

FYI-VIA 597 (VP3) AGP Mother Board Specification

@Chipset :VIA Apollo VP3 Chipset.

@CPU : INTEL PENTIUM P54C, P55C(MMX) / AMD K5,K6(MMX) / Cyrix M1, M2(MX) / IDT C6.

@SRAM : On board 256KB(optional) / 512 KB P.B. SRAM.

@Memory : Supports DIMM x 2 & SIMM x 4 , supports FP / EDO / SDRAM up to 1GB .
Supports SMC Supper Multi I/O for 1 FDD , 1 Parallel port (EPP, ECP) and 2 Serial ports.

@Built-in Switching Voltage Regulator.

@Supports one AGP slot, Four PCI slots and three ISA slots.

@Supports 2X mode for AGP 133 MHz .

@Dual Master IDE Connectors support up to four IDE devices.

@Supports Ultra DMA/33.

@Supports USB header.

@Supports PS/2 keyboard and mouse connector.

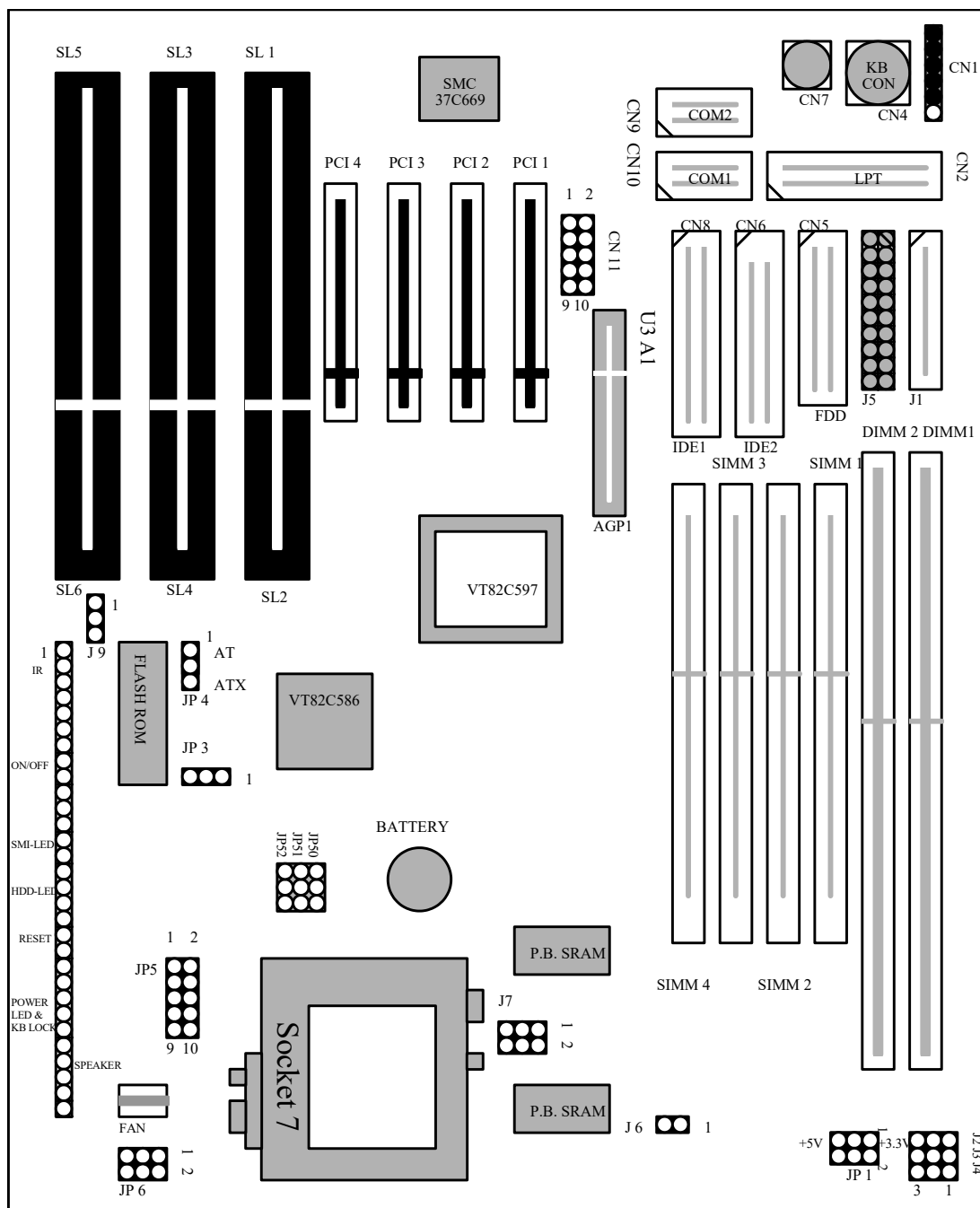
@One FDC port support two devices up to 2.88MB.

@Award APM mode & legacy ACPI ; External Modem ring-on function ; Alarm Power On function.

@Based on form factor AT design features support ATX power connector and PS/2 keyboard at optional ,can direct use ATX Case.

@External Clock supports 75MHz ,83MHz,(100 MHz Optional) .

Layout Placement



Note : Both CN7 and J5 are option

JUMPER SETTING

JP6: CPU Vcore Frequency Ratio

Ratio	C6 -X4.0	X2	X2.5	X3	X4	X4.5
Jumper	X1.5 / X3.5					

JP6	5 1	5 1	5 1	5 1	5 1	5 1
	6 2	6 2	6 2	6 2	6 2	6 2

J2 , J3, J4: CPU Clock Select (ICW48S87-04)

Clock Jumper	50MHz	55MHz	60MHz	66MHz	75MHz	83MHz
J2						
J3						
J4						

JP5: CPU Vcore Voltage Select





Voltage	2.0V	2.1V	2.2V	2.3V	2.4V	2.5V	2.6V	2.7V
JP5	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2

Note :This design for CPU Vcore Voltage Select is more complex than earlier designed M/B, because the scope of the CPU Vcore Voltage will be from 2.0V to 3.5V in the future.





JP3: CMOS Clear Function Select

Jumper	Internal Battery	Clear CMOS RAM Data
JP3		



JP4: AT / ATX Power Supply Select J6: Interleave / Linear Burst Mode

Jumper	AT Power	ATX Power	Jumper	Interleave Off	Linear On
JP4	1 	1 	J6	1 	1 

JP1: DIMM Modules Voltage J9: Flash ROM Type Voltage (Factory)

Jumper	+5V	+3.3V	Jumper	+5V	+12V
JP1	5 1  6 2	5 1  6 2	J9	1 	1 

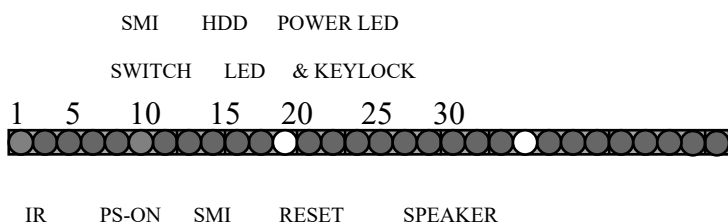
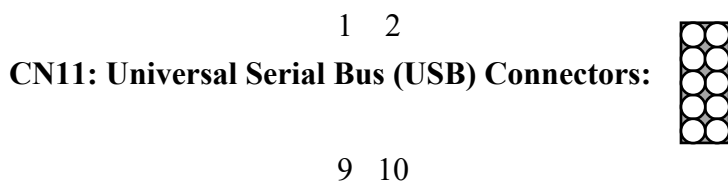
J7: CPU VIO Voltage Select

Jumper	Single Voltage(P54C)	Double Voltage(P55C)
J7	5 1  6 2	5 1  6 2

NOTE: @P54C CPU: INTEL PENTIUM Series , Cyrix 6X86 Series , AMD K5 Series, IDT C6 Series.

@P55C CPU: INTEL PENTIUM MMX Series , Cyrix 6x86L 、 MX Series , AMD K6 Series.

@This design for CPU Voltage Select Jumper Setting is to ensure external that I/O voltage is not influenced by CPU I/ O voltage and Vcore voltage , and also can enhance the system stable.



LED

Pin No	Assignment	Function	Pin No	Assignment	Function
1	IRRX	IR	16	HDD LED-	HDD LED
2	GND		17	HDD LED-	
3	IRTX		18	HDD LEE+	
4	+5V		19	RESET	RESET
5	IRFR		20	GND	BUTTON
6	+5V		21	POWER LED+	POWER LED & KEYLOCK
7	GND		22	NC	
8	POWER ON	PS-ON ATX Power	23	POWER LED-	
9	GND		24	KEYLOCK	
10	NC		25	GND	SPEAKER
11	NC		26	+5V	
12	NC		27	NC	
13	SMI LED+	SMI LED	28	NC	
14	SMI LED-		29	SPEAK OUT	
15	HDD LED+		30	NC	

Note1 : “PS-ON” is connect POWER ON-OFF switch of the “ATX” Power Supply.

Note2 : “IRFR” (SMC 37C 669FR only).

CPU Quick Index



CPU TYPE	PRINTING	MHz	MUL/BUS	Voltage	J2	J3	J4	JP6	JP5	J7
Pentium	75 MHz	75	X1.5 / 50	3.3V	2-3	2-3	2-3	OFF	1-2&5-6&7-8	3-5&4-6
Pentium	90 MHz	90	X1.5 / 60	3.3V	1-2	1-2	2-3	OFF	1-2&5-6&7-8	3-5&4-6
Pentium	100 MHz	100	X1.5 / 66	3.3V	1-2	1-2	1-2	OFF	1-2&5-6&7-8	3-5&4-6

Pentium	120 MHz	120	X2 / 60	3.3V	1-2	1-2	2-3	1-2	1-2&5-6&7-8	3-5&4-6
Pentium	133 MHz	133	X2 / 66	3.3V	1-2	1-2	1-2	1-2	1-2&5-6&7-8	3-5&4-6
Pentium	150 MHz	150	X2.5 / 60	3.3V	1-2	1-2	2-3	1-2&3-4	1-2&5-6&7-8	3-5&4-6
Pentium	166 MHz	166	X2.5 / 66	3.3V	1-2	1-2	1-2	1-2&3-4	1-2&5-6&7-8	3-5&4-6
Pentium	180 MHz	180	X3 / 60	3.3V	1-2	1-2	2-3	3-4	1-2&5-6&7-8	3-5&4-6
Pentium	200 MHz	200	X3 / 66	3.3V	1-2	1-2	1-2	3-4	1-2&5-6&7-8	3-4&5-6
Pentium MMX	166 MHz	166	X2.5 / 66	2.8V	1-2	1-2	1-2	1-2&3-4	7-8	1-3&2-4
Pentium MMX	200 MHz	200	X3 / 66	2.8V	1-2	1-2	1-2	3-4	7-8	1-3&2-4
Pentium MMX	233 MHz	233	X3.5 / 66	2.8V	1-2	1-2	1-2	OFF	7-8	1-3&2-4

 CYRIX

CPU TYPE	PRINTING	MHz	MUL/BUS	Voltage	J2	J3	J4	JP6	JP5	J7
6X86	PR133	110	X2 / 55	3.3V	1-2	2-3	2-3	1-2	1-2&5-6&7-8	3-5&4-6
6X86	PR150+	120	X2 / 60	3.3V	1-2	1-2	2-3	1-2	1-2&5-6&7-8	3-5&4-6
6X86	PR150+	120	X2 / 60	3.52V	1-2	1-2	2-3	1-2	1-2&3-4&5-6&7-8	3-5&4-6
6X86	PR166+	133	X2 / 66	3.3V	1-2	1-2	1-2	1-2	1-2&5-6&7-8	3-5&4-6
6X86	PR166+	133	X2 / 66	3.52V	1-2	1-2	1-2	1-2	1-2&3-4&5-6&7-8	3-5&4-6
6X86	PR200+	150	X2 / 75	3.3V	1-2	2-3	1-2	1-2	1-2&5-6&7-8	3-5&4-6
6X86	PR200+	150	X2 / 75	3.52V	1-2	2-3	1-2	1-2	1-2&3-4&5-6&7-8	3-5&4-6
6X86L	PR150+	120	X2 / 60	2.8V	1-2	1-2	2-3	1-2	7-8	1-3&2-4
6X86L	PR166+	133	X2 / 66	2.8V	1-2	1-2	1-2	1-2	7-8	1-3&2-4
6X86L	PR200+	150	X2 / 75	2.8V	1-2	2-3	1-2	1-2	7-8	1-3&2-4
6X86MX	PR166+	150	X2.5 / 60	2.9V	1-2	1-2	2-3	1-2&3-4	1-2&7-8	1-3&2-4
6X86MX	PR200+	166	X2.5 / 66	2.9V	1-2	1-2	1-2	1-2&3-4	1-2&7-8	1-3&2-4
6X86MX	PR233+	188	X2.5 / 75	2.9V	1-2	2-3	1-2	1-2&3-4	1-2&7-8	1-3&2-4

 AMD

CPU TYPE	PRINTING	MHz	MUL/BUS	Voltage	J2	J3	J4	JP6	JP5	J7
K5	PR90	90	X1.5 / 60	3.3V	1-2	1-2	2-3	OFF	1-2&5-6&7-8	3-5&4-6
K5	PR100	100	X1.5 / 66	3.3V	1-2	1-2	1-2	OFF	1-2&5-6&7-8	3-5&4-6
K5	PR120	120	X2 / 60	3.3V	1-2	1-2	2-3	1-2	1-2&5-6&7-8	3-5&4-6
K5	PR133	133	X2 / 66	3.52V	1-2	1-2	1-2	1-2	1-2&3-4&5-6&7-8	3-5&4-6

K5	PR150	150	X2.5 / 60	3.52V	1-2	1-2	2-3	1-2& 3-4	1-2&3-4&5-6&7-8	3-5&4-6
K5	PR166	166	X2.5 / 66	3.52V	1-2	1-2	1-2	1-2 & 3-4	1-2&3-4&5-6&7-8	3-5&4-6
K6	PR2-166	166	X2.5 / 66	2.9V	1-2	1-2	1-2	1-2 & 3-4	1-2&7-8	1-3&2-4
K6	PR2-200	200	X3 / 66	2.9V	1-2	1-2	1-2	3-4	1-2&7-8	1-3&2-4
K6	PR2-233	233	X3.5 / 66	3.2V	1-2	1-2	1-2	OFF	5-6&7-8	1-3&2-4

IDT

CPU TYPE	PRINTING	MHz	MUL/BUS	Voltage	J2	J3	J4	JP6	JP5	J7
Win Chip C6	150	150	X2.5 / 60	3.3V	1-2	1-2	2-3	1-2&3-4	1-2&5-6&7-8	3-5&4-6
Win Chip C6	180	180	X3 / 60	3.3V	1-2	1-2	2-3	3-4	1-2&5-6&7-8	3-5&4-6
Win Chip C6	200	200	X3 / 66	3.3V	1-2	1-2	1-2	3-4	1-2&5-6&7-8	3-5&4-6

