

StreamDevice: mbbo Records

Normal Operation

Depending on the format type, different record fields are used for output and input. The variable x stands for the written or read value.

DOUBLE format (e.g. %f):
Not allowed.

LONG format (e.g. %i):

If any of ZRVL ... FFVL is set (is not 0):

Output: $x=RVAL\&MASK$

Note that the record calculates RVAL by choosing one of ZRVL ... FFVL depending on VAL and by shifting it left by SHFT bits.

Input: $RBV=x\&MASK$

MASK is initialized to NOBT 1-bits shifted left by SHFT. If MASK==0 (because NOBT was not set) it is ignored, i.e. $x=RVAL$ and $RBV=x$.

If none of ZRVL ... FFVL is set (all are 0):

Output: $x=VAL$

Input: $VAL=x$

ENUM format (e.g. %{}):

Output: $x=VAL$

Input: $VAL=x$

STRING format (e.g. %s):

Output: Depending on VAL, one of ZRST ... FFST is written. VAL must be in the range 0 ... 15.

Input: If input is equal one of ZRST ... FFST, VAL is set accordingly. Other input strings are not accepted.

Initialization

During initialization, the @init handler is executed, if present. In contrast to normal operation, LONG input is put to RVAL as well as to RBV and converted by the record.

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