The AD8INPUT program reads all eight analog inputs of the

MSC1210 and outputs the values along with other A/D relevant

information via the serial interface.

This example shows a simple method to convert the A/D HEX

values into a voltage value that is more readable. The

algorithm uses only long arithmetic and avoids any loss of

precision as it would be the case when using single precision

floating point arithmetic.

Also shown is the usage of the uVision simulator. The file

Debugger.INI defines a signal function that creates a voltage

ramp on AIN0. Toolbox buttons are defined for easy access to

this signal function. The other analog inputs are set to

random input voltages.

The example is available in three targets:

ISD51 - DAQ - 1.84MHz:

generates the program for the TI MSC1210-DAQ-EVM board that uses

1.8432MHz XTAL. It can be debugged using the ISD51 In-System

Debugger with 9600bps communication baudrate.

(Note: The XTAL is given in the Options - C51 dialog)

ISD51 - EVM - 11.0592MHz:

generates the program for the TI MSC1210 EVM board that uses

11.0592MHz XTAL. It can be debugged using the ISD51 In-System

Debugger with 9600bps communication baudrate.

Simulator:

generates the program for running without ISD51 (at 11.0592MHz)

or with testing with the uVision Simulator.

It should be noted that this example requires a common input

volatage and ground pin. It runs therefore only on a modified

hardware. We recommend to use the AD4Input and AD\_Interrupt

examples instead which runs on unmodified hardware.