

t52_lattice2

(TMK3Gzgv2Df9eVDC486z6AosEsYH8aaCGkz)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v10_lattices : \iota \Rightarrow o$ be given. Let $v13_lattices : \iota \Rightarrow o$ be given. Let $l3_lattices : \iota \Rightarrow o$ be given. Let $k5_lattices : \iota \Rightarrow \iota$ be given. Let $k4_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u2_lattices : \iota \Rightarrow \iota$ be given. Let $v1_setwiseo : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge (l3_lattices \\ X0))) \Rightarrow &((v1_setwiseo (u2_lattices X0) (u1_struct_0 X0)) \Rightarrow (k5_lattices \\ X0 = &k4_binop_1 (u1_struct_0 X0) (u2_lattices X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v13_lattices \\ X0) \wedge &(l3_lattices X0)))) \Rightarrow ((v1_funct_1 (u2_lattices X0)) \wedge ((v1_funct_2 \\ (u2_lattices &X0) (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) \\ (u1_struct_0 &X0)) \wedge (v1_setwiseo (u2_lattices X0) (u1_struct_0 \\ X0)))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v13_lattices \\ X0) \wedge &(l3_lattices X0)))) \Rightarrow (k5_lattices X0 = k4_binop_1 (u1_struct_0 \\ X0) &(u2_lattices X0)) \end{aligned}$$