



OPERATOR INTERFACE PRODUCTS APPLICATION NOTE

Subject: Using and Creating User Defined Function Blocks in ASIC-200

AN#1102

Date: 8/22/01

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Description: Using and Creating User Defined Function Blocks in ASIC-200

Affected Products: ASIC-200

Solution:

Use of Functions and Function Blocks

Functions in Structured Text

- Functions take one or more input parameters and return one output.
- They are only usable in structured text.
- They have no persistent data associated with them.

```
Output := function(IN1:=value, IN2:=12.34);
```

Function Blocks in Structured Text

- Function blocks must be defined like other symbols in the Symbol Manager.
- They can have multiple inputs and outputs.
- The function block designer may define persistent data associated with each block.

```
Fb.IN1 := 12.34;  
Fb.IN2 := TRUE;  
Fb();  
temp := Fb.OUT1;  
temp2 := Fb.OUT2;
```

Function Blocks in Ladder Logic

- Function blocks where the first input and first output are Boolean may be used in ladder logic.
- Ladder logic function blocks appear in the function block palette.

They are inserted just like the pre-defined function blocks