

## **bool\_1**<sup>9,38</sup>

COM: bool\_1.begin

COM: bool\_1.summary

COM: bool\_1.intro

COM: BOOL\_DEFS

ABS:  $\mathbb{B}$  **bool**

ABS: tt **btrue**

ABS: ff **bfalse**

STM: bool\_wf

STM: btrue\_wf

STM: bfalse\_wf

ABS: if  $b$  then  $t$  else  $f$  fi **ifthenelse**

STM: ifthenelse\_wf

ABS:  $\uparrow b$  **assert**

ABS:  $i <_z j$  **lt\_int**

STM: assert\_wf

STM: comb\_for\_assert\_wf

STM: lt\_int\_wf

ABS:  $\neg_b b$  **bnot**

ABS:  $p \wedge_b q$  **band**

ABS:  $p \vee_b q$  **bor**

ABS:  $i \leq_z j$  **le\_int**

STM: btrue\_neq\_bfalse

STM: bnot\_wf

STM: band\_wf

STM: bor\_wf

STM: bor\_ff\_simp  
 STM: bor\_tt\_simp  
 STM: band\_ff\_simp  
 STM: band\_tt\_simp  
 STM: bnot\_bnot\_elim  
 STM: le\_int\_wf  
 STM: bnot\_thru\_band  
 STM: bnot\_thru\_bor  
 STM: bnot\_of\_le\_int  
 STM: bnot\_of\_lt\_int  
 ABS:  $b2i(b)$  **b2i**  
 STM: b2i\_wf  
 STM: comb\_for\_b2i\_wf  
 STM: b2i\_bounds  
 STM: comb\_for\_bnot\_wf  
 STM: comb\_for\_bor\_wf  
 STM: comb\_for\_band\_wf  
 ABS:  $p =_b q$  **eq\_bool**  
 STM: eq\_bool\_wf  
 ABS:  $p \oplus_b q$  **bxor**  
 STM: bxor\_wf  
 ABS:  $p \Rightarrow_b q$  **bimplies**  
 STM: bimplies\_wf  
 STM: comb\_for\_bimplies\_wf  
 ABS:  $p \Leftarrow_b q$  **rev\_bimplies**  
 STM: rev\_bimplies\_wf  
 ABS:  $(i =_0 j)$  **eq\_int**

STM: eq\_int\_wf  
ABS:  $x =_a y$  **eq\_atom**  
STM: eq\_atom\_wf  
COM: bool\_thms  
STM: bool\_cases  
STM: bool\_ind  
STM: decidable\_\_equal\_bool  
STM: bimplies\_weakening  
STM: bimplies\_transitivity  
STM: assert\_functionality\_wrt\_bimplies  
COM: bool\_tactics\_1  
COM: assert\_com  
STM: assert\_of\_tt  
STM: assert\_of\_ff  
STM: assert\_elim  
STM: not\_assert\_elim  
STM: eqtt\_to\_assert  
STM: eqff\_to\_assert  
STM: decidable\_\_assert  
STM: iff\_imp\_equal\_bool  
STM: assert\_of\_eq\_atom  
STM: assert\_of\_eq\_int  
STM: neg\_assert\_of\_eq\_int  
STM: neg\_assert\_of\_eq\_atom  
STM: assert\_of\_lt\_int  
COM: assert\_eqint\_rw  
STM: assert\_of\_eq\_int\_rw

STM: assert\_of\_eq\_bool  
STM: assert\_of\_bnot  
STM: assert\_of\_band  
STM: assert\_of\_bor  
STM: assert\_of\_bimplies  
STM: assert\_of\_le\_int  
COM: bool\_tactics  
STM: ite\_rw\_test  
STM: ite\_rw\_false  
STM: ite\_rw\_true  
STM: fun\_thru\_ite  
COM: old\_bool\_1\_stuff  
STM: eq\_int\_eq\_false  
STM: eq\_int\_eq\_true  
STM: eq\_int\_eq\_false\_elim  
STM: eq\_int\_eq\_true\_elim  
STM: eq\_int\_cases\_test  
STM: comb\_for\_lt\_int\_wf  
COM: bool\_1\_end