① XASIN : calcule $\{A2\} = \sin\{A0\}$ (repete xarctg)

(repete KL82) → CMP #$4000,(A0) ⊗
BEQ XPOSE2

KL99 :

KL986 : MOVE TPREC1,D3

BSR XINTE $\quad \langle A2\rangle = (\alpha, X) \quad x = 2^{-\alpha} X$

BSR XAORD $\quad D3 = \max(u + \sqrt{X}, 0) = N$

MOVE.L D3,-(SP)

ADD D3,(A2) $\quad x_N = \frac{x_0}{2^N}$

MOVE.L A2,-(SP)

repete KL94 → MOVE (A2),D0 ← ADD D0,D0 ⊗
SUB TPREC1,D0

MOVE.L A0,A1

MOVE D0,(A6)+
MOVE D0,4(SP)

BSR XMUL1

~~MOVE.L (SP),A0~~ ⊗

MOVE TPREC1,D2

BSR XROR $\quad [A2] \to \frac{[A2]}{2^X}$

LEA -2(A2),A0

BSET #7,(A2) $\quad \langle A0\rangle = -x_N^2 = 2^{\alpha} A$

LEA XSER3S,A3

BSR XSERIE $\quad 1 + \frac{X}{3!} + \frac{X^2}{5!} + \dots$

MOVE.L A2,A1

MOVE.L (SP),A0

ADDQ #2,A0

BSR XMUL1

MOVE 4(SP),D2 $\quad x_N = 2^{-\alpha} A$

BSR XROR $\quad \sin x_N = 2^{-\alpha} [A2]$

KL99 : MOVE.L (SP),A0

ADDQ #2,A0

BSR XLB76

BRA KL990

```
KL99 :
        MOVE.L  (SP),A0
        MOVE    (A0)+,D0
        MOVEM   D0/D3,4(SP)
        MOVE.L  A0,A1
        BSR     XMUL1
        MOVE.L  A2,A0
        BSET    #7,(A0)
        MOVE    4(SP),D1
        ADD     D1,D1
        BSR     XXP2N
        MOVE.L  A2,A1
        BSR     XADDS1
        MOVE.L  A2,A0
        BSR     SQRT1F
        MOVE.L  (SP),A0
        ADDQ    #2,A0
        MOVE.L  A2,A1
        BSR     XMUL1
        MOVE.L  A2,A0
        BSR     XBNB
        SUB     TPREC1,D1
        MOVE    D1,D2
        SUBQ    #1,D2
        MOVE.L  (SP),A0
        MOVE    (A0),D0
        ADD     D0,D0
        SUB     D1,D0
        MOVE    D0,(A0)
        BSR     XROR
KL990 : MOVE    6(SP),D3
        MOVE.L  (SP),A0
        BSR     XLB76
        DBRA    D3,KL99
        BRA     KL91
```

calcule $2y\sqrt{1-y^2}$

$-y^2$

2^{2x}

$2^{2x}(1-y^2)$

$2^{2x}\sqrt{1-y^2}$

$2^{2x}\, y\sqrt{1-y^2}$

$\lfloor A \rfloor = D1$

$2x-9$

$x'=2x-9$

$2y\sqrt{1-y^2} = 2^{-x'}$ [A2]

~~LEA 2(A0),A1~~

```
ADDQ #2,A0
MOVE.L A0,A1
```