t16_zmodul01 (TMaTKnwoQk-wVpvcuc3qtRpN4TDqNuRegEqY)

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Let $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v2\_zmodul01 : \iota \Rightarrow o$ be given. Let $v3\_zmodul01 : \iota \Rightarrow o$ be given. Let $v4\_zmodul01 : \iota \Rightarrow o$ be given. Let $v5\_zmodul01 : \iota \Rightarrow o$ be given. Let $l1\_zmodul01 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_zmodul01 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_int\_1\ X0) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v2\_zmodul01\ X1) \wedge ((v3\_zmodul01\ X1) \wedge ((v4\_zmodul01\ X1) \wedge ((v5\_zmodul01\ X1) \wedge (l1\_zmodul01\ X1))))))))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1)) \Rightarrow (k1\_zmodul01\ X1\ (k4\_algstr\_0\ X1\ X2)\ X0 = k4\_algstr\_0\ X1\ (k1\_zmodul01\ X1\ X2\ X0))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_int\_1\ X0) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v2\_zmodul01\ X1) \wedge ((v3\_zmodul01\ X1) \wedge ((v4\_zmodul01\ X1) \wedge ((v5\_zmodul01\ X1) \wedge (l1\_zmodul01\ X1))))))))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1)) \Rightarrow (k1\_zmodul01\ X1\ (k4\_algstr\_0\ X1\ X2)\ X0 = k1\_zmodul01\ X1\ X2\ (k4\_xcmplx\_0\ X0))))) \tag{2}$$

Theorem 1

$$\forall X0.(v1\_int\_1\ X0) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v2\_zmodul01\ X1) \wedge ((v3\_zmodul01\ X1) \wedge ((v4\_zmodul01\ X1) \wedge ((v5\_zmodul01\ X1) \wedge (l1\_zmodul01\ X1))))))))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X1)) \Rightarrow (k1\_zmodul01\ X1\ X2\ (k4\_xcmplx\_0\ X0) = k4\_algstr\_0\ X1\ (k1\_zmodul01\ X1\ X2\ X0))))$$