## RAMDISK

2016/08/30

PropForth use word'fl' to load forth code.

Word'fl' use free area because of loading /compiling forth code.

Free area of Development-kernel is 15kbyte.

So big forth code cannot load.

Size of sample1.f is 33kbyte. This use word'fl'.

Loading this file below;

9224 characters overflowed

Prop0 Cog6 ok

CON:Prop0 Cog5 RESET - last status: 0 ok

SRAM on RAMDISK is 512k x 16bit.

Low8bit of SRAM is 0 - h3FFFF.

High8bit of SRAM is 4FFFF – h7FFFF.

Setting 19bit-address by using presettable-counter and shift-register.

After loading RAMDISK\_0.3.f, execute word'initRAM'.

Prop0 Cog6 ok initRAM Prop0 Cog6 ok

Size of sample2.f also is 33kbyte. This use word'flRAM'. sample2.f(33kbyte) is loadable because word'flRAM use RAMDISK(512kbyte). sample2 is same as sample1 except for word'flRAM'.

Loading is successful.

Word'flRAM' change connection between cog7 and cog6.

output for  $cog7 \rightarrow input$  for cog6

output for  $cog6 \rightarrow input$  for cog5

input for  $cog7 \leftarrow -----$  output for cog5

Characters flow out from cog7 to cog6.

Cog6 pass through cog5 except for comment[ $\setminus$ ,{}] and space and tab.

Cog5 compile them and register to dectionary.

Cog5 pass through cog7 received characters from cog6.

## Contents in RAMDISK below;

```
Prop0 Cog6 ok
0 500 dumpDISK
00000 01F4:
00000: 0D 0D 0D 0D 0D 0D 3A 20 65 72 72 5F 6D 73 67 20 2E
00010: 22 20 49 32 43 20 65 72 72 6F 72 22 20 3B 0D 3A
00020: 20 65 72 72 3F 20 69 66 20 65 72 72 5F 6D 73 67
00030: 20 63 72 20 74 68 65 6E 20 3B 0D 0D 6C 6F 63 6B
00040: 64 69 63 74 20 63 72 65 61 74 65 20 5F 65 65 73
00050: 74 61 72 74 20 66 6F 72 74 68 65 6E 74 72 79 0D
00060: 24 43 5F 61 5F 6C 78 61 73 6D 20 77 2C 20 68 31
00070: 32 32 20 20 68 31 31 33 32 02 03 1 2D 20 74 75 63
00080: 6B 20 2D 20 68 39 20 6C 73 68 69 96 74 20 6F 72
000900: 20 68 65 72 65 20 57 40 20 61 6C 69 67 6E 6C 20
0000A0: 6B 31 30 20 6C 73 68 69 66 74 20 6F 72 0000A0: 6B 31 30 20 6C 73 68 69 66 74 20 6F 72
000000: 78 6E 58 20 6C 2C 20 7A 32 57 79 50 5B 55 20 6C
000D0: 79 50 57 30 20 6C 2C 20 7A 31 62 69 78 6E 57 20
00010: 30 69 50 61 6B 20 6C 2C 20 7A 31 62 69 78 6E 57 20
00010: 30 69 50 61 6B 20 6C 2C 20 7A 33 72 79 50 57 30
00110: 20 6C 2C 20 7A 32 57 79 50 5B 56 20 6C 2C
00130: 20 7A 43 57 20 6C 2C 20 7A 33 72 79 50 57 30
00110: 30 69 50 61 6B 20 6C 2C 20 7A 33 72 79 50 57 30
00110: 30 69 50 61 6B 20 6C 2C 20 7A 6C 30 20 6C 2C
00130: 20 7A 43 57 20 6C 2C 20 7A 57 30 30 30 30 30 20 6C
00140: 2C 20 7A 47 30 30 30 30 20 6C 2C 20 7A 6C 30 20 6C 2C
00130: 20 7A 43 57 20 6C 2C 20 7A 57 30 30 30 30 30 20 6C
00140: 2C 20 7A 47 30 30 30 30 30 20 6C 2C 20 7A 6C 30 20 6C 2C
00130: 20 7A 74 75 65 60 65 65 73 74 6F 70
00170: 0D 5F 73 63 6C 69 20 20 20 20 20 5F 65 65 73 74
00160: 61 72 74 20 3B 0D 0D 3A 20 5F 65 65 73 74 6F 70
00170: 0D 5F 73 63 6C 69 20 20 20 20 5F 73 64 61 69 20
00190: 20 20 20 20 5C 20 52 65 6C 65 61 73 65 20 73 64
00180: 61 0D 3B 0D 0D 3A 20 62 75 73 5F 63 6C 72 20 64
00180: 61 0D 3B 0D 0D 3A 20 62 75 73 5F 63 6C 72 20 64
00180: 61 0D 0D 0D 6C 6F 63 66 66 67 72 74
001F0: 0D 5F 73 63 6C 65 67 77 72 69 74 65 20 66 6F 72 74
   0 500 dumpDISK
   00000 01F4
                                                                                                                                                                                                         ....: err_msg . <-- first word'err' in sample2
" I2C error" ;.:
err? if err_msg
                                                                                                                                                                                                            cr then ;..lock
                                                                                                                                                                                                         dict create ees
                                                                                                                                                                                                         tart forthentry.
                                                                                                                                                                                                         $C_a_lxasm w, h1
22 h113 1- tuc
k - h9 lshift or
                                                                                                                                                                                                         here W@ alignl
h10 lshift or l
                                                                                                                                                                                                         .z1[ixnW l, z1[i
xnX l, z2WyP[U l
, z20iPak l, z3r
yPW0 l, z1bixnW
l, z2WyP[V l, z2
                                                                                                                                                                                                         0iPak l, z3ryPW0
                                                                                                                                                                                                           l, z1bixnX l, z
                                                                                                                                                                                                        1SV01X l, zl0 l,
zCW l, zW0000 l
, zG0000 l, free
                                                                                                                                                                                                         dict..: Sr _eest
                                                                                                                                                                                                         ¥ Release sd
a.;..: bus_clr d
10 0 do _scll _s
clo _scli loop;
                                                                                                                                                                                                         ...lockdict crea
                                                                                                                                                                                                         te eewrite fort
   001F0: 68 65 6E 74 72 79 0D 24 43 5F 61 5F 6C
                                                                                                                                                                 78 61 73
                                                                                                                                                                                                        hentry.$C_a_lxas
  Prop0 Cog6 ok
  flRAM in L@ . flRAM out L@ .
  21069 21069 Prop0 Cog6 ok
  Prop0 Cog6 ok
20800 500 dumpDISK
   05140 01F4:
 05140 01F4:
05140: 70 0D 64 72 6F 70 0D 63 6C 72 5F 76 72 61 6D 20
05150: 30 20 76 69 64 58 20 57 21 20 0D 63 22 20 46 6F
05160: 72 74 68 22 20 6C 63 64 5F 73 74 72 69 6E 67 0D
05170: 64 69 73 70 5F 4F 4C 45 44 5F 4C 43 44 0D 64 69
05180: 73 70 5F 72 65 76 65 72 73 65 0D 64 32 30 30 30
05190: 20 64 65 6C 6D 73 0D 64 69 73 70 5F 4F 4C 45 44
051A0: 5F 4C 43 44 0D 64 32 30 30 30 20 64 65 6C 6D 73
051B0: 0D 64 69 73 70 5F 6E 6F 72 6D 61 6C 0D 64 32 30
051C0: 30 30 20 64 65 6C 6D 73 0D 64 69 73 70 5F 4F 4C
051D0: 45 44 5F 4C 43 44 0D 3B 0D 0D 3A 20 64 65 6D 6F
                                                                                                                                                                                                        p.drop.clr_vram
0 vidX W! .c" Fo
                                                                                                                                                                                                         rth" lcd string.
                                                                                                                                                                                                         disp OLED LCD.di
                                                                                                                                                                                                         sp reverse.d2000
                                                                                                                                                                                                            delms.disp_OLED
                                                                                                                                                                                                            LCD.d2000 delms
                                                                                                                                                                                                            disp normal.d20
                                                                                                                                                                                                         00 delms.disp OL
                                                                                                                                                                                                         ED_LCD.;..: demo <--- last word'demo4' in
  sample2.f
051E0: 34 0D 64 65 6D 6F 32 0D 73 63 72 6F 6C 6C 5F 48
051F0: 20 0D 64 65 6D 6F 33 0D 73 63 72 6F 6C 6C 5F 56
051F0: 20 0D 30 20 42 6C 69 6E 6B 0D 64 35 30 30 30
                                                                                                                                                                                                         4. demo2. scroll H
 05200: 48 20 0D 30 20 42 6C 69 6E 6B 05210: 20 64 65 6C 6D 73 0D 64 69 73 05220: 42 6C 69 6E 6B 0D 31 20 46 61 05230: 64 35 30 30 30 20 64 65 6C 6D 05240: 46 61 64 65 2F 42 6C 69 6E 6R 05250: F6 68 B6 F3 F4 65 6C 6D
                                                                                                                                                                                                          .demo3.scroll V
                                                                                                                                                                                                         H .0 Blink.d5000
                                                                                                                                 5F 46 61 64 65
64 65 4F 75 74
                                                                                                                                                                                                           delms.dis_Fade/
                                                                                                                                                                                       0D
                                                                                                                                                                                                         Blink.1 FadeOut.
                                                                                                                                                                                                         d5000 delms.dis_Fade/Blink.;....
                                                                                                                                  73 0D 64
                                                                                                                                                                 69
                                                                                                                                                                            73
                                                                                                                                                                                       5F
                                                                                                                                  0D 3B 0D 1D 00 84
                                                                                                                                                                                                       42 C5 C8 A5 16 D6
83 05 C0 E9 B6 F8
28 F3 31 CA C3 A9
00 A1 80 BC 88 04
   05260:
                                                                                                                                                                                       59
                                                                                                                                                                 C3 A9 96
   05270:
   05280:
                                                                                                                                                                                       02
   05290: BB
                                                                                                                                  08 D9 0B 38 5D
                                   14 04 2D F3 93 41 24 8D BE
22 11 E4 48 06 81 E6 94 03
F4 3E 2D AC 0B 91 31 AA 5A
68 B4 E8 4B C2 84 AD CB 95
08 47 07 78 3D AS F0 92 70
                                                                                                                                 F0 60 6A B0 F4
74 47 45 60 94
84 06 05 58 40
                                                                                                                                                       6A B0 F4 F4
   052A0:
                          C5
                         08 22 11
44 F4 3E
   052B0:
                                                                                                                                                                                      C4
                                                                                                                                                                                       19
   052C0:
                                                                                                                                 0C 0B 28 13 21
95 99 8B 1B 35
   052D0:
                         18
                                                                                                                                                                                       74
                                                                                                                                                                                                       n.G. x=...p...5., U] ....d.L.@...
'..!.8=...$...V|
'w...$...=...
H...H.M.G,.pGClE
a....$.0..i.
   052E0: 6E 08
  052F0: EA 55 5D 20 0D 02 13 92 AC 64 C0 4C 91 40 F2 A4 05300: 27 18 83 21 81 38 3D 87 04 CB 24 07 D6 8F 56 7C 05310: 60 77 89 87 24 13 82 60 88 C9 05 3D 89 20 8D 9B 05320: 48 92 FE 81 48 B2 4D B9 47 2C D1 70 47 43 6C 45 05330: 61 B0 C6 98 A2 12 53 D1 B8 30 84 F6 0E 69 1A 13
                                                                                                                                                       91 40 F2 A4
D6 8F 56 7C
  Prop0 Cog6 ok
```

## Writing 0 – hFF whole RAMDISK(512kbyte)

```
Prop0 Cog6 ok
   2048 test
                                                       ......
                                                    ..Prop0 Cog6 ok
 0 300 dumpDISK
00000 012C:
00000: 00 01 02
00010: 10 11 12
00000 012C:
00000: 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
00010: 10 11 12 13 14 15 16 17 18 19 1A 1B 1C 1D 1E 1F
00020: 20 21 22 23 24 25 26 27 28 29 2A 2B 2C 2D 2E 2F
00030: 30 31 32 33 34 35 36 37 38 39 3A 3B 3C 3D 3E 3F
00040: 40 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E 4F
00050: 50 51 52 53 54 55 56 57 58 59 5A 5B 5C 5D 5E 5F
00060: 60 61 62 63 64 65 66 67 68 69 6A 6B 6C 6D 6E 6F
00070: 70 71 72 73 74 75 76 77 78 79 7A 7B 7C 7D 7E 7F
00080: 80 81 82 83 84 85 86 87 88 89 8A 8B 8C 8D 8E 8F
00090: 90 91 92 93 94 95 96 97 98 99 9A 9B 9C 9D 9E 9F
000A0: A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 AA AB AC AD AE AF
000B0: B0 B1 B2 B3 B4 B5 B6 B7 B8 B9 BA BB BC BD BE BF
000C0: C0 C1 C2 C3 C4 C5 C6 C7 C8 C9 CA CB CC CD CE CF
000D0: D0 D1 D2 D3 D4 D5 D6 D7 D8 D9 DA DB DC DD DE DF
000E0: E0 E1 E2 E3 E4 E5 E6 E7 E8 E9 EA EB EC ED EE EF
000F0: F0 F1 F2 F3 F4 F5 F6 F7 F8 F9 FA FB FC FD FE FF
00100: 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
00110: 10 11 12 13 14 15 16 17 18 19 1A 1B 1C 1D 1E 1F
00120: 20 21 22 23 24 25 26 27 28 29 2A 2B 2C 2D 2E 2F
                                                                                                                                                                                                                        !"#$%&'()*+,-./
0123456789:;<=>?
@ABCDEFGHIJKLMNO
PQRSTUVWXYZ[¥]^_
                                                                                                                                                                                                                           abcdefghijklmno
                                                                                                                                                                                                                         pqrstuvwxyz{|}~.
                                                                                                                                                                                                                           !"#$%&'()*+,-./
  Prop0 Cog6 ok
262000 300 dumpDISK
   3FF70 012C:
  3FF70: 70 71
3FF80: 80 81
                                                           73 74 75
83 84 85
93 94 95
                                                                                              76 77 78 79
86 87 88 89
96 97 98 99
                                                                                                                                           7A 7B 7C
8A 8B 8C
9A 9B 9C
                                                                                                                                                                             7D 7E
8D 8E
9D 9E
                                                72
82
92
                                                                                                                                                                                                                        pqrstuvwxyz{|}~.
                           90 91
                                                                                                                                                                                                     9F
   3FF90:
                                                A2
B2
                                                           A3 A4 A5
B3 B4 B5
C3 C4 C5
D3 D4 D5
E3 E4 E5
F3 F4 F5
03 04 05
13 14 15
23 24 25
33 34 35
43 44 45
53 54 55
63 64 65
73 74 75
83 84 85
93 94 95
                                                                                                                                A9
B9
                                                                                                                                                                 AC
BC
                                                                                             A6 A7 A8
B6 B7 B8
C6 C7 C8
D6 D7 D8
E6 E7 E8
F6 F7 F8
G6 07 08
16 17 18
26 27 28
36 37 38
46 47 48
56 57 58
66 67 68
76 77 78
86 87 88
96 97 98
                                      A1
                                                                                                                                             AA
                                                                                                                                                       AB
                                                                                                                                                                               AD
   3FFB0:
                           B0 B1
                                                                                                                                           BA BB BC
CA CB CC
DA DB DC
EA EB EC
FA FB FC
0A 0B 0C
1A 1B 1C
2A 2B 2C
3A 3B 3C
4A 4B 4C
5A 5B 5C
6A 6B 6C
7A 7B 7C
8A 8B 8C
9A 9B 9C
                                                                                                                                            BA BB
                                                                                                                                                                              BD BE
                                                                                                                                                                             CD CE
DD DE
ED EE
                          CO C1
D0 D1
E0 E1
F0 F1
00 01
10 11
20 21
30 31
40 41
50 51
60 61
70 71
80 81
                                     C1 C2
D1 D2
E1 E2
F1 F2
01 02
11 12
21 22
31 32
41 42
51 52
61 62
71 72
81 82
91 92
  3FFC0:
3FFD0:
                                                                                                                                C9
D9
E9
F9
                                                                                                                                                                                                     CF
                                                                                                                                                                                                     DF
                                                                                                                                                                                                    EF
   3FFE0:
   40000:
                                                                                                                                19
29
39
49
   40010:
40020:
                                                                                                                                                                              1D
2D
3D
                                                                                                                                                                                                     1F
                                                                                                                                                                                                                        !"#$%&'()*+,-./
0123456789:;<=>?
                                                                                                                                                                                                     3F
   40030:
                                                                                                                                                                               4D
                                                                                                                                                                                                                         @ABCDEFGHIJKLMNO
                                                                                                                                                                             5D 5E
6D 6E
7D 7E
8D 8E
                                                                                                                                                                                                                         PQRSTUVWXYZ[¥]^
   40050:
                                                                                                                                59
                                                                                                                                69
79
89
99
                                                                                                                                                                                                    6F
7F
   40060:
40070:
                                                                                                                                                                                                                            abcdefghijklmno
                                                                                                                                                                                                                         pqrstuvwxyz{|}~.
   40080:
                                                                                                                                                                                                                         . . . . . . . . . . . . . . . .
                                                                                                                                            9A
 Prop0 Cog6 ok
524000 300 dumpDISK
7FEE0 012C:
 7FEE0 012C:
7FEE0: E0 E1 E2
7FEF0: F0 F1 F2
7FF00: 00 01 02
7FF10: 10 11 12
7FF20: 20 21 22
7FF30: 30 31 32
7FF40: 40 41 42
                                                           E3 E4 E5
F3 F4 F5
03 04 05
13 14 15
23 24 25
33 34 35
                                                                                              E6 E7 E8
F6 F7 F8
06 07 08
16 17 18
26 27 28
36 37 38
                                                                                                                                E9
F9
                                                                                                                                           FA FB
0A 0B
1A 1B
2A 2B
3A 3B
                                                                                                                                                                   FC
                                                                                                                                                                              FD
                                                                                                                                09
19
29
39
                                                                                                                                                                  0C
1C
2C
3C
                                                                                                                                                                              0D 0E 0F
1D 1E 1F
                                                                                                                                                                              1D
2D
3D
                                                                                                                                                                                                                        !"#$%&'()*+,-./
0123456789:;<=>?
                                                                                                                                                                                                     2F
3F
                                                                                                                                                                                         3E
                                                                                                                                                                                                                         @ABCDEFGHIJKLMNO
```

```
7FF50: 50 51 52 53 54 55 56 57 58 59 5A 5B 5C 5D 5E 5F
7FF60: 60 61 62 63 64 65 66 67 68 69 6A 6B 6C 6D 6E 6F
7FF70: 70 71 72 73 74 75 76 77 78 79 7A 7B 7C 7D 7E 7F
7FF80: 80 81 82 83 84 85 86 87 88 89 8A 8B 8C 8D 8E 8F
7FF90: 90 91 92 93 94 95 96 97 98 99 9A 9B 9C 9D 9E 9F
7FFA0: A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 AA AB AC AD AE AF
7FFB0: B0 B1 B2 B3 B4 B5 B6 B7 B8 B9 BA BB BC BD BE BF
7FFC0: C0 C1 C2 C3 C4 C5 C6 C7 C8 C9 CA CB CC CD CE CF
7FFD0: D0 D1 D2 D3 D4 D5 D6 D7 D8 D9 DA DB DC DD DE DF
7FFE0: E0 E1 E2 E3 E4 E5 E6 E7 E8 E9 EA EB EC ED EE EF
7FFF0: F0 F1 F2 F3 F4 F5 F6 F7 F8 F9 FA FB FC FD FE FF
80000: 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F

Prop0 Cog6 ok
```