmark testing results.)

• CPU	Intel® Celeron <sup>™</sup> processor
• DRAM	(128x1) MB SDRAM (LGS GM72V66841ET7J 9908 AA05)
CACHE SIZE	128 KB included in CPU
• DISPLAY	Intel 810 Chipset Graphics Driver PV1.1
• STORAGE	Onboard IDE (IBM DJNA-371800)
• 0.S.	Windows NT™4.0 SPK5
DRIVER	Display Driver at 1024 x 768 x 64k colors x 75Hz.

Processor	Intel <sup>®</sup> Celeron™(Socket 370) 500MHz (66x7.5)
Winbench99	
CPU mark32	37.5
FPU Winmark	2680
Business Disk	3610
Hi-End Disk	5790
Business Graphics	122
Hi-End Graphics	349
Winstone99	
Business	26.2
Hi-End	22