

## DOS COMMAND TO ASSEMBLING AND DEBUGE THE ASM FILE

```
DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Progra...
The DOSBox Team http://www.dosbox.com

Z:\>SET BLASTER=A220 I7 D1 H5 T6

Z:\>mount x D://DOS
Drive X is mounted as local directory D://DOS\

Z:\>x:/

X:\>nasm p559_1.asm -0 p559_1.com
nasm: error: unrecognised option '-0'
nasm: error: more than one input file specified
type 'nasm -h' for help

X:\>nasm p559_1.asm -o p559_1.com

X:\>afd p559_1

AFD-Pro is done

X:\>afd p559_1.com

AFD-Pro is done

X:\>_
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DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Progra...
type 'nasm -h' for help

X:\>nasm p559_1.asm -o p559_1.com

X:\>afd p559_1

AFD-Pro is done

X:\>afd p559_1.com

AFD-Pro is done

X:\>nasm p559_2.asm -o p559_2.com

X:\>afd p559_2.com

AFD-Pro is done

X:\>nasm p559_3.asm -o p559_3.com

X:\>afd p559_3.com

AFD-Pro is done

X:\>_
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# TASK: 01

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Progra...																																																																																																																				
AX 1234	SI 0000	CS 19F5	IP 010C	Stack +0 0000	Flags 7200																																																																																																															
BX ABFC	DI 0000	DS 19F5		+2 20CD																																																																																																																
CX B100	BP 0000	ES 19F5	HS 19F5	+4 9FFF	OF DF IF SF ZF AF PF CF																																																																																																															
DX B800	SP FFFE	SS 19F5	FS 19F5	+6 EA00	0 0 1 0 0 0 0																																																																																																															
CMD >				<table><tr><th>1</th><th>0</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th></tr><tr><td>DS:0100</td><td>B8</td><td>34</td><td>12</td><td>BB</td><td>FC</td><td>AB</td><td>B9</td><td>00</td></tr><tr><td>DS:0108</td><td>B1</td><td>BA</td><td>00</td><td>B8</td><td>01</td><td>D8</td><td>B8</td><td>00</td></tr><tr><td>DS:0110</td><td>4C</td><td>CD</td><td>21</td><td>04</td><td>31</td><td>D2</td><td>31</td><td>C0</td></tr><tr><td>DS:0118</td><td>89</td><td>56</td><td>E4</td><td>89</td><td>46</td><td>E6</td><td>C7</td><td>46</td></tr><tr><td>DS:0120</td><td>F6</td><td>00</td><td>00</td><td>8B</td><td>46</td><td>F6</td><td>D1</td><td>E0</td></tr><tr><td>DS:0128</td><td>D1</td><td>E0</td><td>C5</td><td>5E</td><td>D8</td><td>01</td><td>C3</td><td>8B</td></tr><tr><td>DS:0130</td><td>07</td><td>8B</td><td>57</td><td>02</td><td>85</td><td>D2</td><td>75</td><td>04</td></tr><tr><td>DS:0138</td><td>85</td><td>C0</td><td>74</td><td>1C</td><td>C7</td><td>46</td><td>DC</td><td>00</td></tr><tr><td>DS:0140</td><td>00</td><td>8E</td><td>5E</td><td>FC</td><td>83</td><td>7D</td><td>0E</td><td>00</td></tr><tr><td>DS:0148</td><td>74</td><td>09</td><td>8B</td><td>46</td><td>F2</td><td>48</td><td>3B</td><td>46</td></tr></table>												1	0	1	2	3	4	5	6	7	DS:0100	B8	34	12	BB	FC	AB	B9	00	DS:0108	B1	BA	00	B8	01	D8	B8	00	DS:0110	4C	CD	21	04	31	D2	31	C0	DS:0118	89	56	E4	89	46	E6	C7	46	DS:0120	F6	00	00	8B	46	F6	D1	E0	DS:0128	D1	E0	C5	5E	D8	01	C3	8B	DS:0130	07	8B	57	02	85	D2	75	04	DS:0138	85	C0	74	1C	C7	46	DC	00	DS:0140	00	8E	5E	FC	83	7D	0E	00	DS:0148	74	09	8B	46	F2	48	3B	46		
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# Task: 02

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Progra...																										
AX	FFFF	SI	0000	CS	19F5	IP	0111	Stack	+0	0000	Flags	7200														
BX	000A	DI	0000	DS	19F5										+2	20CD										
CX	000A	BP	0000	ES	19F5	HS	19F5										+4	9FFF	OF	DF	IF	SF	ZF	AF	PF	CF
DX	0005	SP	FFFE	SS	19F5	FS	19F5										+6	EA00	0	0	1	0	0	0	0	0
CMD >																										
1																										
0 1 2 3 4 5 6 7																										
DS:0100 B3 0A BA 05 00 88 D9 89																										
DS:0108 D0 B0 12 B8 34 12 B8 FF																										
DS:0110 FF B8 00 4C CD 21 31 C0																										
DS:0118 89 56 E4 89 46 E6 C7 46																										
DS:0120 F6 00 00 8B 46 F6 D1 E0																										
DS:0128 D1 E0 C5 5E D8 01 C3 8B																										
DS:0130 07 8B 57 02 85 D2 75 04																										
DS:0138 85 C0 74 1C C7 46 DC 00																										
DS:0140 00 8E 5E FC 83 7D 0E 00																										
DS:0148 74 09 8B 46 F2 48 3B 46																										
2																										
0 1 2 3 4 5 6 7 8 9 A B C D E F																										
DS:0000 CD 20 FF 9F 00 EA F0 FE AD DE 1B 05 C5 06 00 00																										
DS:0010 18 01 10 01 18 01 92 01 01 01 01 00 02 FF FF FF																										
DS:0020 FF FF FF FF FF FF FF FF FF FF FF FF EB 19 C0 11																										
DS:0030 A2 01 14 00 18 00 F5 19 FF FF FF FF 00 00 00 00																										
DS:0040 05 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00																										
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1 Step 2ProcStep 3Retrieve 4Help ON 5BRK Menu 6 7 up 8 dn 9 le 10 ri																										

## Task:03

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Progra...

AX 0024	SI 0000	CS 19F5	IP 0112	Stack +0 0000	Flags 7214
BX 0000	DI 0000	DS 19F5		+2 20CD	
CX 001A	BP 0000	ES 19F5	HS 19F5	+4 9FFF	OF DF IF SF ZF AF PF CF
DX 0000	SP FFFE	SS 19F5	FS 19F5	+6 EA00	0 0 1 0 0 1 1 0

CMD >

010F 050600 ADD AX,0006  
0112 050600 ADD AX,0006  
0115 B8004C MOV AX,4C00  
0118 CD21 INT 21  
011A E489 IN AL,[89]  
011C 46 INC SI  
011D E6C7 OUT [C7],AL  
011F 46 INC SI  
0120 F60000 TEST [BX+SI],00

1

0 1 2 3 4 5 6 7  
DS:0000 CD 20 FF 9F 00 EA F0 FE  
DS:0008 AD DE 1B 05 C5 06 00 00  
DS:0010 18 01 10 01 18 01 92 01  
DS:0018 01 01 01 00 02 FF FF FF  
DS:0020 FF FF FF FF FF FF FF FF  
DS:0028 FF FF FF FF EB 19 C0 11  
DS:0030 A2 01 14 00 18 00 F5 19  
DS:0038 FF FF FF FF 00 00 00 00  
DS:0040 05 00 00 00 00 00 00 00  
DS:0048 00 00 00 00 00 00 00 00

2

0 1 2 3 4 5 6 7 8 9 A B C D E F  
DS:0000 CD 20 FF 9F 00 EA F0 FE AD DE 1B 05 C5 06 00 00 = f.Ω≡■ ¡|..†...  
DS:0010 18 01 10 01 18 01 92 01 01 01 01 00 02 FF FF FF .....ff. ....  
DS:0020 FF FF FF FF FF FF FF FF FF FF FF FF EB 19 C0 11 .....δ.L.  
DS:0030 A2 01 14 00 18 00 F5 19 FF FF FF FF 00 00 00 00 6.....J. ....  
DS:0040 05 00 00 00 00 00 00 00 00 00 00 00 00 00 .....

1 Step

2ProcStep

3Retrieve

4Help ON

5BRK Menu

6

7 up

8 dn

9 le

10 ri