Begin

Q: How to view this Block-Diagram?

A: Please follow sequentially the Items Designated as DO_1.1-->_1.3 , _2 , _3 .
To see details associated with each of them, please refer to corresponding item ( DO_1,2,.. ) in TABLE 1: The WIRE_LIST of this example.

B: Also, for more details about each module (SIM), please refer to the figures:

FIG 5 : S2A_BLK_DIA
FIG 6 : S5E_BLK_DIA
FIG 7 : S11A_BLK_DIA
FIG 8 : S901A_BLK_DIA

SIM: S2A_MAIN_INFINITE_LOOP
[1] The code of this module is automatically activated upon "power-up" of the EC chip. Using output ports OUT_1,2 this module initializes modules S5E and S11A.
[2] Also, output port OUT_5 of S2A (that issues continuous calls while in the "Infinite-Loop") activates the scheduler (module S11A).

SIM: S5E_TIMER0_CLOCK_MODULE
TIMER0 in Module S5E, repeatedly, sends a CLK_TIK via output port OUT_2 to input port IN_1 of the scheduler S11A.

SIM: S11A_REAL_TIME_SCHEDULER
Scheduler module S11A, repeatedly (with a user Defined PERIOD 1) upon each TIME-OUT executes a Calls (via its output port OUT_1).
Similarly, output ports OUT_2,3 of this Scheduler executes calls (with user defined PERIOD 2,3 respectively).

Output Ports OUT_1,2,3 of the scheduler module S11A, each Execute Periodic Subroutine Calls to activate Other Modules.
In this example we use module S901A as a place holder for future modules.

http://www.embedded-controller-code-maker.com/
http://www.game-blocks-code.com/