PROGRAM PLC\_PRG

VAR

CODE : Code ;

IN1 : LREAL ;

IN2 : LREAL ;

IN3 : LREAL ;

END\_VAR

IN1 := 10 ;

IN2 := 10 ;

IN3 := 10 ;

CODE (In1 := IN1 , In2 := IN2 , In3 := IN3 );

FUNCTION\_BLOCK Code

VAR\_INPUT

In1: LREAL;

In2: LREAL;

In3: LREAL;

END\_VAR

VAR\_OUTPUT

Out1: LREAL;

Out2: LREAL;

END\_VAR

VAR

TOTAL : LREAL ;

TOTAL\_dint : DINT ;

Array1 : ARRAY [1..100] OF LREAL ;

fbTimer : TON ; //instance of TON timer

TOTAL\_Time : TIME ;

bActivateTimer : BOOL ;

END\_VAR

TOTAL := In1 \* In2 \* In3 ;

IF TOTAL > 1 AND TOTAL < 100 THEN

TOTAL := EXP(TOTAL);

TOTAL\_dint := LREAL\_TO\_DINT (TOTAL);

Array1 [TOTAL\_dint] := TOTAL ;

TOTAL\_Time := LREAL\_TO\_TIME (TOTAL) ;

bActivateTimer := 1 ;

fbTimer (IN := TRUE, PT := TOTAL\_Time) ;

ELSIF TOTAL > 100 AND TOTAL < 10000 THEN

TOTAL := TOTAL \* TOTAL ;

TOTAL\_dint := LREAL\_TO\_DINT (TOTAL);

Array1 [TOTAL\_dint] := TOTAL ;

TOTAL\_Time := LREAL\_TO\_TIME (TOTAL) ;

bActivateTimer := 1 ;

fbTimer (IN := TRUE, PT := TOTAL\_Time) ;

ELSE

TOTAL := TOTAL \* 1000;

TOTAL\_dint := LREAL\_TO\_DINT (TOTAL);

Array1 [TOTAL\_dint] := TOTAL ;

TOTAL\_Time := LREAL\_TO\_TIME (TOTAL) ;

bActivateTimer := 1 ;

fbTimer (IN := TRUE, PT := TOTAL\_Time) ;

END\_IF;

IF fbTimer.Q THEN

(\* Outputs for Atomic SubSystem: '<Root>/Code 4' \*)

(\* Outport: '<Root>/Out1' incorporates:

\* Gain: '<S1>/Gff2' \*)

Out1 := 1.328E-5 \* In2;

(\* Outport: '<Root>/Out2' incorporates:

\* Sum: '<S1>/Sum2' \*)

Out2 := (In1 + In2) + In3;

(\* End of Outputs for SubSystem: '<Root>/Code 4' \*)

END\_IF;