THE ENGLISH DICTIONARY OF MICROPROCESSOR WITH CHINESE TRANSLATION

英汉微处理机双解辞典

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内容简介

本辞典专门汇编了微处理机理论、微处理机结构和工作原理 及功能、机器语言、程序设计、微处理机实际应用等方面的常用词条。各词条均有英汉对照的译名和英汉对照的简明释文。其英文释文通俗易懂,具备一般英文水平的读者即能阅读。根据原辞典编者安东尼·香多(联合国数据处理顾问、信息系统国际有限股份公司常务董事长)二十多年的计算机管理与计算机技术辞典编著的经验,本辞典汇编的专用词条足以满足微处理机技术发展的现阶段的应用。

本辞典可供广大计算机技术研究人员、微处理机使用人员、企业管理人员、大专院校和中学师生,以及情报翻译工作者作为工具 书和参考书使用。

使用说明

- 1、本辞典的英文词条按英文字母顺序排**列**,用黑体字印出。各词条之后为英文释文。
- 2、词条的译名和中文释文依次列于该英文词条和英文 释文之后。词条的译名用黑体字印出。
- 3、同一英文词条有一个以上的不同译名时, 意义相同 或近似的用逗号","分开; 意义不同的用分号";"分开。
- 4、英文词条后面的圆括号内的英文,是该词条的常用缩写词,例如 central processing unit (cpu)。
- 5、英文和中文中的圆括号"()"内的词语是解释。中文中的方括号"[]"内的字是可以省略的。
- 6、释文中需参阅其他词条时, 英文中用"�×××"表示, 中文则译为"参见×××(×××)"字样; 如果英文中用"⇨×××"表示, 中文则译为"见×××(××)"字样。
- 7、释文中给出英文缩写词条的英文全名,一般不再列出其中文译名,个别情况将其译名列于后面的圆括号内。

序言

微处理机的出现使计算机稳步地进入了我们生活的各个 领域。尽管这一趋势不太引入注目,但确已成为现实。微处 理机用户的语言正目益融为日常用语的 一部 分, "chips with every thing"恰好从两个侧面对此作了通俗的说明。 它在微处理机技术中表示"芯片虽小,无所不能",而在生 活中则被引伸为那些万能的事物。计算机工业为其自身创造 了大批充满活力的新词新字,其中许多已转化为微处理机术 语并赋予了新的含义。然而微处理机本身展现的一些新概念 却只能用崭新的词汇来表达。于是继 bug、 bootstrap 和 deadly embrace 这些意义明确的计算机词汇之后,又出现 了 PROM—zapping, hex pad, hot chassis和mother board 等新的术语。计算机与微处理机的词汇相互渗透,有 时难以绝然区分。例如微处理机用户语言中的 edge card 与 数据处理计算机的边沿切口穿孔卡片的含义完全 不同, 而 "inputting input by means of an input (通过输入装 置输入输入信号)"这一术语在两种情况下却能通用。尤其 是"intermittent error"这个令人生畏的术语适用范 围更广、它所表示的"在试图查明其性质和原因时反而常常 不发生的忽隐忽现的故障",不仅在微处理机。而且在几平 所有机械、液压和电子设备中都是一个使工程技术人员和用 户感到头疼的问题。

本书的目的不在于对全部词汇给出恰如其份的定义,而

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是力图为微处理机技术的开发探讨提供一种有益的参考。为此,本辞典对所有词汇和释义,无论其是否优雅均予收集。辞典中的术语按英语字母顺序编排,对词中的逗号、连字符不作考虑。所列词组按其英语自然组合次序编排(例如 slow death 归于S部分,而不列入D部分),只有按自然组合不易查到时才采取倒序方式排列。

鉴于微处理机技术中表达各种新概念的新词新义不断出现, 热忱欢迎广大读者在对旧词赋予新义以及用新词表述新概念方面及时进行交流商榷。

安东尼·香多 1980年

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Α

atend To halt a computer run before it has reached a successful conclusion-to make an abortive end.

异常结束 在计算机圆满完成任务之前停机,即实现应急 停机。

aberration An error condition, usually in the cathode ray tube of a terminal.

失真 常出现于终端设备阴极射线管内的一种错误状态。

abnormal termination The ending of a computer run, routine or program because of a malfunction or error condition.

异常终止 由于故障或错误状态,使计算机终止运行、例 行程序或程序停止执行。

abort To abandon an activity in recognition of an error condition.

异常终止,异常结束 因发现错误状态而停止操作。

absolute address The physical location of storage assigned for data. The location is defined in machine code.

Also known as actual address, direct address, firstlevel address, machine address, one-level address, specific address. **绝对地址** 为数据指定实际的存储位置。这种位置是以机器代码确定的。绝对地址也称 actual address (实际地址)、direct address (直接地址)、first-level address (第一级地址)、machine address (机器地址)、one-level address (一级地址)、specific address (绝对地址)。

absolute addressing The addressing of a physical location in storage by its absolute address.

绝对编址 根据存储器的绝对地址, 在存储器中对实际位置进行编址。

absolute code Program instructions which have been written using absolute addresses. Instructions in absolute code are intelligible to a processor without the need for any intermediate processing.

Also known as actual code, basic code, direct code, one-level code and specific code.

绝对代码 用绝对地址所编写的程序指令。这种以绝对代码表示的指令无需任何中间加工,就能为处理机所理解。绝对代码也称 actual code (实际代码)、basic code (基本代码)、direct code (直接代码)、one-level code (一级代码)和 specific code (绝对代码)。

absolute loader A program with the function of loading another program at a specified address.

绝对地址装入程序 具有按绝对地址装入另一程序的功能的程序。

A-bus The primary internal bus of a microprocessor.

A-母线 微处理机的主要内部母线。

acceleration time The time elapsing between the interpretation of a read or write instruction to a peripheral unit and the moment when transfer of data begins.

Also known as start time.

加速时间 由给外围设备解释一条读指令或写指令起到开始传递数据时止,其间所经过的时间称为 加 速 时 间。也称 start time(启动时间)。

acceptance test A series of actions carried out to prove that a system(hardware and software) meets agreed criteria, e.g. that the processing of specified input produces expected results. **commission.

接收试验 进行一系列操作来证实一套系统(硬件和软件) 能满足议定的要求,即给定的输入处理产生出预期结果。参见commission(试车)。

access To obtain data from a storage device or from a peripheral unit.

取數 从存储装置或外围设备中取出数据。

access arm The positioning device of the reading or writing mechanism of a storage unit.

存储臂,定位臂 存储器读或写机构的定位装置。

access time The time taken from the moment of executing an instruction to call for data to the moment when the data has been stored in the appropriate location. The data may be held in a storage device or obtained from a peripheral unit, and different devices require different access times. For

example, magnetic tape has a longer access time than magnetic disk.

存取时间 从执行调用数据的指令时起到数据存储在适当位置时所需的时间。数据可以保留在存储装置中或从外围设备中取出。而且不同的装置需要不同的存取时间,例如磁带所需的存取时间就比磁盘的长。

accordion A printed circuit connector contact. The spring has an accordion-like Z shape to allow great deflection without the risk of over-stressing.

"Z"形插孔,折式插孔 印刷电路连接器的接点。其弹 簧为折叠式,形如字母"Z",以便能作很大挠曲,而无过 应力的危险。

accumulator A storage location in which operations are performed on numbers and where the results are stored. An accumulator can act as an arithmetic and logic unit, and is sometimes used to control or modify a quantity held in another storage location. Usually it will store one value, receive another value and then hold the result of operations carried out on the original number and the second number. Also known as accumulator register.

累加器 进行数字运算并存放运算结果的存储单元。累加器可用作算术运算装置和逻辑单元,有时用来控制或修改存放在另一个存储单元中的数量。通常是存放某一个数值,接收另一个值,然后将原有的数与第二个数所形成的运算结果保存起来。累加器也称accumulator register(累加寄存器)。

accumulator register Synonymous with accumu-

lator.

累加寄存器 与accumulator(累加器)同义。

accuracy A measure of the size of an error or the quality of freedom from error. High accuracy implies a low degree of error, and may be contrasted with precision. For example, a calculation to five places of decimals may be more precise than a calculation to four places of decimals, but if the five-place calculation contains an error, it will be less accurate than a four-place calculation which is error-free.

准确度 误差程度的度量,或无误差程度的度量。高准确度表明误差度低。准确度和精确度有区别,例如,五位小数的计算结果比四位小数的精确度高,但是五位小数的计算如果有误差,则其准确度就比无误差的四位小数的计算结果低。

acoustic coupler A device capable of transmitting and receiving audio tones which can be sent on telephone lines, allowing a modem to be linked to a telephone handset.

声耦合器 一种能够发送和接收可由电话线路发送的声音 的装置。它使调制解调器与电话受话器相连接。

acoustic delay line A delay line based on the time of propagation of sound waves, so that a pattern of sound pulses is launched at one end of an acoustic medium such as quartz and picked up at the other end. This means that a binary digit can be represented by the presence or absence of a short high-frequency packet.

Also known as sonic delay line.

声延迟线 一种以声波传播时间为基础的延迟线。它使声频脉冲模式在声波传输媒体(例如石英)的一端发射,在另一端接收。这就是说可以通过短高频束的出现或消失来表示二进制数字。亦称 sonic delay line(声延迟线)。

acoustic memory Synonymous with acoustic store. **声存储器** 与acoustic store (声存储器) 同义。

acoustic store A regenerative memory using an acoustic delay line. Also known as acoustic memory.

声存储器 利用声延迟线做成的再生存储器。亦称acoustic memory (声存储器)。

active element A circuit which receives energy from two or more sources. One of these sources of energy controls the energy flow of the other source(s).

有源元件 从两个或两个以上的能源获取能量的电路。其中一个能源控制其他能源的能流。

activity 1. The act of using a file of information, either by altering it or referring to it. The activity level of a file is therefore an indication of the frequency of use. 2. The representation in PERT and critical path analysis of a task or constraint. Time and/or resources are consumed and the activity is necessary in order to move from one event to another.

活动 1.或通过参考或采取修改使用信息文件的活动。因此某一种文件的活动级就表明其使用次数。 2.程 序评价和 审定技术中及任务或约束的关键路径分析中的表示法。为了

从一个进程进入另一个进程,需要消耗时间和/或资源,同时又需要活动。

actual address Synonymous with absolute address。 实际地址 与absolute address (绝对地址)同义。 actual code Synonymous with absolute code。 实际代码 与absolute code (绝对代码)同义。

actual instruction An instruction resulting from modification of a basic instruction.

Also known as effective instruction.

实际指令 由于修改基本指令而产生的指令。也称 effective instruction (有效指令)。

ADA A high-level language for real time processing problems.

ADA语言 一种用于实时处理问题的高级语言。

addend One of the operands used in carrying out the function of addition. The addend is a number which is added to another number called the augend, producing a result called the sum.

加数 加法运算中的操作数之一,是被加到另一个称为被 加数的数上去的数,二者产生和数。

adder A device capable of performing the function of addition using digital signals. It receives three inputs(representing addend, augend and a carry digit) and will provide two outputs(representing the sum and a carry digit).

Also known as digital adder, it is sometimes more precisely known as a full adder, to distinguish it

from half-adder. The term adder usually implies three-input adder and full adder.

加法器 一种能用数字信号进行加法运算的装置。它可以接收三个输入(代表加数、被加数和进位数字),并提供两个输出(表示和数及进位数)。也称digital adder(数字加法器),有时为了区别于半加器需准确地称为全加器。"加法器"这个术语通常含有三输入加法器和全加器的意思。

adder-subtracter A device which acts as either an adder or a subtracter.

加減器 可起加法器作用或减法器作用的装置。

addition An arithmetic operation which produces the sum of two operands-the addend and augend.

加法 产生两个操作数(加数和被加数)之和的算术运算过程。

additional character Synonymous with special character.

附加符号 与special character (特殊字符)同义。

addition record A new record added to a file during updating, without causing the amendment or deletion of an existing record.

追加记录,补充记录 更新时在文件中新建立的记录**,不**会使原有记录被修改或删除。

addition without carry Synonymous with Exclusive-Or operation. Boolean algebra, logic.

无进位数加法 与 Exclusive-Or operation ("异"操作)同义。参见Boolean algebra (布尔代数)、logic(逻辑)。
address 1. An identification by a name, label or

tag of a register, storage location or other source or destination of data.2. Used as a verb, to indicate a location.3. That part of an instruction which specifies the location of an operand involved in the instruction.

地址, 寻址, 编址 1.标识寄存器、存储单元或其他 数据源或数据目的地的名字、标记或特征。2.用作动 词 时, 意指标明位置。3.指令码的一部分, 它规定指令码中 所 包含的运算数的位置。

address computation An operation on the address part of a program instruction.

地址计算 根据程序指令的地址部分而进行的运算。 address, direct Synonymous with absolute address。 直接地址 与 absolute address (绝对地址)同义。

address format The construction of the address part of an instruction.

地址格式 指令中地址部分的结构形式。
address, machine Synonymous with absolute address.

机器地址 与 absolute address (绝对地址)同义。 address mapping Conversion of data representing the physical location of records and assigning records to storage locations, e.g. the translation of a virtual address to an absolute address.

地址映射,地址变换 将表示记录的实际存储单元的数据 和确定记录的数据变换成存储单元,例如将虚拟地址变换成 绝对地址。