BOSGINSTRUCTION'SET DATA TRANSFER INSTRUCTIONS

MOV-MOV Destination, Souther 12 39 49 VOM

The Mov instruction copies a world on byte of data from a specified source can be a register, a memory location or an immediate number. The source and destination cannot both be memory locations. They must both be of the same type (bytes or worlds) Movinstruction does not affect any flag. D MOV CX, 037 AH b Put immediate nummber 037A > MOV BL, [437 AH] copy byte in Ds at offset 437 AH Copy byte content of regist > MOV AX, BX above instituction

[XO7, JOVOM < HI-222MbboAbb

BX to AX COPZ byte from memorzat 103 of [Xa] additions = EATES.

OVERTITIES DERFIX ES

8086 INSTRUCTION SET > MOV DS. BX COPY WORLD FROM BX to DS
Register > MOV RERESULT[BP], AX COPY AX to montated to styd no brown two memory locations; Monvey A metalogie e Aleto the firest location bno somme soll man sAttitothe second; it sol con envitaged gramam and EA of the firest memory (26 NOW 510 23/ FOL) 39 Fot smlocation in sun of the um de dis place ment Flesp polt kno toothe for Represented by RESULTS ANTEO mediate normal bent of BP. HATEL HORETO to 20 mi offed to Physical rodness = EA+55 Same as the abov. > MOV ES: RESULTS [BP], AX above instruction, BX to AX but Physical. COP3 POSTE FREDRINGEROUS CH adA address-EAH JOS of [XO] address = EA+ES, because of the segme Overnide penfix Es

XCHGr - XCHGr Destination, Source

The XC HG instruction exchanges the content of a register with the content of another register on with the content of memory location(s). It cannot directly exchange the content of two memory tocation locations. The source and destination must both be of the same type (bytes on words). The segment Registers Cannot be used in this instruction. The This instruction does not affect any flag. leight all all

Load Bx with offset of > LEABX, PRICES

> LEABP, SS: STACK_TOP Load BP with offset displace ment 1326H

end the Allin Ds to Ds

of STACK-TOP inss

>LEACX, [BX] [DI] Load CX with EA = FORDXT

[ID] for displacement of 1928H

LDS-LDS Register, Memory address of the first world as purchase exchanges to HOX soll

This instruction loads new values into the specified register and into the DS register from four successive memory locations. The worlds from two memory locationsxis copied into the specified register and the world from the next two memory locations is copied into the Ds negisters. LDS does not affect LEA BX, PRICES Loud BX with . gold gno

> LDS BX, [4326] COPY content of memory at displacement 4326H 22 M 90T 10AT2 to in Ds to Bl content of 4327H to BH. Copy content at dis placement of 9328H and 4329 Hin Ds to Ds register.

7 LDS SI, SPTR Copy content of memory at displacement SPTR and SPTR +1 in DS to SI register HARSE transport content of memory at 10 hopers 100 displacements SPTR+2 and tratas Ha of SPTR +3 in DS to Ds register. - DS: SI now points at story LES-LES Register, Memony address of

the firest world o known to tretues content of memory o

This instruction loads new values into the specified register and into the Es register from four successive memory locations. The world from the firest two memory locations in copied into the specified negister, and the world from the next next two memory

locations in copied into the Es register. LES does not affect any flag.

7 LES BX, [789 AH] Copy content of memory to know and to tropping at displacement 789AH bno starge stagmasolin DS to BL. content of

profession all of all mich 789BH + o BH content from to stain wood I memory at displacement DS is copied to ES negister

> LES DI, [BX] & Copy content of memory at offset [BX] and offset [BX] the Es registen

71 in Ds to DI register. copy content of memory at

Offset [BX] 12 and [BX] +3 to Es register.

Knowing out fixs

ARITH METIC INSTRUCTIONS

ADD-ADD Destination. Source

ADC - ADC Destimation, Source 70,79,7A

These Finstructions add a number from some source to a number insome destination and the result in the specified destination. The ADC also adds the status of the carry flag to the Mesult. The sounce may be an immediate number, a register, or a memony location. The destination may be a register oram a memory location. The source and the destions destination must be of the same type (bytes on worlds). If you want to add a byte to a world. you must copy the byte to a world location byte of the world

with o's before adding. Flags affected.

AF, CF, OF, SF, ZF., Noif Doil 290 20A - 20A

Horfood Brown of 91

ARITH METTL INSTRUCTIONS

> ADD AL, 79 H Add immediate number 74H The content of Al. Result in Al

SOLA SAT. Moitsmitzeb des content of BLI pluse conny

Status to content of CL

> ADD DX, BX Add content of BX to content > ADD DX, EST] A.

Add world from memory at 19 5-170 DISTER OTHER PO Offset [st] in Ds to content of > ADCEAL, PRICES [BX] Add byte from

effective address

PRICES [BX] Plus canny status to content

JA 20 0 f A. Add content of > ADD AL, PRICES [BX] memory at effective address PRICES [BX] to AL