PSOC - Devkit8000 Interface ¶

The Devkit8000 can easily communicate with the PSOC boards used in other courses at ASE.
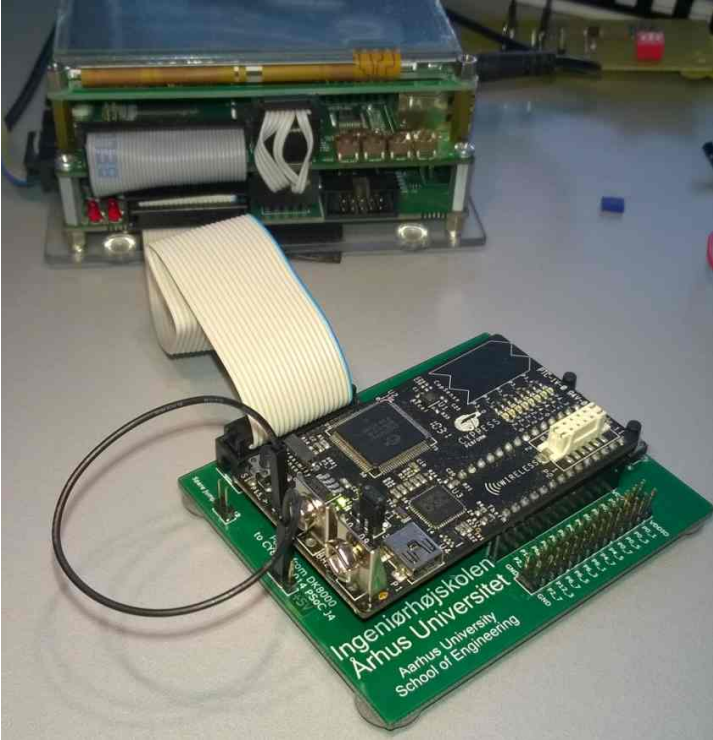
It is however IMPORTANT to note that:

- The Add-On Board uses 3.3 volt I/O, and the PSOC board must be configured to do the same!
- The Devkit8000 must be configured to use the SPI connection on front connector (J4). The is accomplished by typing the following on the Devkit8000:

```
echo 0x3 > /sys/class/cplddrv/cpld/spi_route_reg
echo 0x1 > /sys/class/cplddrv/cpld/ext_serial_if_route_reg
```

See more details in the **CPLD configuration** section on this wiki.

PSOC3 CapSense Kit

A small adapter PCB has been made to allow easy interfacing between the Devkit8000 Add-on Board and the PSOC3/5 CapSense Demo Boards.
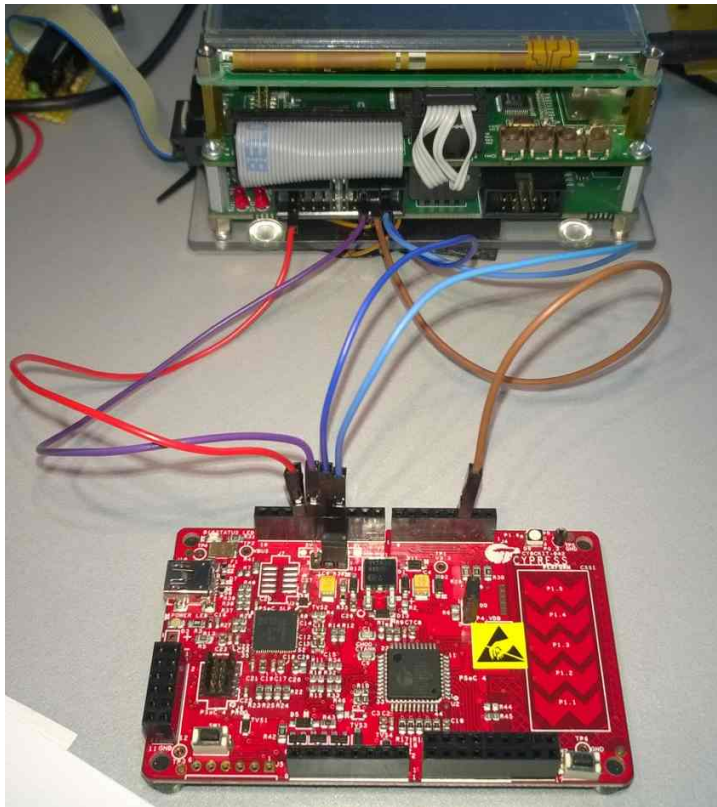

Connections are:

Devkit	Signal	PSOC3
J9.1	MOSI	J2.11 (P6 [5])
J9.2	MISO	J3.13 (P2 [7])
J9.3	SS0	J2.10 (P6 [4])
J9.4	SS3	J2.13 (P2 [6])
J9.5	SCK	J3.11 (P6 [7])
J9.9	SDA	J3.12 (P12 [3])
J9.11	SCL	J2.12 (P12 [2])
J9.20	GND	J2.14 (GND)

An SPI Slave PSOC3 demo project has been made:
PSOC3 Project Archive
PSOC3 Project Documentation

PSOC4 Pioneer Kit

The two boards may be connected using a five SHORT test wires:

Connections are:

Devkit	Signal	PSOC4
J9.1	MOSI	J3.4 (P3 [0])
J9.2	MISO	J3.5 (P3 [1])
J9.3	SS0	J4.3 (P0 [7])
J9.5	SCK	J3.6 (P0 [6])
J9.20	GND	J3.7 (GND)

An SPI Slave PSOC4 demo project has been made:
   PSOC4 Project Archive
   PSOC4 Project Documentation

   psoc_devkit8000_interface_board_72dpi.jpg (49,405 KB) Peter Høgh Mikkelsen, 02 jan 2014 14:32
   devkit8000_psoc3.jpg (69,381 KB) Peter Høgh Mikkelsen, 19 mar 2014 10:08
   devkit8000_psoc4.jpg (81,012 KB) Peter Høgh Mikkelsen, 19 mar 2014 10:08