

*****Draft*****

NanoVG, NanoSVG, Nuklear

07/15/20

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*On 07/13/20 I posted about a missing demo.c file.
See the note below about the the missing file demo.c*

*I located a file demo.c in <https://github.com/develone/nanovg/blob/master/example/demo.c> repo.
I created a script https://github.com/develone/Ultibo_Projects/blob/master/nano-vg-svg-nuk/RPi2/buildlib.sh*

I needed to modify Testnanogl.c by adding "/" to the include.

```
-#include "opt/vc/include/GLES/gl.h"  
-#include "opt/vc/include/GLES/glext.h"  
-//#include "opt/vc/include/GLES2/gl2.h"  
+#include "/opt/vc/include/GLES/gl.h"  
+#include "/opt/vc/include/GLES/glext.h"  
+//#include "/opt/vc/include/GLES2/gl2.h"
```

Was this chg needed since I was working in RPi4 instead of MS Windows.

Downloaded RPi2 from ultibo forum RPi2.zip
<https://ultibo.org/forum/download/file.php?id=327&sid=b0c9a16c33c16d7d63413d4b017acc96>
stb_image_write.h, Testnanogl.c, and libTestnanogl.a

```
{ $linklib Testnanogl }
```

```
procedure glSwapBuffer;export; cdecl;  
procedure getMouseXY(var cx: integer; var cy: integer; var btc: integer);export; cdecl;  
procedure getScreenSize(var scrWidth: LongWord ; var scrHeight: LongWord);export; cdecl;
```

```
procedure test; cdecl; external 'libTestnanogl' name 'test';
```

This is the initial commit

```
~/Ultibo_Projects/nano-vg-svg-nuk/RPi2/sdfiles $ md5sum *  
9e6230038afeddd6b174d8fa8a19a371 config.txt  
5fc4614096c4b753fd940b75b1fa2247 fixup.dat  
fb8e67c4e54427fdca9fab410d41ce2e fixup_x.dat  
9864d17fa3bcd20738ee9c0c67b2330c start.elf  
6fa698231abdd267ba84c4cf3c7ab8d2 start_x.elf
```

```
md5sum ~/firmwar_for_ultibo/022720/*  
156a886d5855e42a887f0dd9316fb4e3 /home/devel/firmwar_for_ultibo/022720/bootcode.bin  
5fc4614096c4b753fd940b75b1fa2247 /home/devel/firmwar_for_ultibo/022720/fixup.dat  
fb8e67c4e54427fdca9fab410d41ce2e /home/devel/firmwar_for_ultibo/022720/fixup_x.dat  
9864d17fa3bcd20738ee9c0c67b2330c /home/devel/firmwar_for_ultibo/022720/start.elf  
6fa698231abdd267ba84c4cf3c7ab8d2 /home/devel/firmwar_for_ultibo/022720/start_x.elf
```

```
~/Ultibo_Projects/nano-vg-svg-nuk/RPi2 $ md5sum sdfiles/bootcode.bin sdfiles/config.txt
sdfiles/fixup* sdfiles/start*
156a886d5855e42a887f0dd9316fb4e3 sdfiles/bootcode.bin
9e6230038afeddd6b174d8fa8a19a371 sdfiles/config.txt
5fc4614096c4b753fd940b75b1fa2247 sdfiles/fixup.dat
fb8e67c4e54427fdca9fab410d41ce2e sdfiles/fixup_x.dat
9864d17fa3bcd20738ee9c0c67b2330c sdfiles/start.elf
6fa698231abdd267ba84c4cf3c7ab8d2 sdfiles/start_x.elf
```

home/devel/Ultibo_Projects/OpenGLS/HelloGLES/RPi2/HelloGLES.lpr

07/13/20 with these files on micro sd

diffuse HelloGLES.lpr ../../OpenGLS/HelloGLES/RPi2/HelloGLES.lpr

```
6-7-20 23:01:16      52304 bootcode.bin
6-7-20 23:01:18      1301 config.txt
6-7-20 23:01:18      4598 cube_constant_blue_01.cob
6-7-20 23:01:18      4694 cube_constant_green_01.cob
6-7-20 23:01:18      4709 cube_constant_red_01.cob
6-7-20 23:01:18      4584 cube_constant_white_01.cob
6-7-20 23:01:18      4694 cube_constant_yellow_01.cob
6-7-20 23:01:18      6745 fixup.dat
6-7-20 23:01:18      9817 fixup_x.dat
6-7-20 23:01:18      2678 height_grass_40_40_01.bmp
6-7-20 23:01:22      <DIR> md2
6-7-20 23:01:30      2884420 start.elf
6-7-20 23:01:30      3798568 start_x.elf
6-7-20 23:01:32      196662 stone256_256_01.bmp
6-7-20 23:01:32      1440054 sunset800_600_03.bmp
13-7-20 18:16:44      3062488 kernel7.img
13-7-20 15:47:48      20468 dump.png
1-1-80               0 MD2ERROR.TXT
1-1-80               0 ERROR.TXT
14-1-03 02:09:24      1440054 cockpit03.bmp
14-1-03 02:09:30      1440054 cockpit03b.bmp
4-7-20 23:00:40      1152054 cockpit03bW.bmp
4-7-20 22:57:52      1152054 cockpit03W.bmp
14-1-03 02:08:26      9462 crosshair01.bmp
14-1-03 02:09:48      1440054 nebbblue01.bmp
14-1-03 02:08:36      1440054 nebgreen03.bmp
14-1-03 02:08:36      1440054 nebred01.bmp
14-1-03 02:09:26      230454 tech_char_set_01.bmp
13-7-20 18:13:46      60367 tie04.cob
28 file(s) 21303445 bytes
1 dir(s)
```

1.

```
~/Ultibo_Projects/nano-vg-svg-nuk/RPi2 $ tftp 192.168.1.245 < cmdstftp
tftp> tftp> Sent 3062488 bytes in 38.6 seconds
```



2.

```
~/Ultibo_Projects/soft-rast-ultibo/RPi3 $ tftp 192.168.1.245 < cmdstftp
```

```
tftp> tftp> Sent 3754920 bytes in 24.9 seconds
```

3.

```
~/Ultibo_Projects/soft-rast-ultibo/raiders3d_ultibo_source/RPi3 $ tftp 192.168.1.245 < cmdstftp
```

```
tftp> tftp> Sent 3250784 bytes in 15.9 seconds
```