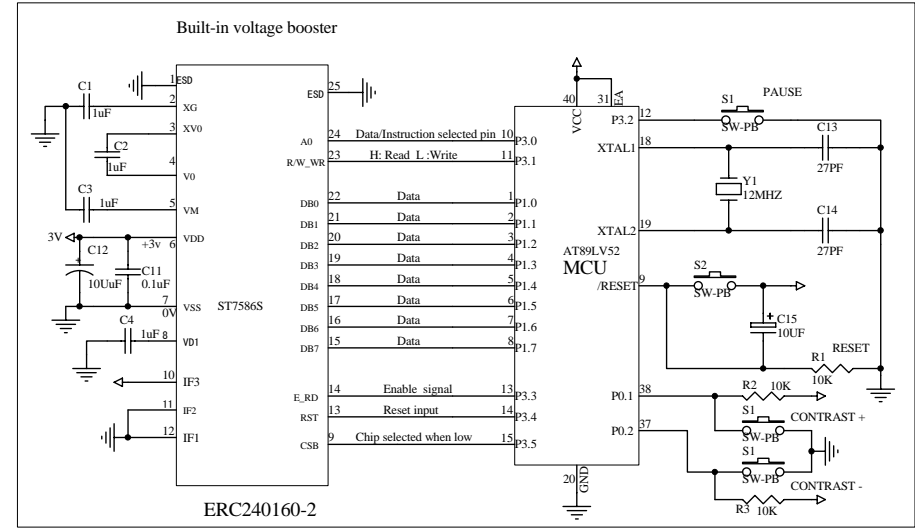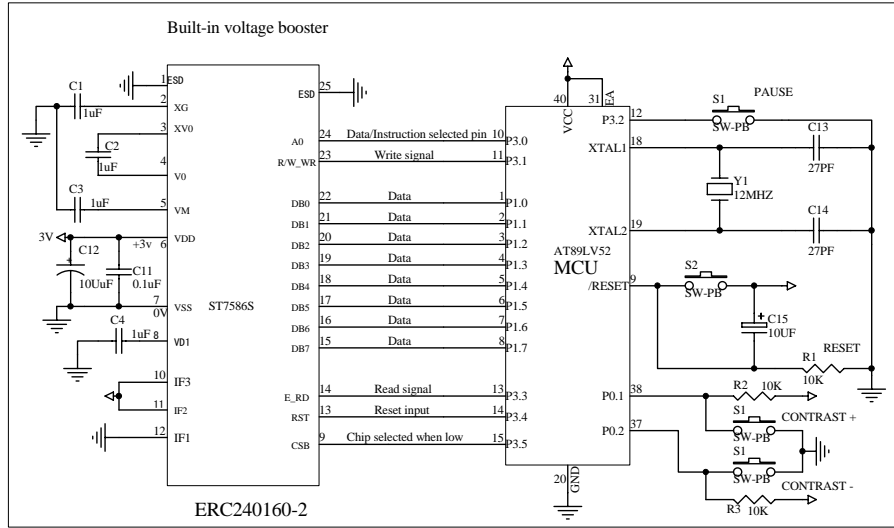# Interfacing LCD Modules to the AT89LV52 MCU
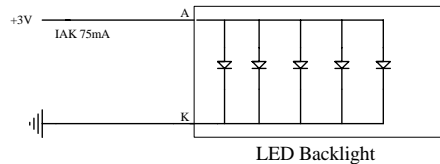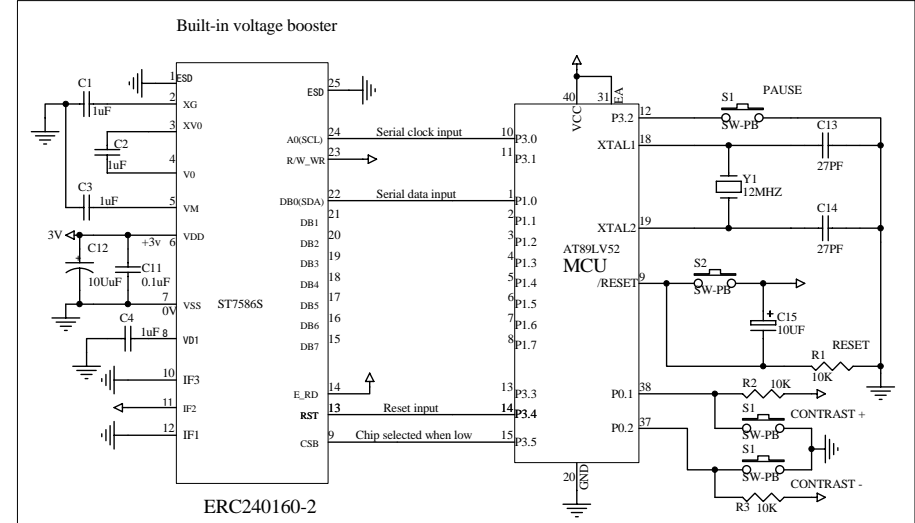
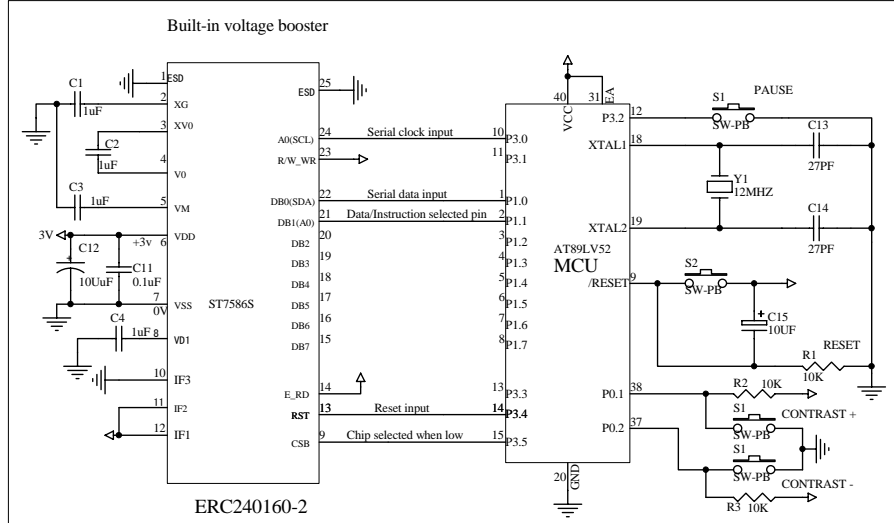The Parallel (8080 8bit Series MCU)Reference Example

Built-in voltage booster

ST7586S

ERC240160-2

AT89LV52 MCU

A0 — 24 — Data/Instruction selected pin — 10 P3.0
R/W_WR — 23 — Write signal — 11 P3.1
DB0 — 22 — Data — 1 P1.0
DB1 — 21 — Data — 2 P1.1
DB2 — 20 — Data — 3 P1.2
DB3 — 19 — Data — 4 P1.3
DB4 — 18 — Data — 5 P1.4
DB5 — 17 — Data — 6 P1.5
DB6 — 16 — Data — 7 P1.6
DB7 — 15 — Data — 8 P1.7
E_RD — 14 — Read signal — 13 P3.3
RST — 13 — Reset input — 14 P3.4
CSB — 9 — Chip selected when low — 15 P3.5

PAUSE — S1 — SW-PB
Y1 12MHZ
C13 27PF
C14 27PF
/RESET — S2 — SW-PB
C15 10UF
RESET
R1 10K
R2 10K
CONTRAST + — S1 — SW-PB
CONTRAST − — S1 — SW-PB
R3 10K

C1 1uF, C2 1uF, C3 1uF, C4 1uF, C11 0.1uF, C12 10UuF
3V, +3v

The Parallel (6800 8bit Series MCU)Reference Example

Built-in voltage booster

ST7586S

ERC240160-2

AT89LV52 MCU

A0 — 24 — Data/Instruction selected pin — 10 P3.0
R/W_WR — 23 — H: Read L :Write — 11 P3.1
DB0 — 22 — Data — 1 P1.0
DB1 — 21 — Data — 2 P1.1
DB2 — 20 — Data — 3 P1.2
DB3 — 19 — Data — 4 P1.3
DB4 — 18 — Data — 5 P1.4
DB5 — 17 — Data — 6 P1.5
DB6 — 16 — Data — 7 P1.6
DB7 — 15 — Data — 8 P1.7
E_RD — 14 — Enable signal — 13 P3.3
RST — 13 — Reset input — 14 P3.4
CSB — 9 — Chip selected when low — 15 P3.5

The Serial (4 LINE SPI S8)Reference Example

Built-in voltage booster

ST7586S

ERC240160-2

AT89LV52 MCU

A0(SCL) — 24 — Serial clock input — 10 P3.0
R/W_WR — 23 — — 11 P3.1
DB0(SDA) — 22 — Serial data input — 1 P1.0
DB1(A0) — 21 — Data/Instruction selected pin — 2 P1.1
E_RD — 14 — — 13 P3.3
RST — 13 — Reset input — 14 P3.4
CSB — 9 — Chip selected when low — 15 P3.5

The Serial (3 LINE SPI S9)Reference Example

Built-in voltage booster

ST7586S

ERC240160-2

AT89LV52 MCU

A0(SCL) — 24 — Serial clock input — 10 P3.0
R/W_WR — 23 — — 11 P3.1
DB0(SDA) — 22 — Serial data input — 1 P1.0
E_RD — 14 — — 13 P3.3
RST — 13 — Reset input — 14 P3.4
CSB — 9 — Chip selected when low — 15 P3.5

+3V IAK 75mA
A
K
LED Backlight

RST pin is optional. When RST pin is not used ,connect the pin to VDD