

| HD44780 std | Signal       | PIC pin |                                       |
|-------------|--------------|---------|---------------------------------------|
| 1           | VSS(GND)     | 8 & 19  | Ground                                |
| 2           | VDD          | 20      | 5V                                    |
| 3           | V0(Kontrast) | -       | via 5K Poti+1k Resistor               |
| 4           | RS           | 22      |                                       |
| 5           | R/W          | 7       |                                       |
| 6           | E            | 21      |                                       |
| 7           |              |         |                                       |
| 8           |              |         |                                       |
| 9           |              |         |                                       |
| 10          |              |         |                                       |
| 11          | DB4          | 2       |                                       |
| 12          | DB5          | 3       |                                       |
| 13          | DB6          | 4       |                                       |
| 14          | DB7          | 5       |                                       |
| 15          | A            | 5V      | not used for Disp. Without Background |
| 16          | K            | GND     | not used for Disp. Without Background |

| A1J2 |                     |            | PINs 16F726 |    |            | A1J2           |
|------|---------------------|------------|-------------|----|------------|----------------|
|      | MCLR/VPP/RE3        | NC         | 1           | 28 | LD1 <-IN   | RB7/PGD 8      |
|      | RA0/AN0             | DB4 OUT -> | 2           | 27 | LD2 <-IN   | RB6/PGC 16     |
|      | RA1/AN1             | DB5 OUT -> | 3           | 26 | RESET <-IN | RB5 24         |
|      | RA2/AN2/VREF-/CVREF | DB6 OUT -> | 4           | 25 | NC         | RB4            |
|      | RA3/AN3/VREF+       | DB7 OUT -> | 5           | 24 | NC         | RB3/PGM        |
|      | RA4/T0CKI/C1OUT     | NC         | 6           | 23 | NC         | RB2            |
|      | RA5/AN4/SS/C2OUT    | RW OUT ->  | 7           | 22 | RS OUT ->  | RB1            |
|      | VSS                 | VSS Ground | 8           | 21 | E OUT ->   | RB0/INT        |
|      | OSC1/CLKI/RA7       | LED 1      | 9           | 20 | VDD +5V    | VDD            |
|      | OSC2/CLKO/RA6       | LED 2      | 10          | 19 | VSS Ground | VSS            |
| 2    | RC0/T1OSO/T1CKI     | data0 <-IN | 11          | 18 | data7 <-IN | RC7/RX/DT 9    |
| 6    | RC1/T1OSI/CCP2      | data1 <-IN | 12          | 17 | data6 <-IN | RC6/TX/CK 15   |
| 7    | RC2/CCP1            | data2 <-IN | 13          | 16 | data5 <-IN | RC5/SDO 14     |
| 1    | RC3/SCK/SCL         | data3 <-IN | 14          | 15 | data4 <-IN | RC4/SDI/SDA 10 |

From SYS80  
To Display

| 80B   | A1J2 | PIC    |
|-------|------|--------|
| D0    |      | 2 RC0  |
| D1    |      | 6 RC1  |
| D2    |      | 7 RC2  |
| D3    |      | 1 RC3  |
| D4    |      | 10 RC4 |
| D5    |      | 14 RC5 |
| D6    |      | 15 RC6 |
| D7    |      | 9 RC7  |
|       |      |        |
| LD1   |      | 8 RB7  |
| LD2   |      | 16 RB6 |
|       |      |        |
| RESET |      | 24 RB5 |