
BOUNDEDBUFFER SHARED RESOURCE

CADT Boundedbuffer

OPERATIONS

ACTION Put: $\mathbb{N}[i]$

ACTION Get: $\mathbb{N}[o]$

SEMANTICS

DOMAIN:

TYPE: *Boundedbuffer* = *Sequence(ANY)*

VARIANT: $\forall mb \in \text{Boundedbuffer} \bullet \text{Length}(mb) \leq \text{MAX}$

TIAL: $\text{Length}(\text{self}) = 0$

**IN-
INI-**

PRE: true

CPRE: $\text{Length}(\text{self}) \leq \text{MAX} - 1$

Put(r)

POST: $\text{self}^{\text{in}} = \text{self} + r$

PRE: true

CPRE: $1 \leq \text{Length}(\text{self})$

Get(s)

POST: $\text{self}^{\text{in}} = \text{self} + s$