PROGRAMMER PRELIMINARY GUIDE SSI2001

Introduction:

The SSI2001 Sound product by Innovation uses the capabilities of the 6581 "SID" chip. Attached is manufacturers information on the 6581 for reference.

The SSI2001 was designed to afford a very simple way to convert programs written with sound effects for the Commodore computer to MS-DOS based computers.

The program conversation is simple:

Rule 1:   All "POKE" commands (BASIC) become "OUT" commands.

   Note: If working machine code make equivalent change.

Rule 2:   The sound standard port is defined as the I/O port at address decimal 640

   Note: If working machine code use hex equivalent.

   Note: Alternative port address are available if I/O port conflict occurs.

Attached are two examples of sound test programs one in Commodore format and one in SSI2001 MS-DOS format for your review.
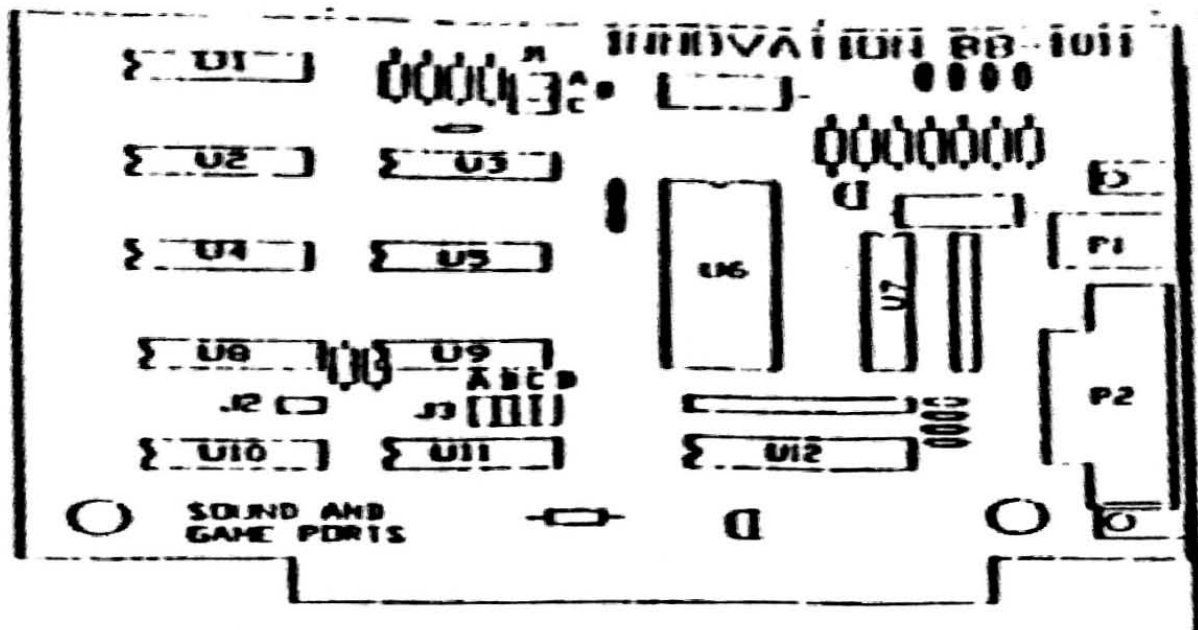
Any questions call 414-693-3416

COMMODORE FORMAT

```
5 S=640
10 FOR L=S TO S+24:POKE L,0:NEXT
20 POKE S+5,9:POKE S+6,0
30 POKE S+24,15
40 READ HF,LF,DR
50 IF HF<0 THEN END
60 POKE S+1,HF:POKE S,LF
70 POKE S+4,33
80 FOR T=1 TO DR:NEXT
90 POKE S+4,32:FOR T=1 TO 50:NEXT
100 GOTO 40
110 DATA 25,177,250,28,214,250
120 DATA 25,177,250,25,177,250
130 DATA 25,177,125,28,214,125
140 DATA 32,94,750,25,177,250
150 DATA 28,214,250,19,63,250
160 DATA 19,63,250,19,63,250
170 DATA 21,154,63,24,63,63
180 DATA 25,177,250,24,63,125
190 DATA 19,63,250,-1,-1,-1
```

MS-DOS FORMAT

```
5 S=640
10 FOR L=S TO S+24:OUT L,0:NEXT
20 OUT S+5,9:OUT S+6,0
30 OUT S+24,15
40 READ HF,LF,DR
50 IF HF<0 THEN END
60 OUT S+1,HF:OUT S,LF
70 OUT S+4,33
80 FOR T=1 TO DR:NEXT
90 OUT S+4,32:FOR T=1 TO 50:NEXT
100 GOTO 40
110 DATA 25,177,250,28,214,250
120 DATA 25,177,250,25,177,250
130 DATA 25,177,125,28,214,125
140 DATA 32,94,750,25,177,250
150 DATA 28,214,250,19,63,250
160 DATA 19,63,250,19,63,250
170 DATA 21,154,63,24,63,63
180 DATA 25,177,250,24,63,125
190 DATA 19,63,250,-1,-1,-1
```

INNOVATION 88-1011

SOUND AND GAME PORTS

Additional information on the jumpers is as follows.

J1 Joystick Sensitivity
    A = Low
    B = Normal *
    C = High

J3 Sound Port Address
    A = 280H, 640D *
    B = 2A0H, 672D
    C = 2C0H, 704D
    D = 2E0H, 736D

J2 Joystick Enable
    Inserted = Enabled *
    Removed = Disabled

* = Standard Setting

Installation Instructions
1. Turn off power to computer.
2. Remove cover. (See Owners Manual)
3. Remove or disable present game port (if installed).
   (If present game port can not be disabled, disable game port on 88-1011 card. Only one game port may be used.)
4. Locate empty expansion slot.
5. Remove cover plate from empty expansion slot.
6. Insert 88-1011 sound board, into empty slot.
7. Replace cover.
8. Attach audio amplifier to top RCA (Phono) jack.
9. Attach joystick (Optional) to lower DA15S jack.

PROGRAMERS UPDATE

Addendum:

It is highly recommended that at least two of the four sound port addresses be supported, i.e. the customer can select from either "A" or "B" etc.

There is a possibility that some accessory boards for IBM compatible will come in conflict with one of the four addresses (ABCD).