

Unspecified Veriopt Theory

April 24, 2021

Contents

```
theory ASE2021
imports
  Tests.UnitTesting
  Graph.Values
begin

notation (latex)
  kind (-⟨-⟩)
```

```
intval-mod (IntVal b1.0 v1.0) (IntVal b2.0 v2.0) =
(if b1.0 ≤ 32 ∧ b2.0 ≤ 32
  then IntVal 32 (sint (word-of-int (v1.0 smod v2.0))))
  else IntVal 64 (sint (word-of-int (v1.0 smod v2.0))))
```

eval:rem

```
moduloSnippet =
irgraph
[(0, StartNode (Some 3) 4, VoidStamp),
 (1, ParameterNode 0, IntegerStamp 32 (− 2147483648) 2147483647),
 (2, ParameterNode 1, IntegerStamp 32 (− 2147483648) 2147483647),
 (3, FrameState [] None (Some [1, 2]) None, IllegalStamp),
 (4, SignedRemNode 4 1 2 None None 5,
  IntegerStamp 32 (− 2147483647) 2147483647),
 (5, ReturnNode (Some 4) None, VoidStamp)]
```

```
static-test moduloSnippet [(IntVal 32 (1)), (Intval 32 (-2147483648))] (IntVal 32  
(1))
```

```
end
```