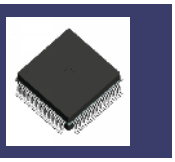

Microcontroller

With a Nitrom 68HC908QY4 and a Hitachi LM052L LC Display I built a little terminal.
The terminal is equipped with a RS232 connector and a debug port, that works with the Motorola User Monitor. I didn´t solderd a level shifter on the board, because I use my little pod, on the controller page or use it directly on a controller. Because the terminal only has to receive characters, I wrote a littele interrupt driven RS232 receive routine. I utilize the KBD interrupt on PTA0 and call the GetbBte ROM routine to receive the character.
The ISR looks like this.
KbdIsr:

```
pshh                    ;save H-reg
sei                     ;Disable Interrupts
mov  #%00000010,KBIER   ;disable KB-Int
bclr PTA0,PTA           ;initialize PTA0 for serial comms
jsr GetByte             ;call GetByte at adress $2D6b
sta data                ;store the received character in RAM
mov #%00000100,KBSCR    ;Clear Pending KBD interrupts
mov #%00000001,KBIER    ;enable Keyboard interrupts
cli                     ;enable ints
pulh                    ;get H-reg back
rti
```

You can find schematics here. **lcdschem.gif** The software is here **lcdterme.asm**. It would fit into the 1.5 kB Flash of the 68HC908QY1 or 68HC908QY2 too, but I had the 4 kB Version lying around so I used them.
Another display project is **Zwobots Display**. This project is programmed n C and uses a hardware SCI.