

表 1: 8086 寄存器

Category	Bits	Register Names
<b>General</b>	16	AX(Accumulator), BX(Base), CX(Count), DX(Data)
	8	AH, AL, BH, BL, CH, CL, DH, DL
<b>Pointer</b>	16	SP(Stack Pointer), BP(Base Pointer)
<b>Segment</b>	16	CS(Code Segment), DS(Data Segment), SS(Stack Segment), ES(Extra Segment)
<b>Instruction</b>	16	IP(Instruction Pointer)
<b>Flag</b>	16	FR(Flag Register)

表 2: 8086 接脚

Signal	Description	0	1
ALE	Address Latch Enabled		Latched
$\overline{\text{BHE}}$	Bank High Enabled	AD <sub>8</sub> ~ AD <sub>15</sub> Enabled	AD <sub>8</sub> ~ AD <sub>15</sub> Disabled
DT/R	direction of Data Transfer	sending data	receiving data
$\overline{\text{DEN}}$	Data transceiver ENabled	enabled	disabled
WR	WRiting to Mem/IO	writing	
$\overline{\text{RD}}$	ReaDing from mem/IO	reading	
$\overline{\text{M}}/\overline{\text{IO}}$	CPU accessing Memory / IO	IO	Memory
INTR	INTerrupt Request, maskable by clearing IF		Requesting
$\overline{\text{INTA}}$	INTerrupt Acknowledge		Acknowledge
NMI	Non-Maskable Interrupt, CPU is interrupted after finishing the current instruction; cannot be masked by software		will be interrupted
HOLD	HOLD the bus request		hold
HOLDA	HoLD request acknowledge		hold req ack
$\overline{\text{TEST}}$	for debug	test	
READY	mem/IO is READY for transfer		ready
RESET	reset the CPU, IP, DS, SS, ES and 6 inst in instruction queue are cleared		CS=0FFFFH

**8086** 16-bit, 20-bit address.

**8088** 16-bit internal, 8-bit external.

只有两段:

**BIU** (Bus Interface Unit) 连接内存与外设。

**EU** (Execution Unit) 执行之前获取的指令。

双工作模式

**最小模式**  $\overline{\text{MN}}/\overline{\text{MX}} = 1$  单 CPU。

**最大模式**  $\overline{\text{MN}}/\overline{\text{MX}} = 0$  多 CPU(8086+8087), 8288控制芯片。