

CSM12D MODULE

QUICKSTART GUIDE

GETTING STARTED

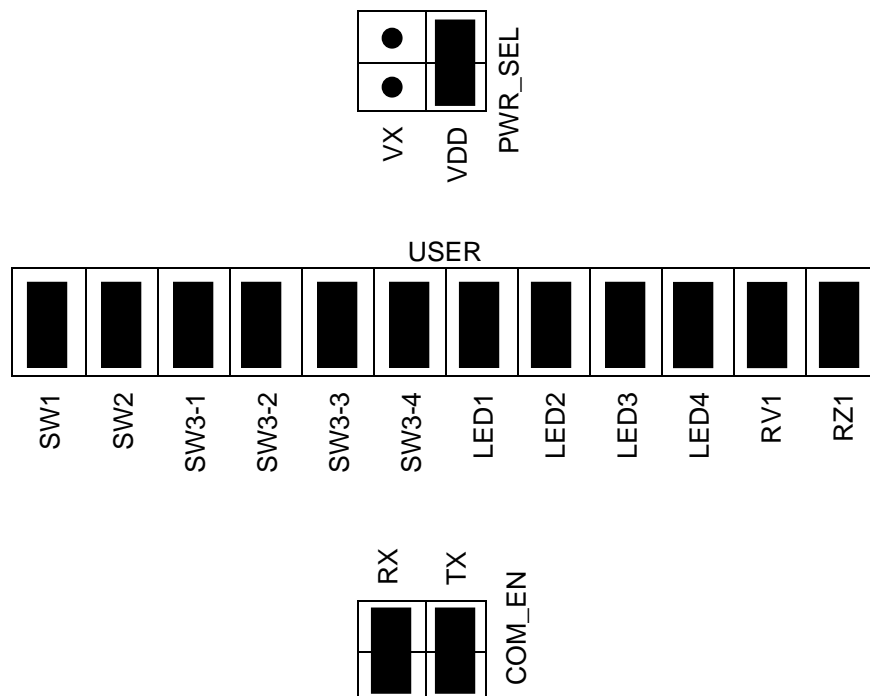
The CSM12D is a feature-rich module designed for use in an educational environment. The Module supports both the MC9S12XDT512 and the MC9S12DT256 MCU's. This document will help the user get started using the module quickly. Although the module is designed for use in conjunction with the MCU Project Board, the module may also be used as a stand-alone development platform. The following procedure shows the user how to setup the module for normal, stand-alone operation.

UNPACK

1. Open the shipping carton and remove the contents. Verify all Packing List items have been received.
2. Inspect the CSM12D for any damage, which may have occurred during shipping. If damage is found, refer to the Technical Information Center insert found in the product kit.

HARDWARE SETUP

1. To begin, place the CSM12D on a flat surface. Ensure sufficient space is available around the module to work safely.
2. Configure the option select headers on the CSM12D as shown below.



3. Connect a serial cable to the COM port on the CSM12D. Connect the other end to an available COM port on the Host PC.
4. Open a terminal, such as AxIDE, and configure for 9600,8,1,N.
5. Plug the transformer into a standard, 120VAC, wall outlet. Connect the transformer power cable to the PWR jack on the CSM12D.
6. Verify the V_{DD} LED is lit.
7. The following text will display in the terminal window:

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CSM12D Educational Module

8. The LED's will turn on and off in a rotating pattern – on one-at-a-time then off one-at-a-time. This pattern will repeat as long as power is applied to the board
9. The MCU module is now ready for use.

TROUBLESHOOTING

If the module fails to perform as expected, follow the steps outlined below.

1. Ensure all jumpers are installed as shown above.
2. Measure voltage input at PWR connector. Input voltage should measure between +7V and +18V. +9V is typical
3. Ensure serial cable is connected to correct COM port on PC and securely attached to COM connector on module. Ensure terminal window is configured correctly – 9600,8,1,N.
4. Contact Freescale Technical Information Center for further assistance. Refer to the Technical Information Center insert found in the product kit

PROGRAMMING SUPPORT

The CSM12D with MC9S12DT256 MCU installed contains a serial monitor to interface to Freescale's CodeWarrior. This allows the user to program and debug application code using the serial COM port.

The CSM12D board with MC9S12XDT512 MCU installed requires an external BDM for programming and debug.