

Entrée $\langle A0 \rangle = x$

$0 \leq x \ll 1$

$x \approx 2^{-\alpha} A$

$A \approx 2^{\alpha}$

Post $\{A2\} = \sqrt{1+x^2} + x$

si $x \approx 2^{\alpha} < 2^{-t}$

met $\{A2\} = 1+x$

```
XFLSQ1: MOVE (A0)+, A1
```

$M = \alpha$

```
XFLSQ1: CMP #4000, (A0)
```

```
BEQ GAP57
```

```
GAP57: BRA XPOSEUN
```

```
BSR XBNB
```

$d1 = l$

```
ADD.L D1, D1
```

```
CMP.L D1, A1
```

```
BLE GAP60
```

met $1+x$

```
MOVE M, (A0)+
```

```
MOVE.L A0, D1
```

```
BSR XFLSQ1
```

```
MOVE A1, D1
```

```
MOVE.L A6, -(SP)
```

```
MOVE D1, (A6)+
```

```
BSR XXPEN
```

2^{α}

```
MOVE.L A2, -(SP)
```

```
MOVE.L A2, A1
```

```
BSR XADDS1
```

$1+x$

```
MOVE.L (SP)+, A0
```

```
BSR XLB76
```

```
MOVE.L (SP), A0
```

```
BSR XUNFL
```

```
MOVE.L A6, -(SP)
```

```
SUBQ #2, A0
```

```
BSR XUNFL
```

```
MOVE.L A2, A0
```

```
BSR GAP57
```

1

```
MOVE.L A2, A1
```

```
BSR XADDS2
```

```
BRA KL860
```

GAP60: MOVE.L ^A Ao/A1/A6, -(SP)

MOVE A1, D1
ADD D1, D1

BSR XXP2N $2^{2\alpha}$ conserve Ao

MOVE.L A2, -(SP)

MOVE.L Ao, A1

BSR XMUL1 A^2

MOVE.L (SP)+, Ao $2^{2\alpha}$

MOVE.L A2, A1

BSR XADDS1 $2^{2\alpha} + A^2$

MOVE.L A2, Ao

BSR SQRTRF \otimes

MOVE.L (SP)+, Ao A

MOVE.L A2, A1

BSR XADDS1 $2^{2\alpha} + \sqrt{2^{2\alpha} + A^2}$

MOVE.L (SP)+, D0 α

MOVE D0, -(A2)

MOVE.L A2, Ao

BSR XUNFL

BRA KL860