thm_2Ebitstring_2Eops__to__v2w (TMX5UcaYj6HiyxBSZvVqzmks1MBjY5nNL8X)

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Let $ty\_2Esum\_2Esum : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A0.nonempty\ A0 \Rightarrow \forall A1.nonempty\ A1 \Rightarrow nonempty\ (ty\_2Esum\_2Esum\ A0\ A1) \tag{1}$$

Let $ty\_2Efcp\_2Efinite\_\_image : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A0.nonempty\ A0 \Rightarrow nonempty\ (ty\_2Efcp\_2Efinite\_\_image\ A0) \tag{2}$$

Definition 1 *We define* c_2Emin_2E_3D *to be* $\lambda A.\lambda x \in A.\lambda y \in A.inj\_\_o\ (x = y)$ *of type* $\iota \Rightarrow \iota$.

Let $ty\_2Ebool\_2Eitself : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A0.nonempty\ A0 \Rightarrow nonempty\ (ty\_2Ebool\_2Eitself\ A0) \tag{3}$$

Let $c\_2Ebool\_2Ethe\_\_value : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow c\_2Ebool\_2Ethe\_\_value\ A\_27a \in (ty\_2Ebool\_2Eitself\ A\_27a) \tag{4}$$

Let $ty\_2Enum\_2Enum : \iota$ be given. Assume the following.

$$nonempty\ ty\_2Enum\_2Enum \tag{5}$$

Let $c\_2Efcp\_2Edimindex : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow c\_2Efcp\_2Edimindex\ A\_27a \in (ty\_2Enum\_2Enum^{(ty\_2Ebool\_2Eitself\ A\_27a)}) \tag{6}$$

Definition 2 *We define* c_2Ebool_2ET *to be* $(ap\ (ap\ (\mathsf{c\_2Emin\_2E\_3D}\ (2^2))\ (\lambda V0x \in 2.V0x))\ (\lambda V1x \in 2.V$

Definition 3 *We define* c_2Ebool_2E_21 *to be* $\lambda A\_27a : \iota.(\lambda V0P \in (2^{A\_27a}).(ap\ (ap\ (\mathsf{c\_2Emin\_2E\_3D}\ (2^{A\_27}$

Definition 4 *We define* c_2Ebool_2EF *to be* $(ap\ (\mathsf{c\_2Ebool\_2E\_21}\ 2)\ (\lambda V0t \in 2.V0t))$.

Definition 5 *We define* c_2Emin_2E_3D_3D_3E *to be* $\lambda P \in 2.\lambda Q \in 2.inj\_\_o\ (p\ P \Rightarrow p\ Q)$ *of type* ι.

Definition 6 *We define* c_2Ebool_2E_7E *to be* $(\lambda V0t \in 2.(ap\ (ap$ c_2Emin_2E_3D_3D_3E $V0t)$ c_2Ebool_2EF

Definition 7 *We define* c_2Ebool_2E_2F_5C *to be* $(\lambda V0t1 \in 2.(\lambda V1t2 \in 2.(ap$ (c_2Ebool_2E_21 2) $(\lambda V2t \in 2$

Let $c\_2Enum\_2EREP\_\_num : \iota$ be given. Assume the following.

$$c\_2Enum\_2EREP\_\_num \in (omega^{ty\_2Enum\_2Enum}) \tag{7}$$

Let $c\_2Enum\_2ESUC\_\_REP : \iota$ be given. Assume the following.

$$c\_2Enum\_2ESUC\_\_REP \in (omega^{omega}) \tag{8}$$

Let $c\_2Enum\_2EABS\_\_num : \iota$ be given. Assume the following.

$$c\_2Enum\_2EABS\_\_num \in (ty\_2Enum\_2Enum^{omega}) \tag{9}$$

Definition 8 *We define* c_2Enum_2ESUC *to be* $\lambda V0m \in ty\_2Enum\_2Enum.(ap\ c\_2Enum\_2EABS\_\_num\ ($

Definition 9 *We define* c_2Emin_2E_40 *to be* $\lambda A.\lambda P \in 2^{A}.$**if** $(\exists x \in A.p\ (ap\ P\ x))$ **then** $(the\ (\lambda x.x \in A \wedge p$ *of type* $\iota \Rightarrow \iota$.

Definition 10 *We define* c_2Ebool_2E_3F *to be* $\lambda A\_27a : \iota.(\lambda V0P \in (2^{A\_27a}).(ap\ V0P\ (ap$ (c_2Emin_2E_40

Definition 11 *We define* c_2Eprim__rec_2E_3C *to be* $\lambda V0m \in ty\_2Enum\_2Enum.\lambda V1n \in ty\_2Enum\_2Enu$

Definition 12 *We define* c_2Ebool_2E_3F_21 *to be* $\lambda A\_27a : \iota.(\lambda V0P \in (2^{A\_27a}).(ap\ (ap$ c_2Ebool_2E_2F_5C

Definition 13 *We define* c_2Efcp_2Efinite__index *to be* $\lambda A\_27a : \iota.(ap$ (c_2Emin_2E_40 $(A\_27a^{ty\_2Enum\_2Enu}$

Let $ty\_2Efcp\_2Ecart : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A0.nonempty\ A0 \Rightarrow \forall A1.nonempty\ A1 \Rightarrow nonempty\ (ty\_2Efcp\_2Ecart\ A0\ A1) \tag{10}$$

Let $c\_2Efcp\_2Edest\_\_cart : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow \forall A\_27b.nonempty\ A\_27b \Rightarrow c\_2Efcp\_2Edest\_\_cart\ A\_27a\ A\_27b \in ((A\_27a^{(ty\_2Efcp\_2Efinite\_\_image\ A\_27b)})^{(ty\_2Efcp\_2Ecart\ A\_27a\ A\_27b)}) \tag{11}$$

Definition 14 *We define* c_2Efcp_2Efcp__index *to be* $\lambda A\_27a : \iota.\lambda A\_27b : \iota.\lambda V0x \in (ty\_2Efcp\_2Ecart\ A\_27$

Let $c\_2Enum\_2EZERO\_\_REP : \iota$ be given. Assume the following.

$$c\_2Enum\_2EZERO\_\_REP \in omega \tag{12}$$

Definition 15 *We define* c_2Enum_2E0 *to be* $(ap\ c\_2Enum\_2EABS\_\_num\ c\_2Enum\_2EZERO\_\_REP)$.

Definition 16 *We define* c_2Earithmetic_2EZERO *to be* c_2Enum_2E0*.*

Let $c\_2Earithmetic\_2E\_2B : \iota$ be given. Assume the following.

$$c\_2Earithmetic\_2E\_2B \in ((ty\_2Enum\_2Enum^{ty\_2Enum\_2Enum})^{ty\_2Enum\_2Enum}) \quad (13)$$

Definition 17 *We define* c_2Earithmetic_2EBIT2 *to be* $\lambda V0n \in ty\_2Enum\_2Enum.(ap\ (ap\ c\_2Earithmetic$

Definition 18 *We define* c_2Earithmetic_2ENUMERAL *to be* $\lambda V0x \in ty\_2Enum\_2Enum.V0x$*.*

Let $c\_2Earithmetic\_2EEXP : \iota$ be given. Assume the following.

$$c\_2Earithmetic\_2EEXP \in ((ty\_2Enum\_2Enum^{ty\_2Enum\_2Enum})^{ty\_2Enum\_2Enum}) \quad (14)$$

Definition 19 *We define* c_2Ebool_2ECOND *to be* $\lambda A\_27a : \iota.(\lambda V0t \in 2.(\lambda V1t1 \in A\_27a.(\lambda V2t2 \in A\_27a.($

Definition 20 *We define* c_2Ebit_2ESBIT *to be* $\lambda V0b \in 2.\lambda V1n \in ty_2Enum_2Enum.(ap\ (ap\ (ap\ ($c_2Eboo

Let $c\_2Esum\_\_num\_2ESUM : \iota$ be given. Assume the following.

$$c\_2Esum\_\_num\_2ESUM \in ((ty\_2Enum\_2Enum^{(ty\_2Enum\_2Enum^{ty\_2Enum\_2Enum})})^{ty\_2Enum\_2Enum}) \quad (15)$$

Definition 21 *We define* c_2Ewords_2Ew2n *to be* $\lambda A\_27a : \iota.\lambda V0w \in (ty\_2Efcp\_2Ecart\ 2\ A\_27a).(ap\ (ap\ c$

Definition 22 *We define* c_2Earithmetic_2EBIT1 *to be* $\lambda V0n \in ty\_2Enum\_2Enum.(ap\ (ap\ c\_2Earithmetic$

Let $c\_2Earithmetic\_2EDIV : \iota$ be given. Assume the following.

$$c\_2Earithmetic\_2EDIV \in ((ty\_2Enum\_2Enum^{ty\_2Enum\_2Enum})^{ty\_2Enum\_2Enum}) \quad (16)$$

Definition 23 *We define* c_2Ebit_2EDIV__2EXP *to be* $\lambda V0x \in ty\_2Enum\_2Enum.\lambda V1n \in ty\_2Enum\_2En$

Let $c\_2Earithmetic\_2E\_2D : \iota$ be given. Assume the following.

$$c\_2Earithmetic\_2E\_2D \in ((ty\_2Enum\_2Enum^{ty\_2Enum\_2Enum})^{ty\_2Enum\_2Enum}) \quad (17)$$

Let $c\_2Earithmetic\_2EMOD : \iota$ be given. Assume the following.

$$c\_2Earithmetic\_2EMOD \in ((ty\_2Enum\_2Enum^{ty\_2Enum\_2Enum})^{ty\_2Enum\_2Enum}) \quad (18)$$

Definition 24 *We define* c_2Ebit_2EMOD__2EXP *to be* $\lambda V0x \in ty\_2Enum\_2Enum.\lambda V1n \in ty\_2Enum\_2E$

Definition 25 *We define* c_2Ebit_2EBITS *to be* $\lambda V0h \in ty\_2Enum\_2Enum.\lambda V1l \in ty\_2Enum\_2Enum.\lambda V$

Definition 26 *We define* c_2Ebit_2EBIT *to be* $\lambda V0b \in ty\_2Enum\_2Enum.\lambda V1n \in ty\_2Enum\_2Enum.(ap$

Definition 27 *We define* c_2Efcp_2EFCP *to be* $\lambda A\_27a : \iota.\lambda A\_27b : \iota.(\lambda V0g \in (A\_27a^{ty\_2Enum\_2Enum}).(ap$

Definition 28 *We define* c_2Ewords_2En2w *to be* $\lambda A\_27a : \iota.\lambda V0n \in ty\_2Enum\_2Enum.(ap$ (c_2Efcp_2EFC

Definition 29 *We define* c_2Ewords_2Ew2w *to be* $\lambda A\_27a : \iota.\lambda A\_27b : \iota.\lambda V0w \in (ty\_2Efcp\_2Ecart\ 2\ A\_27a$

Definition 30 *We define* c_2Ebool_2E_5C_2F *to be* $(\lambda V0t1 \in 2.(\lambda V1t2 \in 2.(ap$ (c_2Ebool_2E_21 2) $(\lambda V2t \in$

Definition 31 *We define* c_2Earithmetic_2E_3C_3D *to be* $\lambda V0m \in ty\_2Enum\_2Enum.\lambda V1n \in ty\_2Enum\_2$

Definition 32 *We define* c_2Ewords_2Eword__lsl *to be* $\lambda A\_27a : \iota.\lambda V0w \in (ty\_2Efcp\_2Ecart\ 2\ A\_27a).\lambda V1$

Definition 33 *We define* c_2Ewords_2Eword__or *to be* $\lambda A\_27a : \iota.\lambda V0v \in (ty\_2Efcp\_2Ecart\ 2\ A\_27a).\lambda V1v$

Definition 34 *We define* c_2Ebool_2ELET *to be* $\lambda A\_27a : \iota.\lambda A\_27b : \iota.(\lambda V0f \in (A\_27b^{A\_27a}).(\lambda V1x \in A\_27$

Definition 35 *We define* c_2Ewords_2Eword__join *to be* $\lambda A\_27a : \iota.\lambda A\_27b : \iota.\lambda V0v \in (ty\_2Efcp\_2Ecart\ 2$

Definition 36 *We define* c_2Ewords_2Eword__concat *to be* $\lambda A\_27a : \iota.\lambda A\_27b : \iota.\lambda A\_27c : \iota.\lambda V0v \in (ty\_2Ef$

Definition 37 *We define* c_2Ewords_2Eword__xnor *to be* $\lambda A\_27a : \iota.\lambda V0v \in (ty\_2Efcp\_2Ecart\ 2\ A\_27a).\lambda V$

Definition 38 *We define* c_2Ewords_2Eword__nand *to be* $\lambda A\_27a : \iota.\lambda V0v \in (ty\_2Efcp\_2Ecart\ 2\ A\_27a).\lambda V$

Definition 39 *We define* c_2Ewords_2Eword__nor *to be* $\lambda A\_27a : \iota.\lambda V0v \in (ty\_2Efcp\_2Ecart\ 2\ A\_27a).\lambda V1$

Definition 40 *We define* c_2Ewords_2Eword__xor *to be* $\lambda A\_27a : \iota.\lambda V0v \in (ty\_2Efcp\_2Ecart\ 2\ A\_27a).\lambda V1$

Definition 41 *We define* c_2Ewords_2Eword__and *to be* $\lambda A\_27a : \iota.\lambda V0v \in (ty\_2Efcp\_2Ecart\ 2\ A\_27a).\lambda V$

Let $ty\_2Elist\_2Elist : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A0.nonempty\ A0 \Rightarrow nonempty\ (ty\_2Elist\_2Elist\ A0) \tag{19}$$

Let $c\_2Enumposrep\_2En2l : \iota$ be given. Assume the following.

$$c\_2Enumposrep\_2En2l \in (((ty\_2Elist\_2Elist\ ty\_2Enum\_2Enum)^{ty\_2Enum\_2Enum})^{ty\_2Enum\_2Enum}) \tag{20}$$

Definition 42 *We define* c_2Enumposrep_2Enum__to__bin__list *to be* $(ap\ c\_2Enumposrep\_2En2l$ (ap c_2Eari

Let $c\_2Elist\_2ENIL : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow c\_2Elist\_2ENIL\ A\_27a \in (ty\_2Elist\_2Elist\ A\_27a) \tag{21}$$

Let $c\_2Ebitstring\_2Eboolify : \iota$ be given. Assume the following.

$$c\_2Ebitstring\_2Eboolify \in (((ty\_2Elist\_2Elist\ 2)^{(ty\_2Elist\_2Elist\ ty\_2Enum\_2Enum)})^{(ty\_2Elist\_2Elist\ 2)}) \tag{22}$$

Definition 43 *We define* c_2Ebitstring_2En2v *to be* $\lambda V0n \in ty\_2Enum\_2Enum.(ap\ (ap\ c\_2Ebitstring\_2Eb$

Let $c\_2Elist\_2ECONS : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow c\_2Elist\_2ECONS\ A\_27a \in (((ty\_2Elist\_2Elist\ A\_27a)^{(ty\_2Elist\_2Elist\ A\_27a)})^{A\_27a}) \tag{23}$$

Let $c\_2Elist\_2ELENGTH : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow c\_2Elist\_2ELENGTH\ A\_27a \in (ty\_2Enum\_2Enum^{(ty\_2Elist\_2Elist\ A\_27a)}) \tag{24}$$

Let $c\_2Elist\_2ETAKE : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow c\_2Elist\_2ETAKE\ A\_27a \in (((ty\_2Elist\_2Elist\ A\_27a)^{(ty\_2Elist\_2Elist\ A\_27a)})^{ty\_2Enum\_2Enum}) \tag{25}$$

Definition 44 *We define* c_2Ebitstring_2Eshiftr *to be* $\lambda V0v \in (ty\_2Elist\_2Elist\ 2).\lambda V1m \in ty\_2Enum\_2En$

Let $c\_2Elist\_2EDROP : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow c\_2Elist\_2EDROP\ A\_27a \in (((ty\_2Elist\_2Elist\ A\_27a)^{(ty\_2Elist\_2Elist\ A\_27a)})^{ty\_2Enum\_2Enum}) \tag{26}$$

Definition 45 *We define* c_2Ecombin_2EK *to be* $\lambda A\_27a : \iota.\lambda A\_27b : \iota.(\lambda V0x \in A\_27a.(\lambda V1y \in A\_27b.V0x)$

Let $c\_2Elist\_2EGENLIST : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow c\_2Elist\_2EGENLIST\ A\_27a \in (((ty\_2Elist\_2Elist\ A\_27a)^{ty\_2Enum\_2Enum})^{(A\_27a^{ty\_2Enum\_2Enum})}) \tag{27}$$

Let $c\_2Elist\_2EAPPEND : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow c\_2Elist\_2EAPPEND\ A\_27a \in (((ty\_2Elist\_2Elist\ A\_27a)^{(ty\_2Elist\_2Elist\ A\_27a)})^{(ty\_2Elist\_2Elist\ A\_27a)}) \tag{28}$$

Definition 46 *We define* c_2Elist_2EPAD__LEFT *to be* $\lambda A\_27a : \iota.\lambda V0c \in A\_27a.\lambda V1n \in ty\_2Enum\_2Enun$

Definition 47 *We define* c_2Ebitstring_2Ezero__extend *to be* $\lambda V0n \in ty\_2Enum\_2Enum.\lambda V1v \in (ty\_2Elist$

Definition 48 *We define* c_2Ebitstring_2Efixwidth *to be* $\lambda V0n \in ty\_2Enum\_2Enum.\lambda V1v \in (ty\_2Elist\_2E$

Definition 49 *We define* c_2Ebitstring_2Efield *to be* $\lambda V0h \in ty\_2Enum\_2Enum.\lambda V1l \in ty\_2Enum\_2Enum$

Definition 50 *We define* c_2Ebitstring_2Etestbit *to be* $\lambda V0b \in ty\_2Enum\_2Enum.\lambda V1v \in (ty\_2Elist\_2Elis$

Definition 51 *We define* c_2Ebitstring_2Ev2w *to be* $\lambda A\_27a : \iota.\lambda V0v \in (ty\_2Elist\_2Elist\ 2).(ap$ (c_2Efcp_2

Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow (\forall V0n \in ty\_2Enum\_2Enum.((ap\ (\mathsf{c\_2Ebitstring\_2Ev2w}\ A\_27a)\ (ap\ \mathsf{c\_2Ebitstring\_2En2v}\ V0n)) = (ap\ (\mathsf{c\_2Ewords\_2En2w}\ A\_27a)\ V0n))) \quad (29)$$

Assume the following.

$$True \quad (30)$$

Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow (\forall V0t \in 2.((\forall V1x \in A\_27a.(p\ V0t)) \Leftrightarrow (p\ V0t))) \quad (31)$$

Assume the following.

$$(\forall V0t \in 2.(((True \wedge (p\ V0t)) \Leftrightarrow (p\ V0t)) \wedge ((((p\ V0t) \wedge True) \Leftrightarrow (p\ V0t)) \wedge (((False \wedge (p\ V0t)) \Leftrightarrow False) \wedge ((((p\ V0t) \wedge False) \Leftrightarrow False) \wedge (((p\ V0t) \wedge (p\ V0t)) \Leftrightarrow (p\ V0t))))))) \quad (32)$$

Assume the following.

$$\forall A\_27a.nonempty\ A\_27a \Rightarrow (\forall V0x \in A\_27a.((V0x = V0x) \Leftrightarrow True)) \quad (33)$$

Theorem 1

∀A_27a.nonempty A_27a⇒∀A_27b.nonempty A_27b⇒∀A_27c.
nonempty A_27c⇒∀A_27d.nonempty A_27d⇒∀A_27e.nonempty
A_27e⇒∀A_27f.nonempty A_27f⇒∀A_27g.nonempty A_27g⇒
∀A_27h.nonempty A_27h⇒∀A_27i.nonempty A_27i⇒∀A_27j.
nonempty A_27j⇒∀A_27k.nonempty A_27k⇒∀A_27l.nonempty
A_27l⇒∀A_27m.nonempty A_27m⇒∀A_27n.nonempty A_27n⇒
∀A_27o.nonempty A_27o⇒∀A_27p.nonempty A_27p⇒∀A_27q.
nonempty A_27q⇒∀A_27r.nonempty A_27r⇒∀A_27s.nonempty
A_27s⇒∀A_27t.nonempty A_27t⇒((∀V0v ∈ (ty_2Elist_2Elist
2).(∀V1n ∈ ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__or
A_27c) (ap (c_2Ebitstring_2Ev2w A_27c) V0v)) (ap (c_2Ewords_2En2w
A_27c) V1n)) = (ap (ap (c_2Ewords_2Eword__or A_27c) (ap (c_2Ebitstring_2Ev2w
A_27c) V0v)) (ap (c_2Ebitstring_2Ev2w A_27c) (ap c_2Ebitstring_2En2v
V1n))))))∧((∀V2v ∈ (ty_2Elist_2Elist 2).(∀V3n ∈
ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__or A_27d) (ap (c_2Ewords_2En2w
A_27d) V3n)) (ap (c_2Ebitstring_2Ev2w A_27d) V2v)) = (ap (ap (c_2Ewords_2Eword__or
A_27d) (ap (c_2Ebitstring_2Ev2w A_27d) (ap c_2Ebitstring_2En2v
V3n))) (ap (c_2Ebitstring_2Ev2w A_27d) V2v)))))∧((∀V4v ∈
(ty_2Elist_2Elist 2).(∀V5n ∈ ty_2Enum_2Enum.((ap (ap
(c_2Ewords_2Eword__and A_27e) (ap (c_2Ebitstring_2Ev2w A_27e)
V4v)) (ap (c_2Ewords_2En2w A_27e) V5n)) = (ap (ap (c_2Ewords_2Eword__and
A_27e) (ap (c_2Ebitstring_2Ev2w A_27e) V4v)) (ap (c_2Ebitstring_2Ev2w
A_27e) (ap c_2Ebitstring_2En2v V5n))))))∧((∀V6v ∈ (ty_2Elist_2Elist
2).(∀V7n ∈ ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__and
A_27f) (ap (c_2Ewords_2En2w A_27f) V7n)) (ap (c_2Ebitstring_2Ev2w
A_27f) V6v)) = (ap (ap (c_2Ewords_2Eword__and A_27f) (ap (c_2Ebitstring_2Ev2w
A_27f) (ap c_2Ebitstring_2En2v V7n))) (ap (c_2Ebitstring_2Ev2w
A_27f) V6v)))))∧((∀V8v ∈ (ty_2Elist_2Elist 2).(∀V9n ∈
ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__xor A_27g) (ap (c_2Ebitstring_2Ev2w
A_27g) V8v)) (ap (c_2Ewords_2En2w A_27g) V9n)) = (ap (ap (c_2Ewords_2Eword__xor
A_27g) (ap (c_2Ebitstring_2Ev2w A_27g) V8v)) (ap (c_2Ebitstring_2Ev2w
A_27g) (ap c_2Ebitstring_2En2v V9n))))))∧((∀V10v ∈ (ty_2Elist_2Elist
2).(∀V11n ∈ ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__xor
A_27h) (ap (c_2Ewords_2En2w A_27h) V11n)) (ap (c_2Ebitstring_2Ev2w
A_27h) V10v)) = (ap (ap (c_2Ewords_2Eword__xor A_27h) (ap (c_2Ebitstring_2Ev2w
A_27h) (ap c_2Ebitstring_2En2v V11n))) (ap (c_2Ebitstring_2Ev2w
A_27h) V10v)))))∧((∀V12v ∈ (ty_2Elist_2Elist 2).(∀V13n ∈
ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__nor A_27i) (ap (c_2Ebitstring_2Ev2w
A_27i) V12v)) (ap (c_2Ewords_2En2w A_27i) V13n)) = (ap (ap (c_2Ewords_2Eword__nor
A_27i) (ap (c_2Ebitstring_2Ev2w A_27i) V12v)) (ap (c_2Ebitstring_2Ev2w
A_27i) (ap c_2Ebitstring_2En2v V13n))))))∧((∀V14v ∈ (ty_2Elist_2Elist
2).(∀V15n ∈ ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__nor
A_27j) (ap (c_2Ewords_2En2w A_27j) V15n)) (ap (c_2Ebitstring_2Ev2w
A_27j) V14v)) = (ap (ap (c_2Ewords_2Eword__nor A_27j) (ap (c_2Ebitstring_2Ev2w
A_27j) (ap c_2Ebitstring_2En2v V15n))) (ap (c_2Ebitstring_2Ev2w
A_27j) V14v)))))∧((∀V16v ∈ (ty_2Elist_2Elist 2).(∀V17n ∈
ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__nand A_27k) (ap (
c_2Ebitstring_2Ev2w A_27k) V16v)) (ap (c_2Ewords_2En2w A_27k)
V17n)) = (ap (ap (c_2Ewords_2Eword__nand A_27k) (ap (c_2Ebitstring_2Ev2w
A_27k) V16v)) (ap (c_2Ebitstring_2Ev2w A_27k) (ap c_2Ebitstring_2En2v
V17n))))))∧((∀V18v ∈ (ty_2Elist_2Elist 2).(∀V19n ∈
ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__nand A_27l) (ap (
c_2Ewords_2En2w A_27l) V19n)) (ap (c_2Ebitstring_2Ev2w A_27l)
V18v)) = (ap (ap (c_2Ewords_2Eword__nand A_27l) (ap (c_2Ebitstring_2Ev2w
A_27l) (ap c_2Ebitstring_2En2v V19n))) (ap (c_2Ebitstring_2Ev2w
A_27l) V18v)))))∧((∀V20v ∈ (ty_2Elist_2Elist 2).(∀V21n ∈
ty_2Enum_2Enum.((ap (ap (c_2Ewords_2Eword__xnor A_27m) (ap (
c_2Ebitstring_2Ev2w A_27m) V20v)) (ap (c_2Ewords_2En2w A_27m)
V21n)) = (ap (ap (c_2Ewords_2Eword__xnor A_27m) (ap (c_2Ebitstring_2Ev2w