

iSerial Feature on MCS7840/MCS7820:

Unlike PCI based COM ports, USB based COM Ports can be hot plugged from the host. In case of a host with multiple USB ports, USB target device like MCS7840 can get connected to any of the USB host ports.

For normal USB based Serial adapter (i.e USB Serial adapter without iSerial feature), Windows operating system allocates different COM# when connected to different USB ports.

Eg1 :- With a host having 4 USB Ports, Normal USB to Serial adapter can get detected as below : (USB to Single Serial adapter used as example below)

USB host Port 1 : COM x
USB host Port 2 : COM y
USB host Port 3 : COM z
USB host Port 4 : COM a

By writing unique Serial Number into EEPROM, each of the MCS7840 & MCS7820 boards can be uniquely identified by Windows OS. **MCS7820/MCS7840 can support iSerial feature with EEPROM only, when unique serial number programmed onto EEPROM.**

Eg2 :- With a host having 4 USB Ports, MCS7840 EVB_X with Serial number “mcs00001” written into EEPROM & MCS7820 EVB_Y with Serial number “mcs00002” written into EEPROM. COM# of the Serial ports of 7840, 7820 shown below when connected to one of the host USB ports.

7840

High-Speed USB Serial Port (COM 3)
High-Speed USB Serial Port (COM 4)
High-Speed USB Serial Port (COM 5)
High-Speed USB Serial Port (COM 6)

7820

High-Speed USB Serial Port (COM 5)
High-Speed USB Serial Port (COM 6)

Above MCS7840, MCS7820 boards would be allocated same COM# irrespective of the USB host port connected in a given PC.

This feature helps in retaining same COM# irrespective of the USB host port in a given system. And helps in avoiding user re-assigning applications to different port number when connected to different USB port.